

Sponsor:

3M St. Paul, Minnesota

FINAL REPORT

Study Title:

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

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Study Completion Date:

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Covance 6329-223

Sponsor Study Identification:

3M Study No. T-6295.7

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Exhibit 1818

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COMPLIANCE STATEMENT

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

All aspects of this study were in accordance with the Environmental Protection Agency Good Laboratory Practice Regulations, 40 CFR 792, with the exception that the analysis of fecal samples for urobilinogen at the Mayo Clinic were not done in compliance with Good Laboratory Practice Regulations.

Peter J. Thomford, PhD Study Director Covance Laboratories Inc.	// Jan. 2002
Andrew M. Seacat, PhD Study Monitor	Date

3M

QUALITY ASSURANCE STATEMENT

This report has been reviewed by the Quality Assurance Unit of Covance Laboratories Inc., in accordance with the Environmental Protection Agency (EPA) Good Laboratory Practice Standards, 40 CFR 792. The following inspections were conducted and findings reported to the study director and study director management.

Inspection			Date Reported to
Dates		_	Study Director and
From	То	Phase	Study Director Management
08/06/98	08/06/98	Test Article Preparation	08/06/98
08/24/98	08/24/98	Protocol Review	08/24/98
11/25/98	11/25/98	Body Weight	11/25/98
03/03/99	03/03/99	Analytical Laboratory Inspection	03/03/99
04/09/99	04/12/99	Protocol Amendment Review	04/12/99
05/23/99	05/23/99	Protocol Amendment Review	05/23/99
09/27/99	09/27/99	Protocol Amendment Review	09/27/99
10/22/99	10/25/99	Data Review	10/27/99
10/20/99	10/27/99	Data Review	10/27/99
02/11/00	02/13/00	Protocol Amendment Review	02/13/00
03/16/00	03/16/00	Protocol Amendment Review	03/16/00
03/13/00	03/23/00	Data Review	03/23/00
04/04/00	04/04/00	Protocol Amendment Review	04/04/00
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12/18/01	12/18/01	Report Review	12/18/01

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STUDY IDENTIFICATION

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Test Material Perfluorooctane Sulfonic Acid Potassium

Salt (PFOS; T-6295)

Sponsor 3M

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Study Timetable

Study Initiation Date

In-Life (Experimental) Start Date

In-Life Termination Date

Experimental Termination Date

August 20, 1998

August 26, 1998

March 8, 2000

December 21, 2001

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ABSTRACT

The purpose of this study was to assess the effect of the test material, Perfluorooctane Sulfonic Acid Potassium Salt [PFOS; T-6295 (hereafter referred to as PFOS)] on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by oral capsule to cynomolgus monkeys for at least 26 weeks. The treatment period was followed by an approximate 52-week recovery period.

Male and female cynomolgus monkeys were assigned to four groups (six animals/sex in Groups 1, 3, and 4; four animals/sex in Group 2). Each group received dose preparations containing the vehicle, lactose, or 0.03, 0.15, or 0.75 mg of PFOS/kg of body weight/day (mg/kg/day). Two animals/group in Groups 1, 3, and 4 were in a recovery period and were not treated for at least 52 weeks following the 26 week treatment period.

Food was provided ad libitum, except when animals were fasted. Water was provided ad libitum. The animals were observed twice daily (a.m. and p.m.) for mortality and moribundity. At least once daily, animals were examined for abnormalities and signs of toxicity, and food consumption was assessed qualitatively. Ophthalmic examinations were done before initiation of treatment and during Weeks 26 and 52. Body weight data were recorded weekly before initiation of treatment, on Days -1 and 1, and weekly thereafter. Blood and urine samples were collected for clinical hematology, clinical chemistry, and urinalysis tests before initiation of treatment and at specified intervals during treatment and recovery. Blood was also collected for blood hormone and PFOS level determinations before, during, and after treatment at specified intervals. Feces and liver samples were also collected at specified intervals. On Day 155 (Week 23), one male given 0.75 mg/kg/day died, and on Day 179 (Week 26), one male given 0.75 mg/kg/day was sacrificed due to poor health. On Days 184 and 185 (Week 27), four animals/sex/group (Groups 1 through 3) and four females and two males (Group 4) were anesthetized, weighed, exsanguinated, and necropsied. At necropsy at the scheduled and unscheduled sacrifices, a serum sample was collected, macroscopic observations were recorded, selected organs were weighed, and selected tissues were collected and preserved. Microscopic examinations were done on tissues from each animal in the control and high-dose groups and selected tissues from animals in the low-and mid-dose groups. Tissues were also collected for palmitoyl CoA oxidase determination, cell proliferation evaluation, PFOS determination, and electron microscopy. Additionally, the bile was collected from the gallbladder, and the gallbladder was preserved. At the recovery sacrifice on Day 549, the remaining Group 4 animals were anesthetized, weighed, exsanguinated, and necropsied. Macroscopic observations were recorded and specified tissues and serum were collected. Remaining animals in Groups 1 and 3 were transferred to Covance stock or transferred to a follow-up study, Covance 6329-268.

At all dose levels, clinical observations, ophthalmic observations, and palmitoyl CoA oxidase determinations do not appear to be affected by treatment with PFOS.

Two males given 0.75 mg/kg/day did not survive to scheduled termination. These deaths were preceded by some adverse clinical observations (constricted pupil, pale gums, abnormal feces, excessive salivation, labored respiration, dehydrated appearance, hypoactive, ataxic, recumbent, low food consumption) and appeared to be related to the administration of PFOS. When compared with animals given the control material, covariate adjusted mean body weights (CAM) for males given 0.75 mg/kg/day were slightly lower beginning at Week 21, and for females given 0.75 mg/kg/day CAM body weights were, in general, significantly lower beginning at Week 11. Similar decreases were not seen in the other treated groups; therefore, this finding is likely test material-related. Test material-related effects on body weights were not apparent during recovery. Low food consumption was noted sporadically for animals in the groups given the control material and 0.03 mg/kg/day throughout treatment. The incidence of low food consumption was generally higher in the groups given 0.15 or 0.75 mg/kg/day as compared to animals given the control material and appeared to be test material-related. During recovery, effects on food consumption were reversed.

Estradiol values were generally lower on Days 62, 91, and 182 in males given 0.75 mg/kg/day, although because of the variation in the data only the Day 182 value was significant. Estrone values were generally higher in all of the treated females on Days 37, 62, and 91, although because of the variation in the data none of these values were significantly different, and this difference was not apparent on Day 182. Triiodothyronine values were notably lower in both males and females given 0.15 and 0.75 mg/kg/day on Days 91 and 182. With the single exception of males given 0.15 mg/kg/day on Day 91, all values were significantly lower. During recovery were occasional instances in which the hormone values in treated groups differed slightly from those of controls, but those differences were not consistent over time or between sexes, were not clearly dose-related, and did not appear to be clearly related to the administration of the test material. Apparent differences in the sexual maturity of both males and females used in this study complicates the interpretation of the hormone data.

The only clinical pathology parameters considered related to the test material were lower total cholesterol for animals given 0.75 mg/kg/day and lower high density lipoprotein cholesterol for animals given 0.15 or 0.75 mg/kg/day. These effects were reversed within the first 5 and 9 weeks of recovery, respectively.

At the terminal sacrifice, increased liver weights, macroscopic observations of mottled liver, hepatocellular hypertrophy, and hepatocellular vacuolation in animals given 0.75 mg/kg/day were considered related to PFOS treatment. However, the microscopic examination liver biopsies taken during recovery did not indicate any test material-related findings and none of the macroscopic observations made at the recovery sacrifice were considered test material-related. There were no microscopic findings in the liver from the animals in the high-dose recovery group. This indicates that the hepatic test material-related effects were reversible.

Treatment with PFOS by oral capsule for at least 26 weeks is generally well-tolerated in male and female cynomolgus monkeys at doses up to 0.15 mg/kg/day. Clinical and pathological findings considered to be associated with the treatment of PFOS after at least 26 weeks of treatment were found to be reversible during a 52-week recovery period. Based on the data presented in this report, the no-observable-adverse-effect level is 0.15 mg/kg/day. Dose analyses (provided by the Sponsor), fecal analysis results (provided by the Mayo Clinic) and electron microscopy results (provided by Pathology Associates North Carolina Division, A Charles River Company), were provided for inclusion in the final report.

PURPOSE

The purpose of this study was to assess the effect of the test material on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by capsule to cynomolgus monkeys for at least 26 weeks. The treatment period was followed by an approximate 52-week recovery period.

REGULATORY COMPLIANCE

All aspects of this study were done in accordance with the Environmental Protection Agency Good Laboratory Practice Regulations, 40 CFR 792, with the exception that the analysis of fecal samples for urobilinogen at the Mayo Clinic were not done in compliance with Good Laboratory Practice Regulations.

TEST MATERIAL, VEHICLE, AND SOLVENT

Test Material

The test material, Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295), Lot No. 217 (expiration date: August 31, 2001), is a white to off-white powder and is 86.9% pure. It was received at Covance on September 4, 1997. The test material was stored at room temperature.

Information on synthesis methods, composition, or other characteristics that define the test material is on file with the Sponsor.

Vehicle

The vehicle was lactose (Spectrum, New Brunswick, New Jersey), Lot No. NN0192 (expiration date February 13, 1999). It was received at Covance on March 30, 1998.

The vehicle was stored at room temperature.

Information on synthesis methods, purity, stability, composition, or other characteristics that define the vehicle is on file with the manufacturer.

Solvent

The solvent was acetone (Spectrum, Gardena, California), Lot No. LH0253, (expiration date June 2000). It was received at Covance on June 23, 1997. The solvent was stored at room temperature.

Information on synthesis methods, composition, or other characteristics that define the solvent is on file with the manufacturer.

Gelatin Capsules

Gelatin capsules, Size Nos. 2 (Lot No. 122932, expiration date June 12, 2003) and 4 (Lot No. 544043, expiration date August 1, 2002) were manufactured by Torpac Inc., (Fairfield, New Jersey). Lot No. 122932 was received at Covance on June 12, 1998, and Lot No. 544043 was received on September 1 and November 10, 1998. The capsules were stored at room temperature. A copy of the Certificate of Analysis provided by the manufacturer is maintained in the data.

Reserve (Archive) Samples

A reserve sample (1 g) of each lot of the test material, vehicle, and each test material/lactose dilution was taken and stored at room temperature. These samples were transferred to the Sponsor after completion of the treatment phase (see Protocol Deviations).

Disposition

Remaining test material will be retained at Covance for use in possible future studies.

TEST ANIMALS AND HUSBANDRY

Animals

Young adult to adult cynomolgus monkeys were obtained from Covance Research Products Inc. (Denver, Pennsylvania) on June 30, 1998. The animals weighed 2.4 to 4.4 kg at initiation of treatment.

Identification

Each animal was assigned a permanent number upon arrival and identified with a collar tag before initiation of treatment. All data for an animal are recorded under this number.

Justification

PFOS is a known hepatic peroxisome proliferator (PP) in the rat. When exposed to a PP, nonhuman primates (such as the cynomolgus monkey) respond similarly to humans (i.e., low to no hepatic response) and therefore are an appropriate human surrogate species.

Husbandry

Animal Rooms 251, 258, 259, and 527 were used for this study. Environmental controls for the animal rooms were set to maintain 18 to 29°C, a relative humidity of 30 to 70%, and a 12-hour light/12-hour dark cycle. Variations from these conditions are documented in the data and are considered to have had no effect on the outcome of the study.

The animals were housed individually in suspended, stainless-steel cages.

Certified primate diet (#8726C, Harlan Teklad) was provided once or twice daily, unless otherwise specified. The lot numbers are recorded in the data. The diet is routinely analyzed by the manufacturer for nutritional components and environmental contaminants. Results of specified nutrient and contaminant analyses are on file with Covance-Madison. Fruits or additional supplements were provided, but did not require analysis.

Water was provided *ad libitum*. Samples of the water are analyzed for specified microorganisms and environmental contaminants. The results are on file with Covance-Madison.

There were no known contaminants in the diet or water at levels that would have interfered with this study.

Acclimation

Twenty-four males and 24 females were received on June 30, 1998, and acclimated in Animal Room 251 for 57 days before initiation of treatment. In general, animals in this shipment appeared healthy. During acclimation, the animals were examined for abnormalities indicative of health problems. In addition, three tuberculosis tests, a physical examination, and a fecal flotation for parasites were performed on each animal.

PROCEDURES

This study was conducted in accordance with the Protocol dated August 20, 1998, and Protocol Amendment Nos. 1, 2, 3, and 4. The protocol, protocol amendments, and protocol deviations are in Appendix 1.

Group Designations and Dosage Levels

Selection of animals for the study was based on data collected during acclimation. Animals were assigned to treatment groups using a computerized blocking procedure designed to achieve body weight balance with respect to treatment group.

	Dose Level	Total Material Dose Level	Number	of Animals
Group	(mg/kg/day) ^a	(mg/kg/day) ^b	Males	Females
1	0^{a}	30 ^a	6 ^d	6 ^d
2	0.03	15 ^b	4	4
3	0.15	6°	6^{d}	6 ^d
4	0.75	30°	6^{d}	6 ^d

- a The control group (Group 1) received the equivalent amount of lactose in gelatin capsules as the total material administered to Group 4.
- b The low-dose (Group 2) received the test material diluted with lactose (1:499, w:w).
- c The mid-dose (Group 3) and high-dose (Group 4) groups received the test material diluted with lactose (1:39, w:w).
- d Two animals in Groups 1, 3, and 4 designated as recovery animals were treated for at least 26 weeks, then treatment was discontinued, and the animals were observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 52 weeks posttreatment.

Dosing Procedures

Vehicle. Dose levels were based on the vehicle as supplied for Group 1. For Group 1 dose preparations, the specified amount of lactose was weighed, transferred into gelatin capsules, and the top and bottom halves of each capsule were joined. Capsules were prepared at least once weekly.

Test Material. The test material/lactose preparations for Groups 2 through 4 were diluted once before initiation of treatment; capsules were prepared at least once weekly.

A specified amount of test material was weighed, placed into a labeled mixing container, and the appropriate volume of acetone was added. After stirring manually until the test material was dissolved, the required amount of lactose was weighed and transferred to the container. The components were mixed thoroughly using a spatula. The prepared test material dilution was stirred periodically while allowed to stand exposed to the air until the acetone had evaporated. Preparations were diluted to facilitate capsule preparation.

Samples of the finished mixture for dose analyses were taken directly from the container.

The dose preparations were stored at room temperature between capsule preparations. The appropriate amount of prepared test material was weighed and transferred into Size 2 (Days 1 through 8) or 4 (Days 9 through 184) gelatin capsules and the top and bottom halves of each capsule were joined. Size 4 capsules were used instead of Size 2 to better facilitate dose administration. Individual daily doses were based on the most recently recorded body weight, with the exception of doses given on days when body weight measurements were performed; on those days, the previous body weight was used.

All capsule preparations were stored at room temperature until used for dosing.

Method of Administration. Gelatin capsules were used to facilitate comparison with data from previous toxicology studies that used the oral route. Also, oral is the most likely route of exposure in humans. Partial or intact capsules were noted in the vomitus of several animals on occasion; however, this is not considered to have adversely affected the results of the study.

The dose preparations were administered orally in gelatin capsules once daily 7 days/week for at least 26 weeks (see Protocol Deviations for exceptions).

Dose Analyses

Homogeneity and stability analyses were the responsibility of the Sponsor.

Samples (approximately 1 g each) were taken from the top, middle, and bottom of the test material/lactose preparations on Day -15 for homogeneity analysis. Samples collected from the middle of the preparations were also designated for prestudy stability analysis. A set of samples (approximately 1 g each) were taken from the low- and high-dose test material/lactose preparations at the end of the treatment phase for test material content analysis.

All samples were stored at room temperature until sent under ambient conditions to the Sponsor for analysis. Results of dose analyses were provided for inclusion in the final report.

Observation of Animals

Clinical Observations. The animals were observed twice daily (a.m. and p.m.) for mortality and moribundity. Animals were also observed at least once daily (a.m.) for signs of poor health or abnormal behavior, and food consumption was assessed qualitatively; only abnormal findings were recorded. Once weekly and on the day of scheduled sacrifice, each animal was observed; abnormal findings or an indication of normal was recorded (see Protocol Deviations for exceptions). Additionally, postdose observations were recorded during treatment approximately 30 to 90 minutes after the last dose administration; only abnormal findings were recorded.

Ophthalmology. Ophthalmic examinations were done on each animal before initiation of treatment, before the scheduled terminal sacrifice during Week 26, and during Week 52 (see Protocol Deviations). The pupils were dilated with 1% Mydriacyl® and the anterior portion of the eye, optic media, and ocular fundus were examined with an indirect ophthalmoscope by a board-certified ophthalmologist.

Body Weights. Individual body weight data were recorded weekly before initiation of treatment, on Day -1, on the first day of treatment, and weekly thereafter.

Clinical Pathology

Blood and urine samples were collected from each animal once before initiation of treatment (Day -27); on Days 37, 62, 91, 153, and 182 of treatment; and on Days 217, 245, 274, 322, 364, 456, and 546 during recovery (see Protocol Deviations). Animals were fasted overnight, and urine was collected overnight on wet ice before blood sampling; water was provided *ad libitum*. Blood was collected from the femoral vein. Potassium EDTA was the anticoagulant used for hematology tests; no anticoagulant was used for the chemistry tests. Blood samples were collected from the animal that was sacrificed at an unscheduled interval. Animals were bled in sequential order on Days 37, 62, and 91 and in random order at all other scheduled collections; this is not expected to have an impact on the clinical pathology results. The following were evaluated (see Protocol Deviations for exceptions).

Hematology

red blood cell (erythrocyte) count differential blood cell count hemoglobin segmented neutrophil count hematocrit lymphocyte count mean corpuscular volume monocyte count mean corpuscular hemoglobin eosinophil count mean corpuscular hemoglobin basophil count concentration blood cell morphology platelet count reticulocyte count white blood cell (leukocyte) count

Clinical Chemistry

sorbitol dehydrogenase glucose urea nitrogen creatine kinase calcium creatinine total protein inorganic phosphorus albumin sodium globulin potassium total bilirubin chloride cholesterol bile acids triglycerides amylase alanine aminotransferase lipase alkaline phosphatase pancreatic-specific amylase aspartate aminotransferase high density lipoprotein (HDL) gamma glutamyltransferase (effective with collection on Day 153)

Urinalysis

volume (approximately 16 hours) bilirubin specific gravity blood urobilinogen

protein microscopic examination of sediment

glucose appearance ketones

Blood Hormone Determination

Blood samples (approximately 5 mL) were collected from each animal three times before initiation of treatment (Days -50, -40, and -27); on Days 37, 62, 91, and 182 of treatment; and on Days 217, 245, 274, 322, 364, 456, and 546 during recovery (see Protocol Deviations). Animals were fasted overnight. Blood was collected from a femoral vein without using an anticoagulant. Samples were allowed to clot and centrifuged within 1 hour after collection; serum was harvested. The serum was divided into two approximately equal aliquots and stored in a freezer, set to maintain -60 to -80°C, until packed on dry ice and shipped to AniLytics Inc. for analysis of cortisol, testosterone, estradiol, estrone, estriol, thyroid stimulating hormone, total triiodothyronine, and total thyroxin. Beginning with the collection on Day 322 the samples were also analyzed for free triiodothyronine and free thyroxin.

Serum PFOS Level Determination

Blood samples (approximately 2 mL) were collected from each animal once before initiation of treatment (Day -27); during Weeks 1 (Day 7), 2, 4, 6, 8, 12, 16, 20, 24, and 26, and 27 (Day 183) of treatment; and during Weeks 27 (Days 184, 185, and 187), 28 (Day 190), 29 (Day 198), 30 (Day 204), 31 (Day 211), 35, 39, 43, 47, 51, 53, 57, 61, 65, 69, 73, 77, and 79 (see Protocol Deviations). Animals were fasted overnight and water was provided *ad libitum*. Blood was collected from a femoral vein without using an anticoagulant. Samples were centrifuged within 1 hour after collection and serum was harvested. Serum samples were stored in a freezer, set to maintain -60 to -80°C, until packed on dry ice and shipped to the Sponsor for analysis. Results will reported separately.

Additional Serum Collection

At the scheduled terminal necropsy and the necropsy of Animal No. I05506 (Group 4 male), blood samples (approximately 20 mL) were collected from the vena cava at the time of exsanguination. Samples were collected without using an anticoagulant and centrifuged within 1 hour of collection. Serum was harvested and stored in a freezer, set to maintain -60 to -80°C, until packed on dry ice and shipped to the Sponsor for possible future analysis.

An aliquot (0.8 ml) of the additional serum collection samples collected from all animals from Groups 1, 2, 3, and 4 sacrificed at the terminal necropsy were sent on dry ice by the Sponsor to AniLytics for total triiodothyronine, total thyroxin, free triiodothyronine, and free thyroxin determinations.

Additional serum samples collected at the terminal and recovery sacrifices were transferred by the Sponsor to Anilytics for analysis of estradiol, follicle stimulating hormone (FSH), and lutenizing hormone (LH) for females, and estradiol in males. Results were provided for inclusion in the final report.

Additionally, samples were transferred by the Sponsor to the Mayo Clinic for analysis of triiodothyronine (T3), total thyroxin (T4), free thyroxin (free T4), and thyroid stimulating hormone (TSH). Additional reserve samples of serum were transferred for possible future anlaysis for estradiol. Any unused serum will be returned to the Sponsor. Results were provided for inclusion in the final report.

Urine and Feces PFOS Level Determination

Urine [at least 2 mL (see Protocol Deviations)] and feces (at least 5 g) were collected overnight on the first day of recovery (Day 184) and on Days 189, 216, 275, 321, and 366 during recovery. In addition, a 24-hour sample of urine and feces was collected before the completion of 52 weeks of recovery. Except for the first day of recovery, animals were not fasted. Samples were stored in a freezer set to maintain -10 to -30°C, until they were packed on dry ice and shipped to the Sponsor. The samples will be analyzed for PFOS. Results will be reported separately.

Additional Fecal Samples

During Week 23, a fresh fecal sample (up to 5 g) was collected from all animals in the control and high-dose groups. Samples were collected in white polypropylene containers after pans were cleaned in the morning to ensure that the fecal samples were not more than 6 hours old (see Protocol Deviations). Samples were packed on dry ice and shipped to the Mayo Clinic for analysis of urobilinogen using a routine, standardized, colormetric assay. Results were provided for inclusion in the final report.

Interim Liver Biopsy Samples

A sample of liver (approximately 1 to 2 g) was collected by biopsy from animals in Group 4 only during recovery [Week 57 (Day 393), on the same day as the serum PFOS blood collection]. This sample was divided into four portions as follows. One subsample was preserved in 10% neutral-buffered formalin, embedded in paraffin, sectioned, stained with hematoxylin and eosin (duplicate slides were prepared), and examined microscopically.

The second subsample was flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped to the Sponsor for analysis (see Protocol Deviations). Results will be reported separately.

The third subsample was processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy were transferred to Pathology Associates. Tissues were processed and evaluated by electron microscopy by Pathology Associates. A report was provided by Pathology Associates for inclusion in the final report.

The fourth subsample was flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until transferred to the Sponsor for possible future analysis.

Terminal Liver Biopsy Samples

A sample of liver (approximately 1 g) was collected by biopsy from all animals in Group 3 during recovery [Week 80 (Day 554), one week after the serum PFOS blood collection (see Protocol Deviations)]. This sample was flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped to the Sponsor for analysis. Results will be reported separately.

Anatomic Pathology - Terminal Sacrifice

Necropsy. A necropsy was done on Animal No. I05509 (Group 4 male) that died on Day 155 (Week 23) and Animal No. I05506 (Group 4 male) that was sacrificed in a moribund condition on Day 179 (Week 26). During Week 27 (Days 184 and 185) four animals/sex/group (Groups 1 through 3) and four females and two males (Group 4) were fasted overnight, anesthetized with ketamine and xylazine, weighed, bled for required tests, exsanguinated, and necropsied. Animals were necropsied in random order.

The necropsy included a macroscopic examination of the external surface of the body; all orifices; the cranial cavity; the external surface of the brain; the nasal cavity and paranasal sinuses; cervical tissues and organs; and the thoracic, abdominal, and pelvic cavities and viscera.

Organ Weights. At scheduled and unscheduled sacrifices, the following organs (when present) were weighed; paired organs were weighed separately.

adrenal (2)	ovary (2)
brain	pancreas
epididymis (2)	testis (2)
kidney (2)	thyroid (2) with parathyroid
liver	• • • • •

Organ-to-body weight percentages and organ-to-brain weight ratios were calculated.

Palmitoyl CoA Oxidase Determinations. Representative samples of the right lateral lobe of liver were collected from each animal at the scheduled sacrifice, weighed, flash-frozen in liquid nitrogen, and stored in a freezer, set to maintain -60 to -80°C, until analyzed for palmitoyl CoA oxidase activity.

Cell Proliferation Evaluation. Representative samples of the left lateral lobe of the liver, left and right testes, and pancreas were collected and preserved in zinc formalin. A second set of tissues (representative samples of the left lateral lobe of the liver, left and right testes, and pancreas) preserved in formalin without zinc were also prepared. After fixation, samples were embedded in paraffin and shipped to Pathology Associates North Carolina Division, A Charles River Company (Pathology Associates) for proliferation cell nuclear antigen (PCNA) evaluation, including the examination of slides stained with

hematoxylin and eosin (see Protocol Deviations). Results were provided by Pathology Associates for inclusion in the final report (Appendix 7).

Liver PFOS Determination. A section of liver (approximately 20 g) was collected from each animal at the scheduled sacrifice, weighed, flash-frozen in liquid nitrogen, and stored in a freezer, set to maintain -60 to -80°C, until shipped with plasma samples to the Sponsor. Results will be reported separately.

Gallbladder and Bile Collection. At the scheduled terminal sacrifice for each animal, bile was collected from the gallbladder, measured, transferred into a cryovial, and flash-frozen in liquid nitrogen. The gallbladder, once emptied, was weighed, and a section (approximately 4 to 5 mm) from the mid-portion was collected. The remaining gallbladder was placed in a cryovial and flash-frozen in liquid nitrogen. The bile and gallbladder samples were stored on dry ice until transferred to a freezer set to maintain -60 to -80°C. Samples were packed on dry ice and shipped to the Sponsor for possible future analysis.

Tissue Preservation. The following tissues (when present) or representative samples were collected and preserved in 10% neutral-buffered formalin, unless otherwise specified (see Protocol Deviations).

adrenal (2) lesions liver aorta brain lung cecum mammary gland cervix mesenteric lymph node colon ovary (2) duodenum pancreas epididymis (2) pituitary esophagus prostate eyes [(2) preserved in Davidson's rectum fixative for all sacrificed animals] salivary gland [mandibular (2)] femur with bone marrow (articular sciatic nerve surface of the distal end) seminal vesicle (2) gallbladder skeletal muscle (thigh) heart skin ileum spinal cord (cervical, thoracic, and jejunum lumbar) kidney (2) spleen

sternum with bone marrow stomach testis [(2) preserved in Bouin's solution for all sacrificed animals] thymus

thyroid (2) with parathyroid trachea urinary bladder uterus vagina

Histopathology. Tissues (as appropriate) were embedded in paraffin, sectioned, stained with hematoxylin and eosin, and examined microscopically from each animal in the control and high-dose groups (see Protocol Deviations for exceptions). In addition, liver and thymus for all animals in the low- and mid-dose groups and spinal cord gray matter from females in the low- and mid-dose groups were embedded in paraffin, sectioned, stained with hematoxylin and eosin, and examined microscopically. Other tissues, as appropriate, will be retained for possible future examination.

Bone marrow smears from the sternum of each animal at scheduled and unscheduled sacrifices were prepared, stained with Wright's stain, and retained for possible examination.

Electron Microscopy. A sample of the liver was collected from each animal at the scheduled terminal sacrifice. Tissues were processed into blocks and, along with a hematoxylin and eosin-stained slide, were shipped to Pathology Associates for analysis. Results were provided for inclusion in the final report.

Anatomic Pathology - Recovery Sacrifice

Termination. Remaining animals in Group 1 were transferred to Covance stock on Day 549 and remaining animals in Group 3 were transferred to Covance 6329-268 on Day 561. On Day 549, remaining animals in Group 4 were fasted overnight, anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

The necropsy of the animals in Group 4 included a macroscopic examination of the external surface of the body; all orifices; the cranial cavity; the external surface of the brain; the nasal cavity and paranasal sinuses; cervical tissues and organs; and the thoracic, abdominal, and pelvic cavities and viscera.

Liver Samples. Samples of liver were collected from animals in Group 4 as follows.

One sample was preserved in 10% neutral-buffered formalin, embedded in paraffin, sectioned, stained with hematoxylin and eosin (duplicate slides were prepared), and examined microscopically.

The second sample was flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped to the Sponsor for analysis. Results will be reported separately.

The third sample was processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy were transferred to Pathology Associates. Tissues were processed and evaluated by electron microscopy by Pathology Associates. A report was provided by Pathology Associates for inclusion in the final report.

Additional Tissue and Serum Samples. Samples of lung, kidney, spleen, thyroid, brain, abdominal fat, heart, (approximately 3 g each, if possible), and bile and serum (each as much as possible) were collected. These samples were flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped to the Sponsor for possible future analysis.

Statistical Analyses

Levene's test (Levene, 1960) was done to test for variance homogeneity. In the case of heterogeneity of variance at $p \le 0.05$, transformations were used to stabilize the variance. Comparison tests took variance heterogeneity into consideration.

One-way analysis of variance [ANOVA (Winer, 1971a)] was used (if applicable) to analyze initial body weights, organ weights, palmitoyl CoA oxidase activities, continuous clinical pathology values, and blood hormone determinations. If the ANOVA was significant, Dunnett's t-test (Dunnett, 1964) was used for control versus treated group comparisons.

One-way analysis of covariance [ANCOVA (Winer, 1971b)] was used to analyze body weights, with initial body weights as the covariate. If the ANCOVA was significant, covariate-adjusted means were used for control versus treated group comparisons.

Group comparisons (Groups 2 through 4 versus Group 1) were evaluated at the 5.0%, two-tailed probability level. Only data collected on or after the first day of treatment were analyzed statistically. Statistical analyses were not performed on data collected during recovery.

Record Retention

All raw data, documentation, records, protocol, and specimens generated as a result of this study will be archived in the storage facilities of Covance-Madison for a period of at least 1 year. At least one year after the submission of the final report, the Sponsor will determine the final disposition of the materials. All raw data stored on magnetic media and the protocol, study correspondence, and an original copy of the final report will be retained by Covance-Madison.

Within 1 year after submission of the final report, all of the aforementioned materials from the Sponsor's designees (AniLytics Inc., 3M E. T. & S, Mayo Clinic, and Pathology Associates) will be sent to the Sponsor (Andrew Seacat, PhD, 3M) by the Sponsor's designees.

RESULTS AND DISCUSSION

Observation of Animals

Clinical Observations. Clinical observations are summarized in Tables 1, 2, and 3; individual data are presented in Appendix 2. Individual animal fate data are also presented in Appendix 2.

Animal Nos. I05506 and I05509 given 0.75 mg/kg/day (Group 4 males) did not survive to the scheduled terminal sacrifice. All other animals survived to the scheduled study termination. No clinical observations noted in the animals that survived to the terminal sacrifice or recovery were attributable to the administration of PFOS.

Animal No. I05509 (Group 4 male) died after dosing on Day 155 (Week 23). On Day 154 (Week 22) observations of constricted pupil in both eyes and pale gums were noted. Observations noted on Day 155 prior to dosing included few, mucoid, liquid, and black-colored feces and low food consumption. Approximately 15 minutes after dosing, the animal was observed as hypoactive with labored respiration and pale gums. This

animal also appeared dehydrated and was cold to the touch. These observations persisted until approximately 30 minutes postdose when the animal was also noted as recumbent. Shortly thereafter, the animal died during an examination by a laboratory animal veterinarian. An enlarged liver was detected by palpation. The cause of death was determined to be pulmonary necrosis with severe acute inflammation.

On Day 179 (Week 26), Animal No. I05506 (Group 4 male) was sacrificed in a moribund condition. Low food consumption was noted on Day 178 (Week 26) and at the a.m. observation interval on Day 179. Approximately 5 to 10 minutes postdose on Day 179, the animal had excessive salivation, labored respiration, and hypoactive and ataxic behavior. With the exception of excessive salivation, these findings continued to be observed approximately 3 hours postdose. The cause of the moribund condition was not determined.

Two additional animals had noteworthy observations during treatment. One female in the group given the control material, Animal No. I05529, was examined by a laboratory animal veterinarian on Day 5 (Week 1) due to observations of dehydration, thin appearance, clear oral and nasal discharge, excessive salivation, and audible respiration. This animal was diagnosed with pneumonia and treated with Lactated Ringer's solution and antibiotics. This animal had recovered by Day 14 (Week 2). Animal No. I05534 (Group 4 female) was diagnosed with a tapeworm infection during Week 23 and was treated with praziquantel. Neither infection was test material-related.

Clinical observations during recovery were typical of laboratory primates.

Ophthalmology. Ophthalmic observations are summarized in Tables 4 and 5; individual data are presented in Appendix 2.

There were no ophthalmic observations at the Week 26 or Week 52 examinations that were test material-related. Animal No. I05529 (Group 1 female) was noted as having increased myelination of the right optic nerve at the baseline and Week 52 ophthalmic examinations. Because this is a permanent, congenital condition, it was noted at the baseline and recovery examinations only and is not related to treatment with PFOS.

Body Weights. Body weight data are illustrated in Figures 1 and 2 and summarized in Tables 6 and 7; individual data are presented in Appendix 3.

Covariate-adjusted mean (CAM) body weights were slightly lower in males given 0.75 mg/kg/day when compared with males given the control material beginning at Week 21; the difference was significant at Weeks 23 and 27. In females given 0.75 mg/kg/day, CAM body weights were significantly lower at Weeks 11 through 16, 19 through 23, and 25 through 27 when compared with females given the control material. These decreases were likely test material-related.

Differences in body weights were not apparent during the recovery period.

Food Consumption. Food consumption data are summarized in Tables 1, 2, and 3 (Summary of Clinical Observations); individual data are included in the individual clinical observations in Appendix 2.

Low food consumption was noted sporadically for animals in the groups given the control material and 0.03 mg/kg/day. The incidence of low food consumption was generally higher in the groups given 0.15 and 0.75 mg/kg/day as compared to animals given the control material and appeared to be test material-related. During recovery, instances of low food consumption were sporadic and were similar for animals in the control and treated groups.

Clinical Pathology

Hematology, clinical chemistry, and urinalysis data are summarized in Tables 8 through 46; individual data are presented in Appendix 4.

Administration of PFOS was associated with moderately to markedly lower total cholesterol for males and females given 0.75 mg/kg/day and high density lipoprotein cholesterol for males and females given 0.15 or 0.75 mg/kg/day. During the treatment period, the effect on total cholesterol became progressively worse over time. The effect on cholesterol was reversed within 5 weeks of the end of treatment, and the effect on high density lipoprotein cholesterol was reversed within 9 weeks of the end of treatment. Of uncertain relationship to administration of PFOS was lower total bilirubin concentration for males given 0.75 mg/kg/day and higher serum bile acid concentration for males given 0.75 mg/kg/day. These potential effects of the test material were very mild, and neither was considered adverse.

Palmitoyl CoA Oxidase Determination

Palmitoyl CoA oxidase determinations are summarized in Table 47; individual data are presented in Appendix 5.

Results of palmitoyl CoA oxidase determinations were not considered to be related to the test material.

Blood Hormone Determination

Summary and Individual Blood Hormone Data are presented in Appendix 6.

Estradiol values were generally lower on Days 62, 91, and 182 in males given 0.75 mg/kg/day, although because of the variation in the data only the Day 182 value was significant. Estrone values were generally higher in all of the treated females on Days 37, 62, and 91, although because of the variation in the data none of these values were significantly different, and this difference was not apparent on Day 182. Triiodothyronine values were notably lower on Days 91 and 182 in both males and females given 0.15 or 0.75 mg/kg/day. With the single exception on Day 91 of males given 0.15 mg/kg/day, all values were significantly lower. There were several other instances in which the hormone values in treated groups differed from those of controls, but these differences were not consistent over time or between sexes, were not clearly dose-related, and did not appear to be related to the administration of the test material.

During recovery were occasional instances in which the hormone values in treated groups differed slightly from those of controls, but those differences were not consistent over time or between sexes, were not clearly dose-related, and did not appear to be clearly related to the administration of the test material.

Apparent differences in the sexual maturity of both males and females used in this study complicates the interpretation of the hormone data.

Anatomic Pathology

Terminal body weights, absolute organ weights, organ-to-body weight percentages, and organ-to-brain weight ratios are summarized in Table 48; incidences of macroscopic and microscopic observations are summarized in Tables 49 through 52. Individual data are presented in Appendix 5.

Two of four males receiving 0.75 mg/kg/day (high dose) did not survive to the scheduled terminal sacrifice at Week 27. At the terminal sacrifice, females in the group receiving 0.75 mg/kg/day had increased absolute liver weight, liver-to-body weight percentages, and liver-to-brain weight ratios. In males, liver-to-body weight percentages were increased in the high-dose group compared to the control group. Absolute and relative liver weight increases were regarded as test material-related. Among the macroscopic observations, only "mottled" liver was considered test material-related. "Mottled" livers were observed in the two high-dose males and in one high-dose female. Of the two males not surviving until the scheduled terminal sacrifice, one had "mottled" and "large" liver.

Microscopic examination of animals sacrificed at Week 27 and of the two males sacrificed at an unscheduled interval yielded test material-related observations in the liver. In four of four high-dose males there was hepatocellular hypertrophy, occurring either centrilobullary or without regard to location within hepatic lobules. Hypertrophy, as described in the males, was observed in all high-dose females. The microscopic observations of hepatocellular hypertrophy were reflected in higher liver weights in the high-dose females. Hypertrophy was regarded as test material-dependent in high-dose animals.

Centrilobular or diffuse hepatocellular vacuolation was also test material-dependent in high-dose animals, occurring in two of four females and two of four males. Multifocal hepatic vacuoles were not regarded as test material-dependent because they were found in one of four low-dose males, and in a control and a low-dose female.

Microscopic examination of liver taken at biopsy on Week 57 from the high-dose animal did not have any test material-related findings.

At the recovery sacrifice, one of two males and one of two females did not have macroscopic observations. The observations in the other animals were of adhesions on the lungs or liver and nodules in the thoracic cavity. None of these observations was considered test material-related. Only livers were examined microscopically, and no test material-related observations were made. The hepatic vacuolation observed in terminal sacrifice and unscheduled death animals was not present, indicating that the hepatic test material-related effects were reversible.

CONCLUSION

Treatment with PFOS by oral capsule for at least 26 weeks is generally well-tolerated in male and female cynomolgus monkeys at doses up to 0.15 mg/kg/day. Clinical and pathological findings considered to be associated with the treatment of PFOS after at least 26 weeks of treatment were found to be reversible during a 52-week recovery period. Based on the data presented in this report, the no-observable-adverse-effect level is 0.15 mg/kg/day. Dose analysis results (provided by the Sponsor), fecal analysis results (provided by the Mayo Clinic), and electron microscopy results (provided by Pathology Associates), were provided for inclusion in the final report.

SIGNATURES

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REFERENCES

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OPHTHALMOLOGY REPORT

Ophthalmic examinations were done before initiation of treatment and during Weeks 26 and 52. There were no ophthalmic observations at the Week 26 or Week 52 examinations that were test material-related. Animal No. I05529 (Group 1 female) was noted as having increased myelination of the right optic nerve at the baseline and Week 52 ophthalmic examinations. Because this is a permanent, congenital condition, it was noted at the baseline and recovery examinations only and is not related to treatment with PFOS. There were no test material-related observations at any of the examinations.

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PATHOLOGY REPORT

SUMMARY

The purpose of the study was to assess the effect of the test material, Perfluorooctane Sulfonic Acid Potassium Salt (PFOS), on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by capsule to cynomolgus monkeys for at least 26 weeks. The test material was administered at dose levels of 0.03, 0.15, and 0.75 mg/kg/day. One male given 0.75 mg/kg/day died on Day 155 after dose administration and one male given 0.75 mg/kg/day was sacrificed on Day 179 due to poor health. The treatment period was followed by an approximate 52-week recovery period.

Administration of PFOS was associated with moderately to markedly lower total cholesterol for males and females given 0.75 mg/kg/day and high density lipoprotein cholesterol for males and females given 0.15 or 0.75 mg/kg/day. During the treatment period, the effect on total cholesterol became progressively worse over time. The effect on cholesterol was reversed within 5 weeks of the end of treatment, and the effect on high density lipoprotein cholesterol was reversed within 9 weeks of the end of treatment. Of uncertain relationship to administration of PFOS was lower total bilirubin concentration for males given 0.75 mg/kg/day and higher serum bile acid concentration for males given 0.75 mg/kg/day. These potential effects of the test material were very mild, and neither was considered adverse.

Two of four males receiving 0.75 mg/kg/day did not survive to the scheduled terminal sacrifice at Week 27. At the terminal sacrifice, females in the group receiving 0.75 mg/kg/day had increased absolute liver weight, liver-to-body weight percentages, and liver-to-brain weight ratios. In males, liver-to-body weight percentages were increased in the high-dose group compared to controls. These absolute and relative liver weight increases were regarded as test material-related. Among the macroscopic observations, only "mottled" liver was considered test material-related. "Mottled" livers were observed in the two high-dose males and in one high-dose female. Of the two males not surviving until the scheduled terminal sacrifice, one had "mottled" and "large" liver.

Microscopic examination of animals sacrificed at Week 27 and the two unscheduled sacrifice males yielded test material-related observations in the liver. In four of four high-dose males there was hepatocellular hypertrophy, occurring either centrilobullary or without regard to location within hepatic lobules. Hypertrophy, as described in the males, was also observed in four of four high-dose females. The microscopic observations of hepatocellular hypertrophy were reflected in higher liver weights in the high-dose females. Hypertrophy was regarded as test material-dependent in high-dose animals.

Centrilobular or diffuse hepatocellular vacuolation was also test material-dependent in high-dose animals, occurring in two of four females and two of four males. Multifocal hepatic vacuoles were not regarded as test material-dependent because they were found in one of four low-dose males, and in a control and a low-dose female.

Microscopic examination of liver taken at biopsy on Week 57 from the high-dose animal did not have any test material-related findings.

For the recovery sacrifice at Week 79, only high-dose animals were necropsied. One of two males and one of two females did not have macroscopic observations. The observations in the other animals were of adhesions on the lungs or liver and nodules in the thoracic cavity. None of these observations was considered test material-related. Only livers were examined microscopically. No test material-related observations were made. The hepatic vacuolation observed in terminal sacrifice and unscheduled death animals was not present, indicating that the hepatic test material-related effects were reversible.

METHODS

Four groups of male and female cynomolgus monkeys were administered the test material daily by capsule at a dose level of 0 (control group; received capsules containing lactose), 0.03, 0.15, or 0.75 mg/kg of body weight/day (mg/kg/day). There were six animals/sex in the control group and the groups given 0.15 or 0.75 mg/kg/day; two animals/sex in these groups were designated as recovery animals to be observed for approximately 26 weeks posttreatment. The recovery period was later extended an additional 26 weeks. There were four animals/sex in the group given 0.03 mg/kg/day.

One male given 0.75 mg/kg/day died on Day 155 following dose administration, and one male given 0.75 mg/kg/day was sacrificed on Day 179 due to poor health.

Blood and urine were collected for hematology, clinical chemistry, and urinalysis tests once before initiation of treatment (Week -4), on Days 37, 62, 91, 153, and 182 and on Days 217, 245, 274, 322, 364, 456, and 546 (recovery animals). High density lipoprotein cholesterol was not measured at the clinical pathology intervals before Day 153.

The terminal sacrifice and necropsy occurred on Days 184/185; macroscopic observations were recorded, organ weights were obtained, and tissues were placed in fixative as specified by the protocol. Samples of the right lateral lobe of the liver from each animal were frozen for analysis of palmitoyl CoA oxidase activity. Sections of liver from each animal were processed to block for electron microscopy and shipped to the Sponsor's designee for ultrastructural evaluation. Samples of liver from each animal were frozen and shipped to the Sponsor for PFOS determination. The gallbladders and bile from each animal were collected, frozen, and shipped to the Sponsor. Samples of pancreas, left and right testes, and the left lateral lobe of the liver were preserved for cell proliferation evaluation by the Sponsor's designee using proliferation cell nuclear antigen. Light microscopic examinations were done on collected tissues from control animals and animals given 0.75 mg/kg/day. In addition, liver and thymus from all animals given 0.03 or 0.15 mg/kg/day and spinal cord gray matter from females given 0.03 or 0.15 mg/kg/day were examined by light microscopy.

During Week 57, liver biopsies were performed on the recovery animals that had been given 0.75 mg/kg/day. The tissue was divided into four samples. Three of the samples were used for light microscopic examination, ultrastructural examination by the Sponsor's designee, and PFOS analysis by the Sponsor, respectively. The fourth sample was frozen and shipped to the Sponsor for possible analysis. At the end of the recovery period (Week 79), the control animals were returned to the Covance stock colony, the animals that had been given 0.15 mg/kg/day were transferred to a subsequent study for the Sponsor (Covance 6329-268) following liver biopsy for PFOS analysis by the Sponsor, and the animals that had been given 0.75 mg/kg/day were sacrificed and necropsied. At this recovery necropsy, macroscopic observations were recorded, and three samples of liver were collected for light microscopic examination, ultrastructural examination by the Sponsor's designee, and PFOS analysis by the Sponsor, respectively.

Statistically significant differences cited in the Results and Discussion are based on comparisons between the control and treated groups.

RESULTS AND DISCUSSION

Mortality

Two of four males receiving 0.75 mg/kg/day (high dose) of the test material did not survive to the scheduled terminal sacrifice at Week 27. One was found dead on Day 155. The other was sacrificed on Day 179 due to poor health. The cause of death in the animal found dead was judged to be pulmonary necrosis with severe acute inflammation. Microscopically, the pulmonary lesion appeared to be an acute exacerbation of a chronic lesion. The cause of death in the moribund animal was not determined. All other animals survived to their scheduled sacrifices.

Clinical Pathology

Week -4. Results of clinical pathology tests indicated no obvious group or individual health abnormalities. Several animals, however, had mildly elevated alanine aminotransferase activities at Week -4. These animals were primarily females and were dispersed among all of the groups. By Day 37, their alanine aminotransferase activities were no longer elevated. The transient increase in this liver enzyme was considered likely due to subclinical infection with Hepatitis A virus, a common infection in cynomolgus monkeys, and did not negatively impact evaluation of the test material.

Days 37, 62, 91, 153, and 182. Although there were several statistically significant or otherwise notable differences for clinical pathology test results between the control and treated animals, most of the differences were inconsistent over time or similar to differences present before initiation of treatment (i.e., Week -4). The only differences considered to represent effects of the test material were lower total cholesterol for males and females given 0.75 mg/kg/day and lower high density lipoprotein cholesterol for males and females given 0.75 or 0.75 mg/kg/day. The effect on total cholesterol became progressively worse over time. At Day 182, the mean total cholesterol concentrations for the males and females given 0.75 mg/kg/day were approximately 68% and 49% lower, respectively, than those for the control males and females. The effect on high density lipoprotein cholesterol, measured only at Days 153 and 182, was proportionately greater than that for total cholesterol. At Day 182, the mean high density lipoprotein cholesterol

concentrations for the males and females given 0.75 mg/kg/day were approximately 79% and 62% lower, respectively, than those for the control males and females.

Of uncertain relationship to administration of PFOS was lower total bilirubin concentration for males given 0.75 mg/kg/day (statistically lower on Days 91, 153, and 182) and higher serum bile acid concentration for males given 0.75 mg/kg/day (statistically higher on Day 182 only). These potential effects of the test material were very mild, and neither was considered adverse.

Statistically significant differences for other test results were considered incidental and unrelated to administration of the test material. These differences were inconsistent over time or were similar to differences that existed before the initiation of treatment.

Unscheduled sacrifice Animal No. I05506, a male given 0.75 mg/kg/day, was sacrificed on Day 179. The most notable findings for this animal were a moderate neutrophilic leukocytosis, mildly increased serum bile acid and globulin concentrations, and moderately to markedly decreased total cholesterol and high density lipoprotein cholesterol.

Days 217, 245, 274, 322, 364, 456, and 546 (Recovery animals). The effect on cholesterol was reversed by Day 217, and the effect on high density lipoprotein cholesterol was reversed by Day 245. There were no other findings considered to represent persistent or delayed occurrence of toxic effects.

Anatomic Pathology

Organ Weights. At the terminal sacrifice (Week 27) females in the group receiving 0.75 mg/kg/day (high-dose) had increased absolute liver weight, liver-to-body weight percentages, and liver-to-brain weight ratios. This increase was regarded as test material-related. In females the absolute pancreas weights were higher in animals receiving 0.03 mg/kg/day (low-dose) than in those receiving 0 mg/kg/day (control). Increased pancreatic weights were not regarded as test material-related.

In males, liver-to-body weight percentages were increased in the high-dose group compared to controls. The increase was regarded as test material-related. Left adrenal-to-body weight percentages were also increased in high dose males compared to controls. The significance of the increase left adrenal weight percentage was not known.

Organ weights were not taken at the recovery sacrifice at Week 79.

Macroscopic Observations. Twenty one of 30 animals at the terminal sacrifice had at least one macroscopic observation. One of the observations was obesity; it was not regarded as pathologic. Thus, 20 animals had macroscopic observations. Of all the macroscopic observations, only "mottled" liver was considered test material-related. "Mottled" liver was observed in the two high-dose males and in one high-dose female.

The other observations included adhesions and dark or red foci in any of several organs. Among high-dose females, each had at least one observation of a dark or red focus. In addition, adrenal cortices of the two high-dose males and two of four high dose females were recorded as dark. In one high-dose female (Animal No. I05540), the red focus in the lung correlated microscopically with hemorrhage. There were no microscopic correlates for the other observations. Hence, dark or red foci were considered too non-specific to be considered test material-related. Additionally, dark and red foci were observed in animals in other dose groups. Dark adrenal cortices did not have a microscopic correlate; they, too, were not considered test material-related.

Of the two males not surviving until the scheduled terminal sacrifice, one did not have any macroscopic observations. The other (Animal No. I05509) had several observations. Of these observations, those in the liver were considered test material-related. The liver observations were "mottled" and "large".

For the recovery sacrifice at Week 79, only high dose animals were necropsied. One of two males and one of two females did not have macroscopic observations. The observations in the other animals were of adhesions on the lungs or liver and nodules in the thoracic cavity. None of these observations was considered test material-related.

Microscopic Observations. At the terminal sacrifice, all tissues from the control and high dose groups were examined. All tissues were examined on the two high-dose males not surviving until the terminal sacrifice; the microscopic data were grouped with that of the terminal sacrifice animals. Liver, thymus, and spinal cord (females only) were examined from animals in the low and intermediate dose groups. In four of four high-dose males there was hepatocellular hypertrophy, occurring either centrilobullary or without regard to location within hepatic lobules. Hypertrophy, as described in the males, was observed in four of four high-dose females. The microscopic observations of

hepatocellular hypertrophy were reflected in higher liver weights in the high-dose females. Hypertrophy was regarded as test material-dependent in high dose animals.

Centrilobular or diffuse hepatocellular vacuolation was also test material-dependent in high-dose animals, occurring in two of four females and two of four males. Multifocal hepatic vacuoles were not regarded as test material-dependent. Multifocal hepatic vacuoles were found in one of four low dose males, and in a control and a low-dose female.

Two other observations were suggestive of possible test material effects upon examination of only control and high-dose animals. When tissues were examined from the low and intermediate dose groups as well, test material-dependency was not supported. In females, thymic atrophy was more pronounced in dosed animals than in controls. However, there is no clear dose-dependent pattern and thus, thymic atrophy cannot be considered test material-dependent. Intraneuronal pigment was observed in the spinal cord gray matter of two of four high dose, four of four mid-dose, three of four low-dose and one of four control females. And thus, spinal cord pigment was considered unrelated to the test material.

Microscopic examination of liver taken at biopsy on Week 57 from the high-dose animal did not have any test material related findings.

At the recovery sacrifice, livers were examined from high-dose animals. No test material-related observations were made. The hepatic vacuolation observed in terminal sacrifice and unscheduled death animals was not present, indicating that the hepatic test material-related effects were reversible.

In those animals from which all tissues were examined, the width of the femoral growth plates were assessed as a general indication of the maturity of the animals. Based on this indicator, males were less mature than females.

Diplomate, ACVP (Clinical Pathology) 21 December 2001 Date

Robert A. Leedle, DVM, PhD

Diplomate, ACVP

21 December 2001 Date

COMMENTS ON THE DATA

Various models of calculators, computers, and computer programs were used to analyze data in this study. Because different models round off or truncate numbers differently, values in some tables (e.g., means, standard deviations, or individual values) may differ slightly from those in other tables, from individually calculated data, or from statistical analysis data. Neither the integrity nor the interpretation of the data was affected by these differences.

Some tabular data were compiled using Excel® Version 7.0 software.

The units for the dose levels on the data collection system (PTS) summary tables are mg/kg/day.

The number of animals listed in the heading of the summary table for clinical observations reflects the number of animals assigned to each group at the start of the study.

The summary table for clinical observations indicates the number of animals for which a condition was observed without regard to the specific nature, severity, reversibility, number of incidences/animal, or the length of time the condition persisted.

Only observations other than normal are indicated on the summary of clinical observations table.

The specific details for comments in the individual clinical observations tables that are indicated with a "C" can be found at the end of each group for each sex.

The day of initiation of treatment is "Day 1, Week 1." Body weight data are entered at the start of a study week (e.g., a body weight recorded on Day 1 is considered a Week 1 body weight, a body weight recorded on Day 8 is considered a Week 2 body weight).

Differences in the population size (N) on the summary tables for clinical and anatomic pathology are explained on the individual data tables.

Results of clinical pathology samples collected for animals sacrificed at an unscheduled interval appear on the individual clinical pathology tables for the next scheduled interval. These results are not on the summary tables and are not included in the statistical analyses.

Statistical analyses were not done when there were two or fewer values for a parameter.

COMMENTS ON THE DATA (continued)

Bile volume is located on the individual anatomic pathology table under the heading of "absolute organ weight (grams)". The value listed for bile is not a weight and is designated with a unit of mL.

Some clinical observations discussed in the report were documented on the Request for Veterinary Services form and will be archived with the raw data, but they do not appear on the individual clinical observations tables.

CODES, ABBREVIATIONS, AND UNITS

General Codes and Abbreviations
Codes for Clinical Pathology
Abbreviations and Units for Clinical Hematology
Abbreviations and Units for Clinical Chemistry
Abbreviations and Units for Clinical Urinalysis
Codes for Anatomic Pathology

Note: The following lists of codes, abbreviations, and units are used by Covance. Some, but not necessarily all, of this information may be needed for this report.

General Codes and Abbreviations

WK Week

N Number of measurements in a group

Mean; MEAN Arithmetic mean

CAM Covariate-adjusted mean SD; S.D.; STAND DEV; Standard deviation

STANDARD DEV; sd

Group mean is significantly different from

the mean of the control group (Group 1) at

 $p \le 0.05$

-; NA No value; not applicable; not present

Present

C Comment found at the end of each group

for each sex

UNSCHED Unscheduled

DISPATCH Observations transferred from the in-life

module of the data collection system to the necropsy module for reference during necropsy. Observations are duplicates of

the last in-life observations.

TBW Terminal body weight

Number

VET EXAM Veterinary examination

AM OBS Observations recorded during the daily,

morning observation interval.

30-90 OB Observations recorded during the 30 to 90

minute postdose observation interval.

E2 Estradiol

FSH Follicle stimulating hormone

LH Lutenizing hormone
 T3 Triiodothyronine
 T4 Total thyroxin
 FREE T4 Free thyroxin

TSH Thyroid stimulating hormone

Codes for Clinical Pathology

GENERAL CODES

NS No sample

QS/QNS Quantity not sufficient

NR No repeat (sample volume not sufficient for repeat analysis)

FS Fibrin strands
SC Sample clotted
SH Slightly hemolyzed

H Hemolyzed
SL Slightly lipemic
L Lipemic
SI Slightly icteric

I Icteric

NF Animal not fasted

Unscheduled/moribund bleed

DT/DOT Animal died on test
DB Died during bleeding

TJ Technician judgment to repeat test

TE Technical error (instrument or technician error that results in

unacceptable data, e.g., unacceptable instrument output, sample

spilled, entry of invalid data)

RE Recording error (recorded incorrect data, e.g., wrong number,

spelling error, incorrect date)

EE Entry error (incorrect keyboard entry)

SE Sampling error
PC Platelets clumped
PD Platelets decreased
PI Platelets increased
PL Platelets large

PA Platelets appear adequate
CO Color interferes with test
HB Heinz bodies observed

PLASMO Plasmodium
NO AGG No aggregation
FR Fractious

UTD Unable to determine NO COAG No coagulation

Codes for Clinical Pathology (Continued)

RESULTS NOT INCLUDED IN STATISTICAL ANALYSES

Hemolyzed clinical chemistry or coagulation samples Samples from animals at unscheduled intervals Prothrombin times (PT) greater than 50 seconds Activated partial thromboplastin times (PTT) greater than 110 seconds Bleed times (BLETIME) greater than 30 minutes

CODES FOR BLOOD CELL MORPHOLOGY

The following scale was used to measure the degree of anisocytosis (ANISO), poikilocytosis (POIK), polychromasia (POLY), hypochromasia (HYPO), and toxic neutrophils (TOXNEUT):

Scale	Degree	Presence
-	Normal for the species	Not present
1	Slight	Rare
2	Moderate	Few
3	Marked	Moderate
4	Not applicable	Many

URINE APPEARANCE

	Color		Clarity	Miscellaneous
A Pale	E Amber	I Black	J Clear	M Debris
B Straw	F Brown	P Blue/green	K Hazy	O Feces
C Yellow	G Red	Q Blue	L Cloudy	
D Dark yellow	H Green	R Orange		

Codes for Clinical Pathology (Continued)

URINE CHEMISTRY MULTISTIX® STRIP

Urine Glucose		Uriı	ne Ketone		Ur	ine Blood	
-	Negativ	/e	-	Negative		-	Negative
+	100 mg	/dL	+	5 mg/dL		+	Small
++	250 mg	/dL	++	15 mg/dL		++	Moderate
+++	500 mg	/dL	+++	40 mg/dL		+++	Large
++++	1,000 n	ng/dL	++++	80 mg/dL			
+++++	≥2,000	mg/dL	+++++	160 mg/dL			
_	Urine U	robilinogen	_	_	Urine	e Bilin	ubin
	-	0.2 mg/dL			-	Neg	ative
	+	1 mg/dL			+	Sma	11
	++	2 mg/dL			++	Mod	lerate
	+++	4 mg/dL			+++	Larg	ge .
	++++	8 mg/dL					

(1 mg = approximately 1 Ehrlich unit)

URINE SEDIMENT

Ce	ells, Crystals, Casts, and (Com	ments	Ba	acteria
A	Amorphous urates	Q	Sperm	0	Not present
В	Amorphous phosphates	R	Fecal contamination	1	Few
C	Uric acid	S	Pinworm ova found	2	Moderate
D	Triple phosphates	T	Pinworm larvae found	3	Many
Ε	Calcium oxalate	U	Parasite ova found		
F	Calcium carbonate				
G	Granular casts	0	Not present		
Н	Hyaline casts	1	1-5 per field		
I	Cellular casts	2	6-10 per field		
J	Waxy casts	3	11-20 per field		
K	Unknown crystal	4	>20 per field		
P	Mucous threads				

Abbreviations and Units for Clinical Hematology

TestRed blood cell count

Abbreviation (Units)
RBC (E6/UL or X10⁶/mcL)

Hemoglobin
Hematocrit
Hematocrit
Hematocrit
Hematocrit
Hematocrit
Hematocrit
Hematocrit
HCT (%)
Mean corpuscular volume
MCV (FL)
Mean corpuscular hemoglobin
MCH (PG)
Mean corpuscular hemoglobin concentration
MCHC (%)

Platelet count PLT (E3/UL or X10³/mcL)

Mean platelet volume MPV (FL)
Reticulocyte count RETIC (%)

Absolute reticulocyte count RETIC (E3/UL or X10³/mcL)

Heinz body count

Erythrocyte sedimentation rate

Prothrombin time

Activated partial thromboplastin time

Thrombin time

TT (SEC)

Thrombin time

TT (SEC)

Activated coagulation time ACT (SEC)
Fibrinogen FBR (MG/DL)
Fibrin/fibrinogen degradation products FDP (UG/ML)

Platelet aggregation

Collagen
Adenosine diphosphate
Alpha 2-antiplasmin
Bleeding time
BLE TIME (SEC)
Methemoglobin
Plasma hemoglobin
PLA HGB (MG/DL)

Myeloid/erythroid ratio M/E RATIO
Estimated myeloid/erythroid ratio EST M/E RATIO

White blood cell count WBC (E3/UL or X10³/mcL)

Differential blood cell count

Nucleated red blood cell count NRBC (/100 WBC)

Corrected white blood cell count

Segmented neutrophil count

Band neutrophil count

Lymphocyte count

Monocyte count

Eosinophil count

Basophil count

COR WBC (E3/UL or X10³/mcL) and %

N-SEG (E3/UL or X10³/mcL) and %

Lymphocyte count

MONO (E3/UL or X10³/mcL) and %

EOSIN (E3/UL or X10³/mcL) and %

BASO (E3/UL or X10³/mcL) and %

BASO (E3/UL or X10³/mcL) and %

Basophil count
Anisocytosis
Polychromasia
Poikilocytosis

BASO (E3/UL or 1
ANISO (-,1,2,3)
POLY (-,1,2,3)
POIK (-,1,2,3)

Abbreviations and Units for Clinical Hematology (Continued)

Test Abbreviation (Units) Hypochromasia HYPO(-,1,2,3)Howell-Jolly bodies HJBODY (-,1,2,3,4) Basophilic stippling BASTIP (-,1,2,3) Toxic neutrophils TOXNEUT (-,1,2,3,4) Atypical lymphocytes ATYPLYM (-,1,2,3,4) Aqueous white blood cell count (right eye) R EYE (WBC/UL) Aqueous white blood cell count (left eye) L EYE (WBC/UL)

Abbreviations and Units for Clinical Chemistry

Test Abbreviation (Units) Glucose GLU (MG/DL) Urea nitrogen UN (MG/DL) Urea UREA (MG/DL) Creatinine CREAT (MG/DL) Total protein T PRO (G/DL) Albumin ALB (G/DL) Globulin GLOB (G/DL) Albumin/globulin ratio A/G RATIO Total bilirubin T BILI (MG/DL) Direct bilirubin D BILI (MG/DL) Indirect bilirubin I BILI (MG/DL) Cholesterol CHOL (MG/DL) Triglyceride TRIG (MG/DL) Urea nitrogen/creatinine ratio UN/CREAT (RATIO) Total lipids T LIPIDS (MG/DL) **Phospholipids** P LIPIDS (MG/DL) High-density lipoprotein cholesterol HDL (MG/DL) Low-density lipoprotein cholesterol LDL (MG/DL) Uric acid UA (MG/DL) Aspartate aminotransferase AST/SGOT (IU/L) Alanine aminotransferase ALT/SGPT (IU/L) Alkaline phosphatase ALK PHOS (IU/L) Gamma glutamyl transferase GGT (IU/L) Sorbitol dehydrogenase SDH (IU/L) Lactate dehydrogenase LDH (IU/L) Creatine kinase CK (IU/L) Amylase AMYLASE (IU/L) Lipase LIPASE (IU/L) Palmitoyl CoA oxidase PCOAO (IU/G) CA (MG/DL) Calcium Ionized calcium ION CA (MG/DL) Inorganic phosphorus I PHOS (MG/DL) Sodium NA (MMOL/L) Potassium K (MMOL/L)

Chloride CL (MMOL/L)
Magnesium MG (MEQ/L or MG/DL)
Zinc ZN (MG/L or PPM)
Strontium SR (MG/L or PPM)
Iron FE (UG/DL)

Abbreviations and Units for Clinical Chemistry (Continued)

Test Abbreviation (Units) Excess iron EX FE (UG/DL) Total iron binding capacity TIBC (UG/DL) Unbound iron binding capacity UIBC (UG/DL) Percent iron saturation FE %SAT (%) Plasma cholinesterase CHEP (MU/ML) Red blood cell cholinesterase CHER (MU/ML) Brain cholinesterase CHEB (MU/ML) Caudate putamen CAUD PUT (UMOL/G) HIPPOCAM (UMOL/G) Hippocampus Frontal cortex F CORTEX (UMOL/G) Cerebellum CEREBELL (UMOL/G) Bicarbonate BICARB (MMOL/L) SER HGB (MG/DL) Serum hemoglobin Serum bile acids SBA (UMOL/L or MG/DL) Fecal bile acids FBA (UG/ML) Average fecal weight FCC WGT (G) Fecal bile acids (calculation) FBA (MG/Day) Osmolality OSMO (MOSM/KG) Electrophoresis Albumin E ALB (G/DL) E A-1 (G/DL) Alpha-1-globulin Alpha-2-globulin E A-2 (G/DL) Beta globulin E BETA (G/DL) Gamma globulin E GAMMA (G/DL) High-density lipoprotein E-HDL (%) Low-density lipoprotein E-LDL (%) Very-low-density lipoprotein E-VLDL (%) INSULIN (UU/ML) Insulin Adrenocorticotropic hormone ACTH (PG/ML) Cortisol CORTISOL (UG/ML) Glucagon GLUCAGON (PG/ML) Triiodothyronine T3 (NG/DL) Thyroxine T4 (UG/DL) Creatine kinase isoenzymes BBCK-BB (U/L) MB CK-MB (U/L) MM CK-MM (U/L)

Abbreviations and Units for Clinical Urinalysis

Test Abbreviation (Units)

Urine volume U VOL (ML) 8 hour urine volume 8 HR VOL (ML)

Specific gravity SP GR

Urine osmolality U OSMO (MOSM/KG)
Quantitative urinary/cerebrospinal QUAN PRO (MG/DL)

fluid protein

Urine protein excretion PRO EXC (MG)

Urine chemistry Multistix® strip

Urine pH U PH

Urine protein U PRO (MG/DL)

Urine glucose
U GLU
Urine ketones
U KET
Urine bilirubin
U BILI
Urine blood
Urine urobilinogen
UROBILI
Urine reducing substances
U GLU
U KET
U KET
U KET
U BILI
U BLOOD
UROBILI
UROBILI
UROBILI

Microscopic examination of urine sediment

Red blood cells per high-power field
White blood cells per high-power field
WBC (PER HPF)
Epithelial cells per high-power field
EPITH (PER HPF)
Bacteria per high-power field
BACT (PER HPF)
Casts per low-power field
CASTS (PER LPF)

Crystals per low-power field CRYSTALS (PER LPF1 or

PER LPF2)

Urine appearance URINE APP1 or URINE APP2

Comments COMMENTS

Miscellaneous Codes and Abbreviations for Clinical Pathology

Fecal occult blood Not applicable
Fecal parasite detection Not applicable
Hemolytic potential Not applicable

Codes for Anatomic Pathology

Code Definition

ANIMAL DEATH CODES

T	Terminal sacrifice
U	Recovery sacrifice
D	Found dead
M	Moribund
P/O	Transferred to Covance stock
6	Transferred to Covance 6329-268

MACROSCOPIC CODES

EX	Indicates that organ weight is excluded from calculations
NOT TAKEN	Organ weight not taken; explanation given in necropsy notes
MISSING	Organ missing or lost
UNSUITABLE	Organ technically unsuitable for weighing
AUTOLYTIC	Organ autolyzed and could not be weighed
EXCLUDE	Weight was taken, but was excluded from all calculations

MICROSCOPIC CODES

Codes Prefacing Neoplastic Findings

B-	Primary, benign neoplasm
M-	Primary, malignant neoplasm
N-	Metastatic neoplasm
I-	Locally invasive neoplasm
X-	Other neoplasm

Distribution of Findings

Focal Diffuse Multifocal

Codes for Anatomic Pathology (Continued)

Code Definition

Grades for Severity or Amount

1	Minimal - the least amount of change that can be observed with the
	light microscope
2	Slight - less than average amount of change, but readily discernible as abnormal
3	Moderate - the average amount of change that is expected for a lesion
4	Moderately severe (marked) - a marked amount of change with possible loss of function of the affected cells or organs
5	Severe - a great amount of change with probable loss of function of the affected cell or organs and frequently involves large areas of the organ

Other Microscopic Codes

Abbreviation

TL Total

P Finding present
- Finding not present

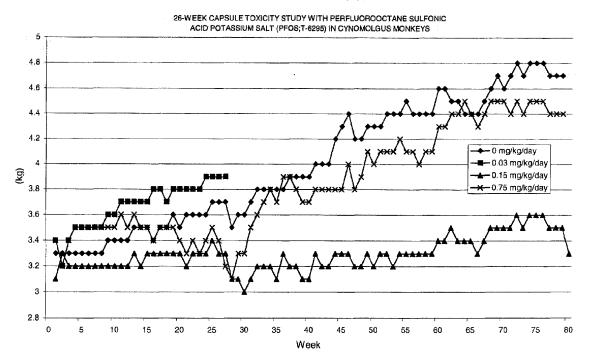
TISSUE ABBREVIATIONS

Definition

LF	Left
RT	Right
LN	Lymph node
GL	Gland
STOMACH, GL	Glandular stomach
STOMACH, NONGL	Nonglandular
SALIV GL, MANDIB	Mandibular salivary gland
LN, ANT MES/PANC	Anterior mesenteric/pancreatic lymph node
AUDITORY SEB GL	Auditory sebaceous gland
LACRIMAL GLAND, EX	Exorbital lacrimal gland
HEMATO NEOPLASIA	Hematopoietic neoplasia
LACRIMAL GL, INT	Internal lacrimal gland
CAVITY, ABDOM	Abdominal cavity
SALIV GL,PAROTID	Parotid salivary gland
LN, TRACHEOBRON	Tracheobronchial lymph node
THYROID/PARA	Thyroid with parathyroid
	•

Figure 1

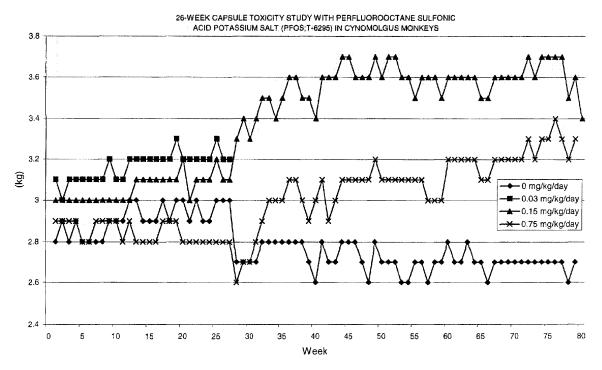
Mean Body Weight Data (kg) - Males



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Figure 2

Mean Body Weight Data (kg) - Females



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PAGE: 1

Table 1

Summary of Clinical Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

DAYS 1-185	NUMBER OF ANIMALS AFFECTED											
DAIS 1-165	SEX:		M	ALE				IALE-				
G3 TTT G D TV	GROUP:	1	2	3	4	1	2	3	4			
CATEGORY KEYWORD	DOSE:	0	0.03	0.15	0.75	0	0.03	0.15	0.75			
QUALIFIER	NUMBER:	6	4	6	6	6	4	6	6			
*** TOP OF LIST ***												
APPEARANCE												
APPEARS DEHYDRATED		0	0	0	1	0	0	0	0			
RECUMBENT		U	U	U	1	U	U	U	0			
BEHAVIOR												
ATAXIC		0	0	0	1	0	0	0	0			
HYPOACTIVE		0	0	0	2	1	0	0	0			
DISCHARGE												
NASAL												
CLEAR		0	0	0	0	1	0	0	0			
ORAL												
CLOUDY		0	0	0	0	1	0	0	0			
VOMITUS WHITE IN COLOR		0	0	0	0		-	0	0			
CONTAINING FOOD		1	1	3		0	0		1			
INTACT CAPSULE		0	0	0	1	2	0	2	2			
PARTIAL CAPSULE		ŏ	ĭ	ŏ	3	3	ŏ	Ö	3			
EXCESSIVE SALIVATION		0	0	0	1	1	0	0	0			
APPEARS TO BE MENSTRUATING		0	0	0	0	4	4	2	4			
DISCHARGE UNKNOWN SOURCE												
FOUND IN PAN												
RED IN COLOR		1	0	0	0	1	0	0	0			

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PAGE: 2

Table 1

Summary of Clinical Observations Treatment

PAGE: 2 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

	NUMBER OF ANIMALS AFFECTED										
DAYS 1-185	SEX:		MA	LE			FEN	ALE			
CATEGORY KEYWORD	GROUP: DOSE:	1	0.03	3	4	1	0.03	3	4		
QUALIFIER	NUMBER:	6	4	6	6	6	4	6	6		
EXCRETION DISCOLORED FECES BLACK IN COLOR		0	0	0	1	0	0	0	0		
RED IN COLOR YELLOW IN COLOR DISCOLORED URINE		ŏ o	o o	ő	0	0	0	ŏ	3 1		
GREEN IN COLOR RED IN COLOR FEW FECES		0 0 0	0 0 0	0 1 0	0 0 2	0	0 0 2	0 0 3	1 0 5		
LIQUID FECES MUCOID FECES NO FECES		1 0 0	1 0 0	0	1 2 2	2 1 0	0 0	0 0	2 2 1		
NON-FORMED FECES SMALL FECES		3	0	1	1 0	0	1	0	1		
EYES CONSTRICTED PUPIL EYES		0	0	0	1	0	0	0	0		
RESPIRATION LABORED		0	0	0	2	0	0	0	0		
SKIN & PELAGE ALOPECIA DORSAL DORSAL-THORACIC		0	0	0	0	0	0	0	1		

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Table 1

TAIL
TAIL-DISTAL
COLD TO TOUCH
BODY-ENTIRE

Summary of Clinical Observations Treatment

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Table 1

QUALITATIVE FOOD CONSUMPTION LOW *** END OF LIST ***

Summary of Clinical Observations Treatment

PAGE: 4 PAGE: 4
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS NUMBER OF ANIMALS AFFECTED DAYS 1-185 -----FEMALE-----GROUP: DOSE: 1 2 3 4 1 2 3 4 0 0.03 0.15 0.75 0 0.03 0.15 0.75 CATEGORY KEYWORD NUMBER: QUALIFIER SKIN & PELAGE
PALE SKIN
HEAD-ENTIRE
GUMS
RED SKIN
LIMB-FRONT-RIGHT
SCAB(S)
HEAD-MAXILLARY-LEPT
LIMB-PRONT-LEPT
LIMB-FRONT-RIGHT
BRUISED SKIN
PERI-ORBITAL-LEFT 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1

6 6 5 3 6

3

64

Table 2

Summary of Clinical Observations Recovery (Days 186 through 365)

Recovery (days 186 through 365)

PAGE: 1

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

	ACID FOIASSIO									 	
DAYS 186-365	SEX:		M	ALE			FEM	IALE			
	GROUP:	1	2	3	4	1	2	3	4		
CATEGORY KEYWORD	DOSE:	0	0.03	0.15	0.75	0	0.03	0.15	0.75		
QUALIFIER	NUMBER:	2	0	2	2	2	0	2	2		
** TOP OF LIST *** ISCHARGE APPEARS TO BE MENSTRUATING		0	0	0	0	1	0	1	1		
XCRETION											
FEW FECES		0	0	0	0	0	0	1	0		
LIQUID FECES		ō	0	ō	0	i	Ó	0	Ö		
NON-FORMED FECES		0	0	1	0	0	0	0	1		
KIN & PELAGE ALOPECIA											
FEET		0	0	0	0	1	0	0	0		
TAIL		0	0	0	0	1	0	0	0		
BROKEN SKIN											
DIGIT(S)-FRONT-LEFT		1	0	0	0	0	0	0	0		
ALITATIVE FOOD CONSUMPTION LOW ** END OF LIST ***		1	0	2	1	2	0	2	2		

65

PAGE: 1

Table 3

Summary of Clinical Observations Recovery (Days 366 through 561)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ACID FOLKASION SALIT (FFOS)1-6290) IN CINOMODUO MONREIS													
		NUMBER OF ANIMALS AFFECTED											
DAYS 368-558	SEX: GROUP:		MA		 4		FEM	ALE					
CATEGORY KEYWORD	DOSE:		0.03			ō	0.03		0.75				
QUALIFIER	NUMBER:	2	0	2	2	2	0	2	2				
*** TOP OF LIST *** APPEARANCE SWOLLEN HEAD-MAXILLARY-RIGHT		0	0	1	0	0	0	0	0				
DISCHARGE VOMITUS CONTAINING FOOD APPEARS TO BE MENSTRUATING		1 0	0	2	0	1	0	1 0	0 1				
DISCHARGE UNKNOWN SOURCE FOUND IN PAN RED IN COLOR		0	0	0	0	0	0	1	1				
EXCRETION FEW FECES LIQUID FECES NO FECES NON-PORMED FECES		0 0 0 1	0 0 0	1 0 1 1	0 0 0 1	0 1 0 1	0 0 0	2 0 2 0	0 1 0 1				
SKIN & PELAGE ALOPECIA LIMB-HIND-RIGHT		0	0	0	0	1	0	0	0				

66

Table 3

		ecovér EXICIT	y (Da ry stu	ys 30 DY W		ough RFLU	561) OROOCI			PAGE: 2
DAYS 368-558			NUMB	ER O	7 ANIM	ALS i	AFFECT	ED		
DAID 300-330	SEX:									
CATEGORY KEYWORD	GROUP: DOSE:				4 0.75					
QUALIFIER	NUMBER:	2	0	2	2	2	0	2	2	
QUALITATIVE FOOD CONSUMPTION LOW NONE *** END OF LIST ***		1	0	2	1 0	2	0	2 2	2 0	

67

PAGE: 1

Table 4

Summary of Ophthalmic Observations Treatment

PAGE: 1 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS:T-6295) IN CYNOMOLGUS MONKEYS

WEEK -4	NUMBER OF ANIMALS AFFECTED										
WEEK -4	SEX:		M	ALE			PEM	ALE-			
	GROUP:	1	2	3	4	1	2	3	4		
CATEGORY	DOSE:	0	0.03	0.15	0.75	0	0.03	0.15	0.75		
KEYWORD											
QUALIFIER	NUMBER:	6	4	6	6	6	4	6	6		
*** TOP OF LIST ***											
O VISIBLE LESIONS											
NO VISIBLE LESIONS											
EYE-LEFT		0	0	0	0	1	0	0	0		
EYES		6	4	6	6	5	4	6	6		
MISCELLANEOUS OPHTHALMICS											
INCREASED MYELINATION OF OPTIC NERVE											
EYE-RIGHT		0	0	0	0	1	0	0	0		
*** END OF LIST ***						-					

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Table 4

	Summ 26-WEEK CAPSULE TO ACID FOTASSIUM		Treat TUDY W	ment WITH PE	RFLUC	ROOCT.	ANE S		PAGE: 2
WEEK 26				F ANIM					
CATEGORY KEYWORD OUALIFIER	SEX: GROUP: DOSE: NUMBER:	1 2 0 0.0	3 3 0.15		1 0	0.03	3 0.15	0.75	
*** TOP OF LIST *** NO VISIBLE LESIONS NO VISIBLE LESIONS EYES *** END OF LIST ***	NONDEK:	6 4		5	6	4	6	6	

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Table 5

Summary of Ophthalmic Observations Recovery

RECOVERY
PAGE: 3
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

WINE SO	NUMBER OF ANIMALS AFFECTED										
WEEK 52	SEX:		IV	IALE				MALE-			
CATEGORY	GROUP: DOSE:	1	0.03	3 : 0.15	4 0.75	1	0.03	0.15	0.75		
KEYWORD QUALIFIER	NUMBER:	2		2	2	2	0	2	2		
*** TOP OF LIST *** NO VISIBLE LESIONS											
NO VISIBLE LESIONS EYES		2	0	2	2	1	0	2	2		
EYE-LEFT		ō	ō	0	0	ī	0	0	ō		
MISCELLANEOUS OPHTHALMICS											
INCREASED MYELINATION OF OPTIC NERVE EYE-RIGHT		0	0	0	0	1	0	0	0		
*** END OF LIST ***											

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Table 6
Summary of Body Weight Data (kg)
Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS PAGE: 1

	SEX:		MAL	P		FEMALE									
WEEK	GROUP: DOSE: UNITS:	1 0	2	3 0.15		1 0	2	3 0.15	4 0.75 MG/KG/DAY						
-1°	N MEAN S.D.	3.2	4 3.4 0.73	3.0	3.3	6 2.8 0.33	4 3.0 0.55	6 3.0 0.38	6 2.9 0.54						
-1 ^b	N MEAN S.D.	6 3.3 0.45	4 3.4 0.65	6 3.1 0.34	6 3.4 0.55	6 2.8 0.29	4 3.0 0.55	6 3.0 0.41	6 2.9 0.52						
1	N MEAN S.D.	3.3	4 3.4 0.70	3.1	6 3.4 0.55	2.8	3.1	6 3.0 0.41							
2	N CAM MEAN S.D.	3.3	4 3.2 3.4 0.64	3.3		2.9	3.0 3.1		2.9						
3	N CAM MEAN S.D.	3.3	4 3.3 3.4 0.68	3.3	6 3.3 3.4 0.59	2.9	3.0 3.1								
4	N CAM MEAN S.D.	6 3.3 3.3 0.38	4 3.4 3.5 0.64	6 3.4 3.2 0.34	6 3.4 3.5 0.58	6 3.0 2.9 0.34	3.0	6 2.9 3.0 0.43	6 2.9 2.9 0.52						
5	N CAM MEAN S.D.	3.3	3.5	3.2	6 3.4 3.5 0.60	2.8	4 2.9 3.1 0.60	6 2.9 3.0 0.44	6 2.8 2.8 0.55						

a Day -7. b Day -1.

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Table 6
Summary of Body Weight Data (kg)
Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC PAGE: 2
ACID POTASSIUM SALT (PPOS,T-6295) IN CYNOMOLGUS MONKEYS

SEX:		MALI	E			FEMA	LE	
GROUP: DOSE: UNITS:	1 0 MG/KG/DAY	2 0.03 MG/KG/DAY	3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY	1 0 MG/KG/DAY	2 0.03 MG/KG/DAY	3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY
N	6 3.3	4	6	6	6	4	6	6
CAM MEAN	3.3	3.4	3.4	3.4	2.9	3.0	2.9	2.8
S.D.	3.3 0.41	0.63	0.34	0.60	0.36	0.57	0.48	0.55
N	6 3.3	4	6	6	6	4	6	6
CAM MEAN	3.3	3.4	3.4	3.4	3.0	3.0	2.9	2.9
S.D.	3.3 0.42	0.64	0.33	0.63	0.38	0.61	0.47	0.48
N	6	4	6	6	6	4	6	6
CAM MEAN	3.3	3.4	3.3	3.4	2.9	3.0	2.9	2.9
S.D.	0.39	4 3.4 3.5 0.64	0.30	0.65	0.39	0.61	0.47	0.50
N								
CAM	3.4	3.4	3.4	3.5	3.0	3.0	3.0	2.9
MEAN S.D.	3.4 0.43	3.6 0.60	3.2 0.29	3.5 0.65	2.9 0.40	3.2 0.66	3.0 0.46	2.9 0.55
N	6 3.4	4	6	6	6	4	6	6
CAM	3.4	3.4	3.3	3.4	3.0	3.0	3.0	2.9
	3.4 0.43	3.6 0.60	3.2 0.33	3.5 0.65	0.36	3.1 0.62	3.0 0.44	2.9 0.55
N	6 3.4	4	6	6	6	4	6	6
CAM	3.4	3.5	3.4	3.5	3.0	3.0	3.0	2.8*
MEAN S.D.	0.46	3.7 0.68	0.33	0.66	2.9 0.35	0.60	3.0 0.46	0.51
N	6 3.4 3.4 0.47	4	6	6	6	4	6	6
CAM	3.4	3.5	3.4	3.4	3.1	3.0	3.0	2.9*
S.D.	0.47	0.68	0.29	0.65	0.37	0.59	0.48	0.50

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Table 6
Summary of Body Weight Data (kg)
Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC PAGE: 3
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

1 0 MG/KG/DAY 1 0 MG/KG/DAY 3 0.15 MG/KG/DAY 4 3.6 3.7 0.65 13 N CAM 6 3.5 3.6 0.66 6 2.8* 2.8 0.46 MEAN S.D. N CAM MEAN S.D. 4 3.5 3.7 0.57 6 3.4 3.5 0.67 6 3.0 2.9 0.37 6 3.0 3.1 0.48 14 3.2 0.31 2.8 6 3.0 2.9 0.38 N CAM MEAN S.D. 6 2.8* 2.8 0.38 15 16 3.0 2.9 0.34 CAM MEAN 0.45 0.38 0.48 0.60 4 3.7 3.8 0.56 3.5 0.75 3.0 2.9 3.3 0.26 3.1 0.45 4 3.6 3.7 0.56 6 2.9 2.9 0.45 4 18 CAM MEAN S.D. N CAM MEAN 4 3.7 3.8 0.59 6 3.4 3.5 0.73 6 2.9* 2.9 0.39 19

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Table 6
Summary of Body Weight Data (kg)
Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC PAGE: 4
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

			MALI				FEMA		
	ROUP: DOSE: JNITS:	1 0 MG/KG/DAY		3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY	1 0 MG/KG/DAY	2 0.03 MG/KG/DAY		4 0.75 MG/KG/DAY
)	N	6	4	6	6	6	4	6	6
	CAM	3.5	3.7	3.5	3.3		3.1	3.1	2.8*
	MEAN	3.5	3.8	3.3	3.4	3.0	3.2	3.2	2.8
	S.D.	0.53	0.59	0.22	0.73	0.34	0.67	0.48	0.38
	N	6	4	6	6 3.2	6	4	6 3.0	6
	CAM	3.6	3.6	3.4	3.2	3.0	3.1	3.0	2.8*
	MEAN	3.6	3.8	3.2	3.3	2.9	3.2	3.0	2.8
	S.D.	0.55	0.64	0.26	0.72	0.34	0.70	0.46	0.33
	N	6	4	6	6	6	4	6	6
	CAM	3.6	3.7	3.5	3.3	3.1	3.1	3.1	2.8*
	MEAN	3.6	3.8	3.3	3.4	3.0	3.2	3.1	2.8
	S.D.	0.56	0.56	0.25	0.62	0.37	0.68	0.44	0.31
	N	6	4	6	6	6	4	6	6
	CAM	3.6	3.7	3.5	3.2*	3.0	3.1	3.1	2.8*
	MEAN	3.6	3.8	3.3	3.3		3.2	3.1	2.8
	S.D.	0.58	0.55	0.25	0.67	0.31	0.68	0.46	0.35
	N	6	4	6	5	6	4	6	6
	CAM	3.6	3.7	3.5	3.3		3.1		
	MEAN	3.6	3.9	3.3	3.4	2.9	3.2	3.1	
	S.D.	0.63	0.60	0.26	0.69	0.32	0.76	0.46	0.32
	N	6	4	6	5	6	4	6	6
	CAM	3.7	3.8		3.3			3.1	
	MEAN	3.7	3.9	3.4	3.5	3.0	3.3	3.2	2.8
	S.D.	0.61	0.55	0.20	0.72	0.37	0.76	0.46	0.31
	N	6	4	6	5	6	4	6	6
	CAM	3.7	3.8	3.5	3.3	3.1	3.1		
	MEAN	3.7	3.9	3.3	3.4		3.2	3.1	2.8
	S.D.	0.67	0.55	0.20	0.73	0.37	0.79	0.46	0.35

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Table 6
Summary of Body Weight Data (kg)
Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

	SEX:		MAL	E			FEMA	LE	
WEEK	GROUP: DOSE: UNITS:	1 0 MG/KG/DAY	2 0.03 MG/KG/DAY	3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY	1 0 MG/KG/DAY	2 0.03 MG/KG/DAY	3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY
27	N	6	4	6	4	6	4	6	6
	CAM	3.7	3.8	3.5	3.0*	3.1	3.1	3.0	2.8*
	MEAN S.D.	3.7 0.68	3.9 0.56	3.3 0.26	3.2 0.83	3.0 0.35	3.2 0.72	3.1 0.51	2.8 0.37

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Table 7

Summary of Body Weight Data (kg)
Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

SEX: GROUP: DOSE: UNITS: --MALE----3 0.15 MG/KG/DAY 4 0.75 MG/KG/DAY 4 0.75 MG/KG/DAY 1 0 MG/KG/DAY 1 0 MG/KG/DAY 3 0.15 MG/KG/DAY WEEK N MEAN S.D. 2 2.7 0.35 2 2.7 0.42 2 3.1 0.28 N MEAN S.D. 29 31 MEAN S.D. 3.4 2 2.8 0.35 2 3.5 0.78 N MEAN 33 MEAN S.D. N MEAN S.D. 2 3.4 0.85

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Table 7

Summary of Body Weight Data (kg)
Recovery

PAGE: 2

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

WEEK	SEX: GROUP: DOSE: UNITS:	1 0 MG/KG/DAY	MALE 3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY	1 0 MG/KG/DAY	FEMALE 3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY
35	N	2	2	2	2	2	2
	MEAN	3.8	3.1	3.7	2.8	3.5	3.0
	S.D.	0.35	0.28	0.99	0.35	0.92	0.21
36	N	2	2	2	2	2	2
	MEAN	3.8	3.3	3.9	2.8	3.6	3.1
	S.D.	0.42	0.21	1.06	0.35	0.92	0.35
37	N	2	2	2	2	2	2
	MEAN	3.9	3.2	3.9	2.8	3.6	3.1
	S.D.	0.42	0.28	1.06	0.42	0.78	0.35
38	N	2	2	2	2	2	2
	MEAN	3.9	3.2	3.8	2.8	3.5	3.0
	S.D.	0.42	0.21	0.99	0.35	0.85	0.42
39	N	2	2	2	2	2	2
	MEAN	3.9	3.1	3.7	2.7	3.5	2.9
	S.D.	0.35	0.28	0.99	0.42	0.85	0.35
40	N	2	2	2	2	2	2
	MEAN	3.9	3.1	3.7	2.6	3.4	3.0
	S.D.	0.35	0.28	1.06	0.42	0.85	0.21
41	N	2	2	2	2	2	2
	MEAN	4.0	3.3	3.8	2.8	3.6	3.1
	S.D.	0.42	0.21	0.99	0.42	0.85	0.35

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Table 7
Summary of Body Weight Data (kg)
Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

SEX: GROUP: DOSE: UNITS: --MALE----3 0.15 MG/KG/DAY 4 0.75 MG/KG/DAY 4 0.75 MG/KG/DAY 1 0 MG/KG/DAY 1 0 MG/KG/DAY 3 0.15 MG/KG/DAY WEEK 2 4.0 0.28 2 3.6 0.78 42 2 2.7 0.42 2 3.2 0.21 N MEAN S.D. 43 2 2.8 0.35 2 3.7 0.92 3.8 45 MEAN S.D. 2 2.8 0.42 2 3.6 0.85 N MEAN 46 47 MEAN S.D. 2 3.6 0.94 48 N MEAN

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Table 7 Summary of Body Weight Data (kg) Recovery

PAGE: 4

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

	SEX:		MALE			FEMALE	
WEEK	GROUP: DOSE: UNITS:	1 0 MG/KG/DAY		4 0.75 MG/KG/DAY	1 0 MG/KG/DAY		4 0.75 MG/KG/DAY
49	N	2	2	2	2	2	2
	MEAN	4.3	3.3	4.1	2.8	3.7	3.2
	S.D.	0.21	0.21	0.78	0.35	0.92	0.35
50	N	2	2	2	2	2	2
	MEAN	4.3	3.2	4.0	2.7	3.6	3.1
	S.D.	0.21	0.28	0.71	0.35	0.92	0.35
51	N	2	2	2	2	2	2
	MEAN	4.3	3.3	4.1	2.7	3.7	3.1
	S.D.	0.21	0.21	0.64	0.42	0.92	0.35
52	N	2	2	2	2	2	2
	MEAN	4.4	3.3	4.1	2.7	3.7	3.1
	S.D.	0.21	0.21	0.57	0.28	0.92	0.42
53	N	2	2	2	2	2	2
	MEAN	4.4	3.2	4.1	2.6	3.6	3.1
	S.D.	0.21	0.28	0.49	0.28	0.99	0.49
54	N	2	2	2	2	2	2
	MEAN	4.4	3.3	4.2	2.6	3.6	3.1
	S.D.	0.28	0.21	0.49	0.28	0.92	0.49
55	N	2	2	2	2	2	2
	MEAN	4.5	3.3	4.1	2.7	3.5	3.1
	S.D.	0.28	0.21	0.42	0.35	0.99	0.64

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Table 7

Summary of Body Weight Data (kg)
Recovery

PAGE: 5

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

	SEX:		MALE			FEMALE	
	GROUP:	1	3	4	1	3	4
WEEK	DOSE: UNITS:	0 MG/KG/DAY	0.15 MG/VG/DAY	0.75 MG/KG/DAY	0 MG/KG/DAY	0.15	0.75 MG/KG/DAY
WEEK	ONIIS:				MG/ KG/ DA1		PIG/ NG/ DAI
56	N	2		2	2	2	2
	MEAN		3.3		2.7		
	S.D.	0.35	0.14	0.35	0.35	0.92	0.57
57	N	2	2	2	2	2	2
	MEAN	4.4					3.0
	S.D.	0.35	0.21	0.28	0.35	0.92	0.57
58	N	2	2	2	2	2	2
	MEAN	4.4	3.3	4.1	2.7	3.6	3.0
	S.D.	0.35	0.14	0.35	0.28	0.78	0.57
59	N	2	2	2	2	2	2
	MEAN	4.4	3.3	4.1	2.7		3.0
	S.D.	0.42	0.14	0.42	0.35	0.71	0.57
60	N	2	2	2	2	2	2
	MEAN	4.6	3.4	4.3	2.8	3.6	3.2
	S.D.	0.49	0.14	0.42	0.35	0.85	0.49
61	N	2	2	2	2	2	2
	MEAN	4.6	3.4	4.3	2.7	3.6	3.2
	S.D.	0.49	0.14	0.42	0.28	0.78	0.49
62	N	2	2	2	2	2	2 3.2
	MEAN	4.5	3.5	4.4		3.6	
	S.D.	0.49	0.21	0.49	0.42	0.78	0.57

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Table 7

Summary of Body Weight Data (kg)
Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

					DIGH BELL (F			
	SEX:		MALE			FEMALE		
WEEK	GROUP: DOSE: UNITS:	1 0 MG/KG/DAY	3 0.15	4 0.75	1 0 MG/KG/DAY	3 0.15	4 0.75 MG/KG/DAY	
63	N MEAN S.D.	2 4.5 0.57	2 3.4 0.14	2 4.4 0.42	2 2.8 0.35	2 3.6 0.71	2 3.2 0.57	
64	N MEAN S.D.	2 4.4 0.64	2 3.4 0.14	2 4.5 0.21	2 2.7 0.35	2 3.6 0.78	2 3.2 0.64	
65	N MEAN S.D.	2 4.4 0.57	2 3.4 0.07	2 4.4 0.21	2 2.7 0.35	2 3.5 0.78	2 3.1 0.57	
66	N MEAN S.D.	2 4.4 0.64	2 3.3 0.14	2 4.3 0.28	2 2.6 0.28	2 3.5 0.78	2 3.1 0.57	
67	N MEAN S.D.	2 4.5 0.57	2 3.4 0.14	2 4.4 0.21	2 2.7 0.35	2 3.6 0.71	2 3.2 0.57	
68	N MEAN S.D.	2 4.6 0.57	2 3.5 0.21	2 4.5 0.21	2 2.7 0.35	2 3.6 0.78	2 3.2 0.64	
69	N MEAN S.D.	2 4.7 0.57	2 3.5 0.14	2 4.5 0.28	2 2.7 0.28	2 3.6 0.85	2 3.2 0.71	

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Table 7
Summary of Body Weight Data (kg)
Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

SEX: GROUP: DOSE: UNITS: --MALE----3 0.15 MG/KG/DAY 4 0.75 MG/KG/DAY 4 0.75 MG/KG/DAY 1 0 MG/KG/DAY 1 0 MG/KG/DAY 3 0.15 MG/KG/DAY WEEK 2 4.6 0.57 2 4.5 0.21 2 2.7 0.35 2 3.6 0.78 2 2.7 0.35 2 3.2 0.71 N MEAN S.D. 71 2 2.7 0.35 4.5 0.21 73 MEAN S.D. 2 4.5 0.21 2 2.7 0.42 2 3.7 0.78 N MEAN 75 MEAN S.D. 2 4.5 0.21 76 N MEAN

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Table 7

Summary of Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

WEEK	SEX: GROUP: DOSE: UNITS:	1 0 MG/KG/DAY	MALE 3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY	1 0 MG/KG/DAY	FEMALE 3 0.15 MG/KG/DAY	4 0.75 MG/KG/DAY
77	N	2	2	2	2	2	2
	MEAN	4.7	3.5	4.4	2.7	3.7	3.3
	S.D.	0.85	0.07	0.14	0.35	0.78	0.78
78	N	2	2	2	2	2	2
	MEAN	4.7	3.5	4.4	2.6	3.5	3.2
	S.D.	0.92	0.07	0.14	0.28	0.85	0.85
79	N	2	2	2	2	2	2
	MEAN	4.7	3.5	4.4	2.7	3.6	3.3
	S.D.	0.92	0.00	0.07	0.35	0.85	0.85
80	N MEAN S.D.	0	2 3.3 0.21	0	0	2 3.4 0.85	0

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Table 8
Summary of Clinical Hematology Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
	-									
0	MEAN S.D. N	6.45 .275 6	12.2 .36 6	41.2 1.30 6	63.9 2.32 6	19.0 .87 6	29.8 .56 6	530 125.0 6	.3 .19	20 12.6 6
0.03	MEAN	6.99	12.4	42.9	61.5	17.8	29.0	574	.4	24
	S.D.	.688	.46	2.95	2.51	1.13	1.34	210.3	.24	14.9
	N	4	4	4	4	4	4	4	4	4
0.15	MEAN	6.76	12.6	42.9	63.5	18.7	29.5	493	.5	32
	S.D.	.315	.41	1.88	2.38	.76	.41	109.0	.53	34.5
	N	6	6	6	6	6	6	6	6	6
0.75	MEAN	6.88	12.5	43.1	62.8	18.2	29.0	415	.5	33
	S.D.	.575	.82	2.06	3.44	1.01	.61	202.6	.47	27.8
	N	6	6	6	6	6	6	6	6	6

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Table 8
Summary of Clinical Hematology Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0	MEAN S.D. N	8.6 1.76 6	3.9 1.28	4.0 .90	.6 .24 6	.1 .08 6	.0 .05 6	44 8.9 6	47 9.2 6	7 2.4 6	1 .8 6	0 .5
0.03	MEAN S.D. N	11.0 1.00 4	5.2 1.88 4	4.6 1.05 4	.8 .48 4	.2 .17 4	.0 .00 4	47 15.2 4	43 9.4 4	8 4.4 4	2 1.3 4	0 4.0
0.15	MEAN S.D. N	11.9 1.95 6	6.6 2.42 6	4.1 1.14 6	.9 .25 6	.2 .31 6	.0 .04 6	54 13.4 6	36 10.9 6	8 3.3 6	2 2.1 6	0 .4 6
0.75	MEAN S.D. N	9.4 2.53	3.7 1.40	4.3 1.25	1.1 .53	.2 .25	.1 .08	39 10.9	46 9.5	12 3.3 6	2 3.3 6	1 .8

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Table 8
Summary of Clinical Hematology Data

Females Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	/day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg/		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
	-									
0	MEAN S.D. N	6.09 .681 6	12.0 .97 6	39.3 3.93 6	64.7 4.51 6	19.7 1.81 6	30.4 .87	539 79.5 6	.6 .46 6	35 24.2 6
0.03	MEAN	6.31	11.5	39.5	62.7	18.3	29.2	482	.4	27
	S.D.	.522	1.06	3.26	4.49	1.73	.71	72.4	.31	17.1
	N	4	4	4	4	4	4	4	4	4
0.15	MEAN	6.54	12.0	40.1	61.4	18.3	29.8	481	.4	29
	S.D.	.320	.49	1.97	2.79	.50	.68	100.9	.26	16.2
	N	6	6	6	6	6	6	6	6	6
0.75	MEAN	6.50	12.1	41.5	63.9	18.7	29.2	435	.2	16
	S.D.	.195	.50	1.68	1.14	.50	.52	108.9	.18	11.4

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Table 8 Summary of Clinical Hematology Data

Females Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X103/mcL	MONO X103/mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	10.2 2.52 6	4.6 1.14 6	4.5 1.36 6	.8 .24 6	.3 .28 6	.0 .05 6	4 5 8.3 6	44 7.6 6	7 1.2	3 2.1 6	0 .5 6
0.03	MEAN S.D. N	8.7 2.41 4	5.0 2.52 4	2.9 .79 4	.6 .17 4	.1 .05 4	.0 .05 4	55 14.3 4	35 11.6 4	8 2.8 4	$\frac{2}{4}.6$	0 4.5
0.15	MEAN S.D. N	10.1 2.94 6	5.1 2.81 6	3.8 .40 6	.8 .20 6	.3 .27 6	.0 .04 6	48 13.0	40 8.4 6	9 3.8 6	3 3.0 6	0 .4 6
0.75	MEAN S.D. N	9.0 3.08	4.8 1.70	3.2 1.66	.8 .32	.1	.0	54 10.7		9 4.2		0 .4

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Table 9
Summary of Clinical Hematology Data

Males Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg,	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.45 .221 6	12.4 .55 6	40.6 1.44 6	63.0 2.74 6	19.1 .97 6	30.4 .58	486 117.8 6	.2 .16 6	14 10.4 6
0.03	MEAN	6.86	12.5	42.4	61.9	18.2	29.5	532	.4	29
	S.D.	.501	.38	3.93	4.61	1.17	1.69	146.1	.35	23.8
	N	4	4	4	4	4	4	4	4	4
0.15	MEAN	6.66	12.5	41.2	62.0	18.8	30.3	476	.4	25
	S.D.	.385	.27	.76	2.96	1.06	.53	59.6	.14	10.5
	N	6	6	6	6	6	6	6	6	6
0.75	MEAN	6.53	11.8	40.2	61.7	18.1	29.4	383	.4	25
	S.D.	.431	.57	1.74	2.63	.85	.57	164.3	.10	5.9
	N	6	6	6	6	6	6	6	6	6

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Table 9
Summary of Clinical Hematology Data

Males Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X103/mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	7.6 1.98	3.9 2.01	3.1 .67	.5 .31 6	.0 .08 6	.0 .08 6	50 14.4 6	43 12.8 6	7 3.4 6	1 1.2 6	0 .8 6
0.03	MEAN S.D. N	10.8 1.89 4	6.3 2.40 4	3.7 1.26 4	.5 .17 4	.2 .05 4	.0 .00 4	58 15.9 4	36 14.2 4	5 1.7 4	2 4.5	0 4.0
0.15	MEAN S.D. N	10.0 2.06 6	6.0 2.23 6	3.2 .91 6	.6 .24 6	.2 .32 6	.0 .05 6	58 12.5 6	33 10.4 6	6 3.6 6	2 2.3 6	0 .4 s
0.75	MEAN S.D. N	10.3 4.16 6	6.6 3.69	2.9 .52	.6 .18	.1 .11 6	.0 .05	62 9.8	30 7.5 6	7 2.7	1 1.2 6	1 .4

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Table 9
Summary of Clinical Hematology Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10°/mcL
	-									
0	MEAN S.D. N	6.41 .351 6	12.2 .69 6	40.5 2.42 6	63.1 2.31 6	19.0 .83	30.2 .29	538 84.2 6	.3 .16 6	22 10.8 6
0.03	MEAN S.D. N	6.60 .664 4	11.8 .97 4	40.6 2.92 4	61.8 6.28 4	18.1 1.80 4	29.2 .48 4	417 23.6 4	.3 .28 4	18 15.6 4
0.15	MEAN S.D. N	6.55 .343 6	11.8 .41 6	39.7 1.06 6	60.7 2.68 6	18.1 .75 6	29.7 .29 6	431 85.3 6	.3 .12 6	19 8.0 6
0.75	MEAN S.D. N	6.21 .280 6	11.6 .38 6	39.1 1.96 6	63.0 1.48 6	18.6 .44 6	29.6 .89	469 95.4 6	.3 .23 6	20 13.1 6

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Table 9
Summary of Clinical Hematology Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10³/mcL	EOSIN X103/mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	12.7 4.75 6	7.8 3.77 6	3.6 1.59	1.1 .67	.3 .26 6	.0 .08 6	59 18.2 6	30 16.2 6	8 2.3 6	2 1.7 6	0 .5 6
0.03	MEAN S.D. N	9.6 2.37 4	5.7 1.90 4	2.8 .82 4	.8 .24 4	.2 .17 4	.0 .05 4	60 10.6 4	29 6.0 4	8 2.1 4	3 2.2 4	0 1.0 4
0.15	MEAN S.D. N	9.1 2.66 6	5.5 2.48 6	2.9 .72 6	.5 .13 6	.2 .18 6	.0 .00	56 17.0 6	35 15.7 6	6 1.6 6	3 1.2 6	0 .0
0.75	MEAN S.D. N	8.9 2.85	5.3 3.19	2.9 1.06	.6 .20	.1	.0	56 15.1	35 13.7	7 2.7 6	1 1.2	0 .4

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Table 10 Summary of Clinical Hematology Data

Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	r/day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
	-									
0	MEAN	6.49	12.5	41.1	63.3	19.2	30.4	522	.3	18
	S.D.	.292	.53	1.78	3.03	.95	.84	126.9	.27	17.3
	N	6	6	6	6	6	6	6	6	6
0.03	MEAN	6.84	12.4	41.4	60.7	18.2	29.9	536	.4	25
	S.D.	.437	.33	1.36	2.92	.91	.62	152.1	.45	29.6
	N	4	4	4	4	4	4	4	4	4
0.15	MEAN	6.60	12.5	40.7	61.7	18.9	30.6	504	.3	21
	S.D.	.315	.52	1.42	2.56	.87	.50	97.3	.25	17.3
	N	6	6	6	6	6	6	6	6	6
0.75	MEAN S.D. N	6.73 .516	12.3 .75	41.2 2.31 6	61.3 3.02	18.3 .72	29.8 .52	437 217.8	.3 .19	19 12.6

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Summary of Clinical Hematology Data

Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	7.3 .81 6	3.0 .68 6	3.5 .87 6	.6 .26 6	.1 .08 6	.0 .05 6	42 10.5	48 8.2 6	8 3.2 6	2 .8	0 .8
0.03	MEAN S.D. N	10.5 1.79 4	6.1 * 1.51 4	3.4 .82 4	.8 .38 4	.2 .05 4	.0 .00 4	58 9.5 4	32 6.5 4	8 3.5 4	2 4.5	0 4.0
0.15	MEAN S.D. N	11.8 3.02 6		3.9 1.18 6	.7 .40 6	.2 .13 6	.0 .05 6	56 16.3 6	35 14.6 6	7 4.0 6	2 .8	0 .4 6
0.75	MEAN S.D. N	9.6 2.97	5.3 2.52 6	3.4 .52	.6 .23	.2 .21	.0 .08	52 10.0	38 11.2	6 1.0	2 2.1 6	0 .5

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Table 10 Summary of Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	r/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.23 .766 6	12.3 .66 6	40.2 3.27 6	64.9 4.33	19.9 1.87	30.6 1.01 6	572 74.6 6	.4 .22	27 11.2 6
0.03	MEAN S.D. N	6.48 .593 4	12.0 .83 4	40.2 2.39 4	62.4 6.25 4	18.5 2.02 4	29.7 .67	462 83.8 4	.4 .37 4	28 24.1 4
0.15	MEAN S.D. N	7.00 1.068 6	12.8 2.17 6	42.3 6.70 6		18.3 .76 6	30.3 .57 6	436 133.5 6	.4 .28 6	24 18.2 6
0.75	MEAN S.D. N	6.28 .397 6	11.8 .29	40.2 1.96 6	64.0 1.27 6	18.9 .72 6	29.5 .70 6	504 148.3 6	.3 .25 6	17 14.9 6

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Summary of Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X103/mcL	MONO X10³/mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	11.1 2.93 6	5.8 3.08 6	4.3 1.73	.6 .48 6	.3 .18 6	.0 .08 6	50 17.6 6	40 15.9 6	6 4.6 6	2 2.0 6	0 .5 6
0.03	MEAN S.D. N	8.7 1.42 4	4.4 1.59	$\begin{smallmatrix}3.4\\1.16\\4\end{smallmatrix}$.6 .13 4	.2 .17 4	.0 .06 4	50 14.5 4	40 14.9 4	8 4	2 1.7 4	0 .6 4
0.15	MEAN S.D. N	8.8 1.78 6	4.3 1.75 6	3.6 .93 6	.5 .16 6	.3 .15 6	.0 .05 6	48 13.1 6	42 11.2 6	6 2.9 6	3 1.6 6	0 .5 6
0.75	MEAN S.D.	9.3 4.59	5.6 3.89	3.0 1.07	.6 .40	.1	.0	56 13.2		7 2.7	1 1.0	0 .4

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Table 11
Summary of Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.43 .314	12.4 .53	40.3 2.17	62.8 3.11	19.3 1.06	30.7 1.00	490 124.3	.3 .26	21 16.4
0.03		-		-		18.2			-	6 4 7
	MEAN S.D. N	7.00 .628 4	12.7 .55 4	42.5 1.78 4	61.0 3.13 4	18.2 1.02 4	29.8 .43 4	512 208.8 4	.7 .54 4	33.7 4
0.15										
	MEAN S.D. N	6.50 .295 6	12.3 .16 6	40.4 .93 6	62.1 2.53 6	19.0 .76 6	30.6 .49 6	496 82.6 6	.5 .54 6	33 32.0 6
0.75										
	MEAN S.D. N	6.66 .488 6	12.2 .81 6	41.0 2.23 6	61.6 2.47 6	18.2 .77 6	29.6 * .65	431 198.6 6	.4 .19 6	26 11.8 6

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Summary of Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10³/mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	6.7 1.99	2.4 .64	3.7 1.24	.4 .16 6	.1 .08 6	.0 .04 6	37 4.1 6	55 2.8 6	6 2.1 6	2 1.3 6	0 .5
0.03	MEAN S.D. N	8.5 1.60 4	4.4 1.79	3.3 .88 4	.6 .00 4	.2 .10 4	.0 .00 4	50 13.9 4	40 * 12.6 4	7 1.0 4	2 1.4 4	0 4.0
0.15	MEAN S.D. N	10.3 3.21 6	5.7 * 1.85 6	3.7 1.61 6	.6 .27 6	.2 .18 6	.0 .05 6	56 * 9.3 6		7 2.6 6	2 1.8 6	0 .5 ნ
0.75	MEAN S.D. N	9.4 2.56	5.1 * 2.06	3.5 .71	.6 .28	.2 .16	.0 .05	52 * 9.8		6 3.2 6	2 1.6	0 .5

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Table 11
Summary of Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.31 .565 6	12.3 .77 6	40.3 2.79 6	64.1 3.90 6	19.5 1.21 6	30.4 .33 6	562 83.6 6	.3 .08 6	20 5.7 6
0.03	MEAN S.D. N	6.20 .472 4	11.7 .97 4	39.2 2.18 4	63.6 7.19 4	19.0 2.78 4	29.9 1.21 4	467 33.4 4	.5 .13 4	30 7.9 4
0.15	MEAN S.D. N	6.50 .298 6	12.0 .42 6	39.4 1.44 6	60.7 2.35 6	18.6 .78 6	30.6 .57 6	442 78.9 6	.2 .10 6	14 6.6 6
0.75	MEAN S.D.	6.32 .210	11.9 .36	40.3 1.54	63.8 1.37	18.8 .51	29.4 .54	504 124.1	.2	12 9.4

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Summary of Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOS mg/	SE 'kg/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0	MEAN S.D. N	9.4 1.89 6	4.0 1.31	4.3 1.59	.6 .10 6	.4 .27	.0 .04 6	44 12.5 6	46 10.3 6	7 1.0	4 2.4 6	0 .5
0.0	MEAN S.D. N	8.7 3.42 4	4.4 2.74 4	3.2 1.22 4	.8 .41 4	.2 .10 4	.0 .10 4	48 13.2 4	39 11.2 4	9 3.9 4	2 1.0 4	0 1.0 4
0.1	.5 MEAN S.D. N	8.7 1.25 6	4.4 .82 6	3.4 .69	.6 .18 6	.2 .12 6	.0 .00 6	51 6.4 6	39 6.6 6	7 1.5 6	2 1.0 6	0 .4 6
0.5	MEAN S.D. N	8.1 1.91	4.6 1.75	2.9 1.02	.6 .26	.1	.0 .05	56 13.1	36 10.4	7 3.5	2 1.2	0 .5

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Table 12
Summary of Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.68 .421	12.5 .54	40.9 2.28	61.4 2.74	18.7 .88	30.6 .62	464 131.6	.2	17 18.7 6
0.03	MEAN	7.08 .513	12.6	41.7 1.91	59.0 2.70	17.8 .90	30.2 .82	483 167.0	.2	14 10.7
0.15	N	4	4	4	4	4	4	4	4	4
	MEAN S.D. N	6.78 .479 6	12.6 .38 6	41.3 1.47 6	61.1 2.82 6	18.7 .95 6	30.6 .40 6	519 146.4 6	.4 .15 6	30 9.6 6
0.75	MEAN S.D. N	6.65 .641 6	11.8 1.04 6	40.0 3.32 6	60.3 2.43 6	17.7 .87 6	29.4 * .50	398 199.1 6	.6 .48 6	39 30.3 6

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Summary of Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X103/mcL	MONO X10³/mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	7.3 2.62 6	2.7 1.64 6	3.9 .91 6	.5 .29 6	.2 .15 6	.0 .08 6	35 8.6 6	5 4 8.3 6	7 2.9 6	2 2.7 6	0 .8 6
0.03	MEAN S.D. N	9.9 1.04 4	5.6 1.70 4	3.5 1.08 4	.6 .22 4	.2 .08 4	.0 .00 4	56 15.0 4		6 1.8 4	2 1.0 4	0 4
0.15	MEAN S.D. N	10.1 2.44 6	5.2 2.81 6	4.0 1.17 6	.7 .12 6	.3 .21 6	.0 .05 6	49 18.2 6	42 16.4 6	7 2.5 6	2 2.0 6	0 .5 ຮ
0.75	MEAN S.D.	9.0 2.87	4.3 3.02	3.6 1.08	.8 .44	.2	.0	45 16.3		9 3.7		0 .4

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Table 12
Summary of Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	RBC ay X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	EAN 6.60 .D559	12.4 .85	40.6 2.96	61.7 2.45	18.8 .77	30.6 .46	520 73.1	.4	24 20.5
N		6	6	6	6	6	6	6	6
0.03									
	EAN 6.66 .D641 4	12.0 .92 4	40.4 2.44 4	61.1 6.52 4	18.1 2.23 4	29.6 * .82 4	387 52.3 4	.6 .61 4	39 33.6 4
0.15									
	EAN 6.66 .D257	12.1 .45 6	39.9 1.31 6	59.8 2.12 6	18.2 .64 6	30.4 .18	460 83.7 6	.3 .24 6	20 16.1 6
0.75									
S	EAN 6.33 .D288	11.7 .44	39.5 1.98	62.4 2.21	18.5 .70	29.7 * .65	492 144.0	.2 .12	11 7.9

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Summary of Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X103/mcL	MONO X103/mcL	EOSIN X103/mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	9.7 2.44 6	4.6 2.98 6	4.1 1.08	.8 .30	.2 .18 6	.0 .05 6	44 18.7	44 15.9 6	9 3.9 6	3 2.3 6	0 .5
0.03	MEAN S.D. N	9.3 4.49 4	5.0 3.55 4	2.9 .62 4	1.1 1.00 4	.2 .14 4	.1 .08 4	50 12.6 4	36 15.6 4	11 3.6 4	2 1.4 4	1 1.0 4
0.15	MEAN S.D. N	8.1 2.23 6	3.7 1.98 6	3.4 .96 6	.6 .14 6	.3 .15 6	.0 .00	44 14.5 6	44 14.4 6	8 2.2 6	3 1.9 6	0 .5 s
0.75	MEAN S.D. N	9.5 2.99	4.4 2.33	4.0 2.19	.8 .35	.2 .13	.0 .05	46 17.4		9 4.3	2 .9	1 .5

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Table 13
Summary of Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOS mg/	E kg/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
0	MEAN S.D. N	6.60 .354 6	12.5 .50 6	41.1 2.07 6	62.3 2.53 6	18.9 .78 6	30.3 .79	467 90.4 6	.2	11 5.8 6
0.0	MEAN S.D. N	6.96 .627 4	12.5 .45 4	42.1 1.79 4	60.7 2.81 4	18.0 1.05 4	29.6 .88 4	466 183.0 4	.2 .17 4	12 11.8 4
0.1	.5 MEAN S.D. N	6.65 .372 6	12.5 .31 6	41.0 1.15 6	61.8 2.76 6	18.8 .80 6	30.4 .30 6	470 63.1 6	.3 .04 6	19 3.2 6
0.7	5 MEAN S.D. N	6.32 .387 4	11.4 * .83	38.8 2.45 4	61.5 2.72 4	17.9 1.08 4	29.2 * .48 4	401 228.0 4	.2 .24 4	12 14.6 4

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Summary of Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcL	EOSIN X103/mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	9.7 1.76 6	4.2 1.66	4.4 1.46 6	.7 .46 6	.2 .18 6	.0 .05 6	45 16.1 6	46 12.4 6	7 4.1 6	2 2.0 6	0 .5
0.03	MEAN S.D. N	8.4 .74 4	4.8 1.46 4	2.8 .74 4	.6 .26 4	.2 .06 4	.0 .00 4	57 15.1 4	34 10.6 4	6 3.8 4	2 1.0 4	0 .5 4
0.15	MEAN S.D. N	10.0 2.44 6	5.2 2.10 6	4.1 1.39 6	.5 .14 6	.2 .20 6	.0 .00 6	50 15.2 6	42 13.6 6	5 2.4 6	2 2.1 6	0 .0 6
0.75	MEAN S.D. N	7.6 2.09	2.9 1.13 4	4.0 1.16 4	.5 .12 4	.1	.0 .06 4	38 6.9 4	53 9.1 4	7 2.9 4	2 1.7 4	0 .6

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Table 13
Summary of Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.40 .461 6	12.1 .64 6	40.8 2.67 6	63.8 2.49 6	19.0 .70 6	29.7 .65 6	484 100.1 6	.4 .24 6	27 15.1 6
0.03	MEAN S.D. N	6.15 .798 4	11.2 1.66 4	38.3 5.67 4	62.3 6.23 4	18.2 2.09 4	29.3 .94 4	429 54.7 4	.2 .13 4	13 5.8 4
0.15	MEAN S.D. N	6.57 .256 6	11.9 .62 6	39.9 1.78 6	60.8 2.50 6	18.2 .73 6	29.9 .35 6	412 74.4 6	.2 .12 6	12 7.5 6
0.75	MEAN S.D. N	6.09 .360	11.3 .37	39.2 2.17 6	64.3 1.46	18.6 .71	29.0 1.09	490 166.0	.2 .21	12 12.7

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Summary of Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcL	EOSIN X10 ³ /mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0	MEAN S.D. N	10.4 3.59	5.0 3.41 6	4.3 1.96	.7 .15 6	.2 .19 6	.0 .05 6	46 17.5 6	44 15.1 6	8 3.4 6	3 1.8 6	0 .5
0.03	MEAN S.D. N	8.5 2.05 4	4.3 1.45 4	3.2 .57 4	.7 .32 4	.3 .15 4	.0 .10 4	50 9.3 4	38 10.1 4	8 2.2 4	3 1.4 4	0 1.0 4
0.15	MEAN S.D. N	9.2 1.61 6	4.5 1.73 6	3.8 .61 6	.6 .18 6	.3 .24 6	.0 .04 6	48 13.0 6	43 11.7 6	6 2.1 6	3 2.0 6	0 .8 6
0.75	MEAN S.D. N	9.7 2.73	4.2 1.10	4.6 2.70	.7 .32	.2	.1 .05	46 14.6	45 14.8	8 3.4 6	2 .8	0 .5

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Table 14
Summary of Clinical Hematology Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0										
	MEAN	6.26	12.0	38.1	60.8	19.1	31.5	483	. 4	22
	S.D.	.007	.21	.28	.35	.28	.35	193.7	.07	4.2
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.49	12.7	40.7	62.8	19.6	31.2	488	.3	20
	S.D.	.057	.42	1.27	1.34	.42	.07	118.8	.14	9.2
	N	2	2	2	2	2	2	2	2	2
0.75										
0.75	MEAN	5.90	11.6	37.8	64.0	19.5	30.6	469	. 4	26
	S.D.	.042	.07	.64	.71	.07	.42	22.6	.21	12.0
	N	2	2	2	2	2	2	2	2	2

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Table 14

Summary of Clinical Hematology Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10°/mcL	MONO X10 ³ /mcL	EOSIN X10°/mcL	BASO X10³/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
MEAL	7.3	2.4	4.0	.6	.2	.0	34	54	9	3	1
S.D		.14		.14	.07	.00	4.9		4.2	.0	.0
И	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEAI	I 11.5	6.2	4.5	.6	.3	.0	53	38	6	3	0
S.D	3.82	2.05	2.12	.21	.14	.00	.0	5.7	3.5	2.8	. 0
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEAL	V 11.8	6.0	4.4	. 9	. 4	.0	50	39	7	4	0
S.D	4.10	2.69	.78	.57	.07	.00	5.7		2.8	.0	.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 14

Summary of Clinical Hematology Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
0										
	MEAN	5.94	11.8	36.9	62.0	19.8	32.0	468	.3	18
	S.D.	.714	1.20	4.81	.64		.99	111.0	.28	19.1
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.14	11.9	37.6	61.4	19.5	31.7	408	. 4	22
	S.D.	.092	.14	.57	.07	.07	.14	37.5	.21	13.4
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.42	12.0	40.2	62.6	18.7	29.8	444	.5	32
	S.D.	.417	.28	2.90			1.34	160.5		
	M	2	2	2	2	2	2	2	2	2

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Table 14

Summary of Clinical Hematology Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10³/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
ME.	AN 8.2	4.6	2.8	. 6	.1	.0	55	36	8	2	0
S.	D. 2.76	2.12		.28	.00	.00	7.1	7.8	.7	.7	
И	2	2	2	2	2	2	2	2	2	2	2
0.15											
ME.	AN 7.6	2.6	4.0	.6	. 4	.0	34	53	8	4	1
s.:	1.06	1.20	.35	.14	.21	.07	10.6	11.3	2.8	2.1	0
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
ME	AN 9.3	2.6	5.8	. 6	.2	.0	28	64	6	3	0
s.:	2.26	.64	1.20	.35	.07	.07	.7		2.8	1.4	.7
N	2	2	2	2	2	2	2	2	2	2	2

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Table 15
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
0	MEAN S.D. N	6.52 .332 2	12.6 .57 2	39.2 1.91 2	60.2 .07 2	19.4 .07 2	32.1 .00 2	556 181.7 2	.2	13 8.5 2
0.15	MEAN	6.78	13.3	42.2	62.1	19.6	31.6	493	.2	10
	S.D.	.049	.00	.49	1.13	.28	.21	36.8	.07	4.9
	N	2	2	2	2	2	2	2	2	2
0.75	MEAN	6.20	11.9	39.5	63.7	19.2	30.1	532	.6	36
	S.D.	.191	.71	.64	.99	.49	1.27	43.1	.28	16.3
	N	2	2	2	2	2	2	2	2	2

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Table 15 Summary of Clinical Hematology Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	lay	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10³/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0												
M	IEAN	10.0	3.2	6.1	. 4	.3	.0	32	60	4	3	0
S	.D.	2.90	.78	2.12	.07	.00	.00	1.4	3.5	.7	1.4	1 .0
N	ſ	2	2	2	2	2	2	2	2	2	2	2
0.15												
M	IEAN	11.4	5.5	4.8	. 6	. 4	.0	48	42	6	3	0
S	.D.	1.13	.42	1.06	.28	.07	.00	. 7	4.9	3.5	1.4	1 .0
N		2	2	2	2	2	2	2	2	2	2	2
0.75												
M	IEAN	13.4	5.6	6.2	1.0	.5	.1	41	47	8	4	1
S	.D.	5.52	2.83	1.77	.64	.14	.00	4.2	5.7	2.1		.0
N	ſ	2	2	2	2	2	2	2	2	2	2	2

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Table 15
Summary of Clinical Hematology Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0										
	MEAN S.D.	6.22 .735	12.3 1.41	38.4 4.95	61.6 .71	19.8	32.1	519 82.0	.2	16 6.4
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.74	12.7	40.7	60.3	18.8	31.2	425	.2	10
	S.D.	.191	.28	.35	1.27	.14	.28	48.1	.07	4.2
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.70	12.5	42.0	62.7	18.7	29.8	440	.2	17
	S.D.	.453	.42	2.97	.21	.71	1.20	149.2	.21	15.6
	N	2	2	2	2	2	2	2	2	2

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Table 15

Summary of Clinical Hematology Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da	WBC ay X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10³/mcL	N-SEG%	LYMPH%	#ONO%	EOSIN%	BASO%
0											
MI	EAN 11.4	7.1	3.4	.7	.2	.0	62	3.0	6	2	0
S	.D. 1.56		.85	.28	.14	.00	16.3	12.0	2.8	1.4	
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
MI	EAN 9.4	3.0	5.0	1.0	. 4	.0	28	56	11	4	0
S	.D. 2.76		.49	.00	.28	.07	23.3	21.9	2.8	1.4	. 7
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MI	EAN 11.0	3.6	6.2	. 9	.2	.1	32	56	8	2	1
S	.D2	1.34	1.77	.28	.07	.00	12.7		2.8	1.4	.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 16
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg		RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC	RETIC X10 ³ /mcL
0	MEAN S.D. N	6.72 .198 2	12.6 .49 2	40.1 2.12 2	59.6 1.34 2	18.8 .21 2	31.6 .42 2	504 228.4 2	.2 .07 2	17 4.2 2
0.15	MEAN S.D. N	6.78 .106 2	13.1 .42 2	41.8 2.05 2	61.5 1.98 2	19.3 .28 2	31.4 .49 2	496 105.4 2	.4 .28 2	27 19.8 2
0.75	MEAN S.D. N	6.45 .495	12.3 1.13 2	41.0 2.40	63.6 1.13	19.1 .21	29.9 .92	519 60.8	.3	19 7.1 2

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Table 16

Summary of Clinical Hematology Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10°/mcL	MONO X10 ³ /mcL	EOSIN X10°/mcL	BASO X10³/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
MEAN		2.6	3.7	.8	.1	.0	36	51	10	2	1
S.D.			.42	.35	.00	.07	6.4		4.2		. 0
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEAN	11.5	6.6	4.1	. 4	. 2	.0	58	36	4	2	0
S.D.	2.26	2.05	.14	.21	.14	.00	58 6.4	8.5	1.4	1.4	. 0
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEAN	11.6	5.0	5.4	.8	. 4	.0	40	49	7	2	1
S.D.	6.22	3.54	1.91	.49	.21	.07	9.2		.0	.7	.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 16 Summary of Clinical Hematology Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	ı/day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
	-									
0	MEAN S.D. N	6.32 1.082 2	12.3 1.70 2	39.0 7.57 2	61.7 1.41 2	19.5 .71 2	31.6 1.91 2	510 135.8 2	.4	25 4.2 2
0.15	MEAN	6.64	12.6	40.1	60.3	18.8	31.2	423	.4	23
	S.D.	.071	.07	.57	.21	.35	.64	5.7	.21	14.1
	N	2	2	2	2	2	2	2	2	2
0.75	MEAN	6.78	12.5	40.8	60.2	18.4	30.5	440	.4	30
	S.D.	.410	.35	1.56	1.34	.64	.35	137.9	.35	21.9
	N	2	2	2	2	2	2	2	2	2

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Table 16
Summary of Clinical Hematology Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/	day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10³/mcI	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0												
	MEAN	8.8	5.4	2.8	.5	.0	.0	60	3.3	6	1	0
	S.D.	1.13	2.40	.99	.14	.07	.00	19.1		2.8		
	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
	MEAN	7.8	2.9	3.8	. 6	. 4	.0	34	53	8	5	1
	S.D.	2.26	2.55	.64	.07	.28	.07	22.6	22.6	. 7	1.4	. 0
	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	9.2	4.4	4.1	. 6	.1	.0	4.8	44	6	0	0
	S.D.	2.26	.92	.85	.49	.00	.07	2.1		3.5		.7
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 17
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	I/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0	MEAN S.D. N	6.72 .078 2	12.6 .35 2	40.2 .57 2	59.8 .07 2	18.8 .28 2	31.5 .42 2	544 209.3 2	.3	20 19.1 2
0.15	MEAN S.D. N	6.80 .127 2	13.2 .57 2	41.9 1.84 2	61.5 1.48 2	19.4 .49 2	31.5 .07 2	491 80.6 2	.2 5 .07 2	10 4.9 2
0.75	MEAN S.D.	6.22 .198	11.8		61.1 1.34	19.0	31.0 .71	572 43.3	.6 1 .35	34 21.2

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Table 17
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	lay	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10³/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0												
	IEAN	8.6	4.2	3.8	. 6	.1	.0	48	42	8	1	0
	.D.	1.20	.21	1.06	.07	.00	.00	4.9		1.4		
И	ſ	2	2	2	2	2	2	2	2	2	2	2
0.15												
M	IEAN	12.8	8.2	3.7	.8	.2	.0	64	3.0	6	1	0
S	.D.	1.34	2.05	.99	.21	.07	.00	9.2	10.6	1.4	.0	. 0
И		2	2	2	2	2	2	2	2	2	2	2
0.75												
	IEAN	9.0	4.0	3.9	.8	.2	.0	4.3	44	10	2	0
S	.D.	3.75	2.55	1.13	.07	.07	.07	9.9		2.8	1.4	.7
N	ſ	2	2	2	2	2	2	2	2	2	2	2

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Table 17
Summary of Clinical Hematology Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	ı/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0										
	MEAN	6.32	12.3	38.4	60.8	19.6	32.1	546	.2	13
	S.D.	.403	.64	2.12	.49	.21	.07	140.0	.14	
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.76	12.5	40.1	59.4	18.4	31.0	472	. 4	24
	S.D.	.071	.00	.78	1.77	.21	.64	103.9	.07	4.9 2
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.50	11.9	39.5	60.8	18.4	30.2	424	.3	20
	S.D.	.431	.42	2.19	.64	.64	.71	155.6	.28	19.8
	N	2	2	2	2	2	2	2	2	2

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Table 17

Summary of Clinical Hematology Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	lay :	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10°/mcL	MONO X10 ³ /mo	EOSIN L X10³/mo	BASO N L X10 ³ /m	-SEG% L	YMPH%	MONO% E	OSIN% F	BASO%
	-											
0												
M	IEAN	11.8	7.2	3.2	1.0	.2	.0	59	3.0	8	2	0
S	.D.	4.38	3.96	.07	.57	.07	.00	11.3	11.3	2.1	1.4	.0
N	1	2	2	2	2	2	2	2	2	2	2	2
0.15												
M	IEAN	9.4	4.2	4.2	. 6	. 4	.0	42	48	7	4	0
S	.D.	2.83	3.18	.42	.21	.28	.00	21.2	19.1	4.2	1.4	. 0
N	1	2	2	2	2	2	2	2	2	2	2	2
0.75												
M	IEAN	8.9	2.7	5.6	. 6	.2	.0	30	62	6	2	0
S	.D.	1.56	.57	.78	.07	.07	.00	1.4	1.4	.7	.7	.0
N	I	2	2	2	2	2	2	2	2	2	2	2

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Table 18
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg		RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
0										
	MEAN S.D.	6.53 .042	12.4	39.5 .07	60.5 .49	19.2 .21	31.6 .07	514 179.6	.1	6 9.2
	N.	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.72	13.0	41.2	61.3	19.4	31.7	448	. 1	7
	S.D.	.283	.64	2.97	1.91	.28	.57	68.6	.14	9.9
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.23	12.2	38.9	62.5	19.5	31.2	508	.8	46
	S.D.	.198	.21	.28	2.40	.28	.85	17.7	1.06	
	N	2	2	2	2	2	2	2	2	2

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Table 18
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10°/mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
MEAN		6.6	3.4	.7	.0	.0	61	32	6	0	0
S.D.		.99		.14	.07	.07	8.5		.7		
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEAN	12.5	8.2	3.5	.8	.1	.0	64	28	6	0	0
S.D.	1.84	1.98	.71	.49	.14	.00	6.4	10.6	2.8		7.0
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEAN	12.2	6.4	4.2	1.1	. 4	.0	52	36	9	3	0
S.D.	3.96	2.69	.78	.42	.07	.07	4.9		.0	. (.7
N	2	2	2	2	2	2	2	2	2	2	2

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Table 18
Summary of Clinical Hematology Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	day	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
mg/kg/		X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10°/mcL
0										
	MEAN	6.28	12.4	38.1	60.8	19.8	32.6	534	.2	10
	S.D.	.453	.78	2.90	.35	.14	.42	142.8	.07	4.9
	N	2	2	2	2	2	2	2	2	2
		2	2	2	2	2	2	2	2	2
	MEAN	6.77	12.6	40.8	60.2	18.6	31.0	456	.2	10
	S.D.	.113	.14	1.34	.92	.07	.64	67.9	.07	4.2
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.54	12.2	40.1	61.3	18.6	30.4	448	.2	10
	S.D.	.028	.07	.57	1.13	.14	.78	181.7	.07	4.2
	N	2	2	2	2	2	2	2	2	2

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Table 18
Summary of Clinical Hematology Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
ME.		3.4 1.13	2.8	1.0	.2	.0	46 6.4	37 1.4	14 6.4	3	0
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
ME.		3.0	3.7	. 9	. 4	.0	38	46	11	5	0
s.:			.99	.42		.07	10.6		4.2		
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
ME		4.7	5.2	.8	.1	.0	43	48	8	1	0
s.			.21	.42	.14	.00	1.4	4.9	3.5	1.4	.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 19
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	ı/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0										
	MEAN S.D.	6.63 .269	12.9 .57	40.2 1.34	60.7 .42	19.4 .00	32.0 .28	460 174.7	.3	20 9.9
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	7.16	14.0	45.6	63.7	19.5	30.6	490	.3	22
	S.D.	.049	.21	.99	.92	.14	.21	106.8	.28	20.5
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.30	12.6	40.6	64.5	19.9	31.0	510	.7	42
	S.D.	.530	.92	2.69	1.13	.21	.14	92.6	.99	58.7
	N	2	2	2	2	2	2	2	2	2

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Table 19
Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/da	WBC y X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
ME	AN 11.6	6.4	4.4	. 6	.1	.0	55	38	5	1	0
S.	D57	1.48		.07	.00	.07	9.9	8.5	.7	. (.7
И	2	2	2	2	2	2	2	2	2	2	2
0.15											
ME	AN 11.6	4.9	5.9	.6	. 2	.0	42	50	6	2	0
s.	D. 1.27		.42	.21	.00	.00	4.9		2.1	. 7	7 .0
И	2	2	2	2	2	2	2	2	2	2	2
0.75											
ME	AN 16.6	10.3	4.8	1.2	. 4	.1	62	28	6	2	0
S.	D. 6.51	3.96	1.77	.64	.21	.00	.7	.7	.7	1.4	.7
N	2	2	2	2	2	2	2	2	2	2	2

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Table 19
Summary of Clinical Hematology Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10°/mcL
	-									
0										
	MEAN S.D.	6.26 .884	12.4 1.56	38.5 5.23	61.6 .35	19.8	32.2 .49	494 122.3	.5 .14	31 4.2 2
	N	2	2	2	2	2	2	2	2	2
0.15	MEAN	6.66	12.7	40.8	61.4	19.2	31.2	451	.3	20
	s.D. N	.064	.00	.85 2	.71 2	.21	.78 2	14.1 2	.14	9.2 2
0.75										
	MEAN S.D.	7.06 .629	13.1 .57	42.9 3.18	60.8 .92	18.5 .78	30.6 .92	446 215.7	.2 .21	12 16.3
	N	2	2	2	2	2	2	2	2	2

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Table 19

Summary of Clinical Hematology Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0											
MEA	N 8.8	4.4	3.4	.7	.3	.0	50	38	8	3	0
S.D	78	.14	.64	.14	.14	.00	6.4	3.5	.7	1.4	1 .0
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEA	N 9.9	3.8	4.6	. 9	.6	.0	37	48	9	6	0
S.I	. 1.70	1.70	.07	.14	.28	.00	11.3	6.4	. 0	4.2	2 .0
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEA	N 10.6	3.0	6.2	1.0	.3	.2	29	58	9	3	2
S.I	92	.71	1.56	.07	.14	.07	9.9		1.4	1.4	.7
N	2	2	2	2	2	2	2	2	2	2	2

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Table 20 Summary of Clinical Hematology Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	r/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	-									
0										
	MEAN	6.56	12.6	40.7	61.9	19.2	31.0	434	. 5	33
	S.D.	.035	.00	1.06	1.27	.07	.71	96.9	.28	18.4
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	6.90	13.6	43.9	63.6	19.8	31.1	373	.7	48
	S.D.	.141	.21	.42	.71	.00	.28	5.7	.00	.7
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	6.42	12.6	42.4	66.0	19.6	29.8	520	.6	38
	S.D.	.000	.14	1.56	2.33	.14	.78	59.4	.42	27.6
	N	2	2	2	2	2	2	2	2	2

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Table 20 Summary of Clinical Hematology Data

Males Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/d	lay	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X103/mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
0												
	IEAN	8.4	3.1	4.2	.8	.1	.2	36	52	9	1	2
	.D.	1.77	1.56	.14	.42	.00	.21	11.3		2.8		
N	1	2	2	2	2	2	2	2	2	2	2	2
0.15												
M	IEAN	10.9	5.0	4.7	.8	. 4	.1	46	42	8	2	1
S	.D.	3.96	1.70	2.12	.14	.21	.00	1.4	4.2	4.2	· .'	7 .0
N	1	2	2	2	2	2	2	2	2	2	2	2
0.75												
M	IEAN	16.0	9.8	4.4	1.2	.2	.2	62	28	8	2	2
S	D.	.35	1.48	1.41	.07	.21	.14	11.3		.7	·	7 .7
N	1	2	2	2	2	2	2	2	2	2	2	2

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Table 20
Summary of Clinical Hematology Data

Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10°/mcL
0									
MEAN		11.8	37.5	62.5	19.8	31.6	508	. 4	26
S.D.			4.17	.21	.49	.71	35.4	.21	9.2
N	2	2	2	2	2	2	2	2	2
0.15									
MEAN	6.46	12.3	40.2	62.2	19.0	30.6	406	. 4	29
S.D.	.191	.42	1.34	.21	.14	.14	2.1	.21	12.7
N	2	2	2	2	2	2	2	2	2
0.75									
MEAN	6.72	12.4	40.8	60.8	18.5	30.4	396	.3	20
S.D.		.14	.28	1.56	.57	.14	146.4	.14	9.9
N	2	2	2	2	2	2	2	2	2

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Table 20

Summary of Clinical Hematology Data

Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	/day	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcL	EOSIN X10 ³ /mcL	BASO X10 ³ /mcL	N-SEG%	LYMPH%	MONO%	EOSIN%	BASO%
	-											
0												
	MEAN	11.2	7.0	2.8	1.0	.3	.2	58	28	10	2	1
	S.D.	6.15	4.95	.49	.42	.14	.07	12.0				
	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
	MEAN	11.5	5.4	4.2	1.0	. 6	.2	46	37	10	5	2
	S.D.	3.25	2.33	1.20	.07	.21	.00					
	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	10.4	3.1	6.4	.5	.2	.2	3.0	61	5	2	2
	S.D.	.85	.14	.92	.00	.14	.07	3.5	5 4.2		0 .	
	И	2	2	2	2	2	2	2	2	2	2	2

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Table 21 Summary of Clinical Chemistry Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG
mg/kg		MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL
	-										
0	MEAN S.D. N	76 12.5 6	20 3.8 6	1.2 .10 6	9.0 .32 6	4.9 .21	4.1 .26 6	.6 .45 6	9 2.0 6	138 33.7 6	70 13.3 6
0.03	MEAN	70	20	1.2	9.6	5.2	4.4	.4	9	110	61
	S.D.	8.3	6.2	.17	.58	.46	.48	.18	1.4	20.1	35.0
	N	4	4	4	4	4	4	4	4	4	4
0.15	MEAN S.D. N	82 30.4 6	21 3.3 6	1.2 .22 6	9.5 .44 6	5.1 .34 6	4.4 .26 6	.6 .37 6	10 2.2 6	151 26.1 6	56 . 4.9
0.75	MEAN	73	20	1.3	9.4	5.2	4.3	.5	9	138	67
	S.D.	15.4	2.0	.11	.38	.28	.37	.29	1.3	29.3	11.0
	N	6	6	6	6	6	6	6	6	6	6

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Table 21
Summary of Clinical Chemistry Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	/day	AST/SGOT	ALT/SGPT	ALK PHOS	GGT	SDH	CK	AMYLASE	LIPASE	P AMYL
mg/kg/		IU/L	IU/L	IU/L	IU/L	IU/L	IU/L	IU/L	IU/L	U/L
	-									
	MEAN	56	32	711	134	7	1133	395	55	247
	S.D.	16.	5 9.	7 252.6	42.8	1.9	535.3	93.4	8 4. 4	54.0
	N	6	6	6	6	6	6	6	6	6
	MEAN S.D. N		36 11.	700 2 265.6 4	141 34.5 4	3 1.0 4	936 709.0 4	476 164.6 4	35 20.6 4	302 107.4 4
	MEAN	72	69	770	160	8	1087	386	51	242
	S.D.	23.	5 35.	7 210.3	68.4	5.4	322.3	94.5	42.4	62.4
	N	6	6	6	6	6	6	6	6	6
	MEAN S.D. N	68 11. 6	7 54. 6	840 2 360.9 6	171 53.3 6	6 1.5 6	1094 497.4 6	529 135.6 6	41 31.8 6	324 72.2 6

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Table 21
Summary of Clinical Chemistry Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEA S.D N		6.2 .84 6	159 4.6 6	5.4 .58 6	109 2.9 6
0.03 MEA S.D N		6.6 .44 4	16 4 6.0 4	5.9 .32 4	111 2.2 4
0.15 MEA S.D N		7.1 .99 6	163 5.3 6	6.4 .60 6	112 2.7 6
0.75 MEA S.D N		6.9 1.06 6	161 4.8 6	5.8 .62 6	108 2.9 6

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Table 21

Summary of Clinical Chemistry Data

Females Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
	-										
0	MEAN S.D. N	76 22.2 6	22 1.6 6	1.2	9.6 .78 6	4.9 .35	4.7 .83 6	.5 .34 6	7 1.9	149 37.2 6	73 32.4 6
0.03	MEAN S.D. N	73 10.7 4	22 1.3 4	1.2 .08 4	9.3 .50 4	4.7 .18 4	4.6 .41 4	.5 .17 4	6 1.7 4	130 12.4 4	62 7.5 4
0.15	MEAN S.D. N	76 12.0 6	23 3.9 6	1.1 .10 6	9.6 .62 6	4.7 .57 6	4.9 .38 6	.6 .21 6	12 12.1 6	144 14.0 6	58 11.7 6
0.75	MEAN S.D.	78 16.3	24 3.9	1.2	9.4 .78	4.8	4.6 .65	.6 .37	9 1.4	154 10.1	61 16.6

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Table 21
Summary of Clinical Chemistry Data

Females Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N			291 9 130.1 6	123 54.0 6	4 1.6	979 384.3 6	37 4 121.9 6	28 12.5 6	220 73.1 6
0.03 MEA S.D N		.2 103 .2 29.	201 4 12.5 4	94 48.5 4	3 4.8	484 156.7 4	378 153.7 4	26 15.9 4	237 79.9 4
0.15 MEA S.C N		110 .5 41.	257 0 118.5 6	87 32.9 6	4 2.4 6	844 306.4 6	416 121.0 6		244 81.3 6
0.75 MEA S.D N		123 .4 54.	310 2 141.4 6	75 24.3 6	4 2.0 6	1624 1251.5 6	384 88.6 6	19 15.4 6	247 54.1 6

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Table 21
Summary of Clinical Chemistry Data

Females Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	ı/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	11.4	6.2	163	6.2	114
	S.D.	1.10	.63	7.1	.96	5.0
	N	6	6	6	6	6
0.03	MEAN	10.9	4.7	163	5.9	115
	S.D.	.58	.99	3.4	.70	3.3
	N	4	4	4	4	4
0.15	MEAN	11.0	5.9	162	6.1	115
	S.D.	.59	.78	6.1	.63	3.1
	N	6	6	6	6	6
0.75	MEAN	11.3	5.5	163	6.1	114
	S.D.	.59	.50	4.9	.80	1.5

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Table 22 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG
mg/kg		MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL
0	MEAN S.D. N	60 5.9 6	20 3.3 6	1.1 .12 6	8.9 .56 6	4.7 .13 6	4.2 .49	.8 .43 6	9 1.5 6	140 22.1 6	69 18.7 6
0.03	MEAN	62	18	1.2	9.3	5.0	4.3	.4	8	118	47
	S.D.	8.3	3.9	.18	1.02	.46	.85	.16	1.3	28.4	4.6
	N	4	4	4	4	4	4	4	4	4	4
0.15	MEAN	61	21	1.2	9.2	4.8	4.4	.6	8	146	58
	S.D.	9.8	4.9	.23	.33	.25	.32	.27	.8	21.5	5.3
	N	6	6	6	6	6	6	6	6	6	6
0.75	MEAN S.D. N	65 7.8	21 2.3 6	1.3 .12	9.3 .37	5.1 .36	4.2 .40	.4 .17	7 1.5	130 18.0	91 27.3 6

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Table 22
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 Mea S.I N		.9 39 .9 19.	888 5 339.5 6	134 42.9 6	7 2.6 6	354 461.0	374 106.3 6	22 12.5 6	222 58.4 6
0.03 MEZ S.I N		.3 40 13.	876 0 384.3 4	120 35.4 4	3 1.5 4	191 58.2 4	459 149.3 4	24 13.6 4	282 93.3 4
0.15 MEZ S.I N		50 .9 23.	896 8 267.3 6	136 57.3 6	5 3.2 6	184 59.7 6	369 78.9 6	40 21.7 6	221 55.5 6
0.75 MEA S.I N		.0 46 .0 23.	996 0 417.0 6	142 39.9 6	2 * .4 6	283 149.7 6	522 124.7 6	26 10.9 6	307 55.9 6

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Table 22
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEAN S.D. N		6.7 .80 6	160 3.6 6	5.4 .28 6	115 3.4 6
0.03 MEAN S.D. N		6.9 1.58 4	165 10.1 4	5.8 .74 4	116 4.2 4
0.15 MEAN S.D. N		6.8 1.00 6	160 3.1 6	5.6 .38 6	115 .9 6
0.75 MEAN S.D. N		6.6 1.29 6	162 3.4 6	5.4 .29	114 2.7 6

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Table 22
Summary of Clinical Chemistry Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG
mg/kg		MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL
0	MEAN S.D. N	58 14.7 6	22 4.4 6	1.1 .16 6	9.3 .71 6	4.4 .26 6	4.9 .80 6	.6 .34 6	8 .5	147 26.9 6	71 25.7 6
0.03	MEAN	67	21	1.1	9.0	4.5	4.5	.5	9	124	64
	S.D.	15.2	3.0	.05	.41	.15	.39	.25	2.5	11.1	12.0
	N	4	4	4	4	4	4	4	4	4	4
0.15	MEAN	60	20	1.0	9.2	4.3	4.9	.6	8	133	57
	S.D.	8.4	3.6	.04	.26	.37	.40	.14	3.2	22.4	11.3
	N	6	6	6	6	6	6	6	6	6	6
0.75	MEAN S.D. N	70 11.5	22 5.4	1.1 .14 6	9.1 .31	4.4 .10	4.7 .38	.4 .15	7 1.2	123 14.1	66 23.0

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Table 22 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N		59 30.	362 2 125.6 6	102 42.9 6	5 2.4 6	240 146.6 6	339 89.9 6	18 13.2 6	194 58.2 6
0.03 MEA S.D N		9 70 13.	240 3 48.7 4	88 54.7 4	3 1.3 4	378 262.2 4	384 110.9 4	28 15.2 4	237 55.5 4
0.15 MEA S.D N		68 6 30. 6	319 9 129.0 6	76 20.3 6	3 1.5 6	198 101.3 6	414 115.1 6	34 17.4 6	230 70.7 6
0.75 MEA S.D N		.0 46 7.	415 5 188.9 6	58 20.0 6	2 * .9	331 242.1 6	373 83.3 6	23 5.9 6	230 66.0 6

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Table 22
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da	CA xy MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
	ZAN 10.4 D39	5.7 .73 6	161 4.9 6	5.7 .38 6	115 4.4 6
	ZAN 10.2 D42	4.2 * .37 4	161 5.4 4	5.2 .92 4	116 4.3 4
	AN 9.7 D73	5.1 .65 6	157 2.5 6	5.2 .39 6	114 1.1 6
	D. 10.4 D25	5.0 .48 6	160 5.3 6	5.9 .42 6	116 3.0 6

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Table 23
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG
mg/kg		MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL
0	MEAN S.D. N	59 9.1 6	20 3.9 6	1.1 .08	8.6 .50 6	4.6 .17 6	4.0 .42 6	.7 .42 6	9 1.5 6	153 23.0 6	62 19.0 6
0.03	MEAN	59	20	1.2	9.0	4.7	4.3	.4	10	114 *	60
	S.D.	2.9	3.7	.14	.69	.36	.58	.10	2.2	25.1	14.8
	N	4	4	4	4	4	4	4	4	4	4
0.15	MEAN	67	18	1.2	8.8	4.6	4.1	.5	10	144	57
	S.D.	13.3	3.9	.19	.42	.48	.44	.23	1.7	19.7	13.4
	N	6	6	6	6	6	6	6	6	6	6
0.75	MEAN S.D. N	74 10.6	19 2.6	1.3 .12	8.8 .41	4.8 .53	4.0 .59	.3	10 2.7	125 20.6	76 16.6

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Table 23
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.1 N		.9 34 15.	839 2 321.9	130 46.2 6	7 2.3 6	132 27.8 6	371 115.8 6	22 13.9 6	224 64.2 6
0.03 ME2 S.1 N		.2 35 .2 17.	750 5 369.9 4	116 25.0 4	$\begin{smallmatrix}4\\1.5\\4\end{smallmatrix}$	149 47.7 4	428 143.3 4	21 13.8 4	270 92.9 4
0.15 MEA S.I N		37 .4 11.	806 7 237.8 6	128 39.4 6	5 3.8 6	153 19.9 6	344 89.3 6	20 11.3 6	213 61.7 6
0.75 MEX S.I N		.3 16.	823 2 367.0 6	125 29.9 6	3 .8 6	203 * 57.2 6		22 13.4 6	301 53.4 6

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Table 23
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	10.4	7.1	160	5.4	120
	S.D.	.39	.66	2.9	.44	2.5
	N	6	6	6	6	6
0.03	MEAN	10.5	6.8	166	5.6	122
	S.D.	.44	.88	12.5	.92	9.3
	N	4	4	4	4	4
0.15	MEAN	10.4	6.6	160	5.4	120
	S.D.	.26	1.08	3.5	.50	3.5
	N	6	6	6	6	6
0.75	MEAN S.D. N	10.5 .60	6.8 1.31 6	159 6.4 6	5.6 .63 6	120 2.8 6

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Table 23

Summary of Clinical Chemistry Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	OOSE ng/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
		-										
(0	MEAN S.D. N	57 10.2 6	21 3.5 6	1.1 .13 6	9.0 .57 6	4.4 .21	4.7 .75 6	.5 .24 6	9 .8	155 45.4 6	86 4 9.4 6
(0.03	MEAN S.D. N	66 17.3	22 3.4 4	1.1 .05 4	8.8 .44 4	4.3 .10 4	4.5 .46 4	.6 .26 4	10 3.7 4	127 11.2 4	76 21.5 4
(0.15	MEAN S.D. N	62 12.6 6	20 2.7 6	1.0 .10	9.0 .15 6	4.3 .33 6	4.7 .24 6	.6 .18 6	10 3.2 6	137 19.5 6	64 18.0 6
(0.75	MEAN S.D. N	74 7.2	20 5.0	1.2 .13	9.0 .44	4.4 .17	4.6 .39	.4 .10	9 1.9	127 18.9	61 10.5

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Table 23
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da	AST/SGOT Y IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE I	P AMYL U/L
	AN 38 D. 3	53 .4 16.	360 7 152.5 6	106 47.7 6	4 1.8 6	262 123.6 6	3 4 2 86.9 6	14 14.7 6	198 55.5 6
	AN 45 D. 9	77 .9 15.	8 241 8 45.3 4	84 44.5 4	4 2.2 4	276 67.9 4	358 108.3 4	19 16.7 4	228 55.8 4
	AN 37 D. 7	.8 29. 6	305 3 134.0 6	75 20.8 6	4 1.0 6	194 76.1 6	410 129.7 6	28 19.6 6	234 82.3 6
	AN 31 D. 7	.8 6. 6	398 2 200.5 6	58 20.0 6	2 * .4 6	243 130.1 6	385 89.4 6	27 9.9 6	246 56.7 6

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Table 23
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	ı/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	10.0	6.0	162	5.8	120
	S.D.	.34	.36	6.5	.59	5.1
	N	6	6	6	6	6
0.03	MEAN	9.9	4.6 *	160	5.2	120
	S.D.	.22	.30	2.9	.43	2.2
	N	4	4	4	4	4
0.15	MEAN	9.6	5.1 *	160	5.5	123
	S.D.	.48	.51	3.6	.60	3.0
	N	6	6	6	6	6
0.75	MEAN S.D. N	10.2 .60	5.0 * .30	161 3.5 6	5.8 .67	120 1.8 6

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Table 24

Summary of Clinical Chemistry Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
	-										
0	MEAN S.D. N	60 8.0 6	20 4.3 6	1.1 .14	8.7 .40 6	4.8 .12 6	3.9 .33 6	.7 .38 6	8 1.2 6	154 24.6 6	68 20.4 6
0.03	MEAN S.D. N	64 7.6 4	20 4.9 4	1.3 .22 4	9.6 .98 4	5.3 * .39 4	4.2 .75 4	.4 .13 4	8 .6 4	126 14.9 4	54 9.8 4
0.15	MEAN S.D. N	75 18.5 6	19 4.6 6	1.2 .16	9.0 .19 6	5.0 .14 6	4.0 .21 6	.4 .22 6	9 2.7 6	150 18.8 6	50 10.4 6
0.75	MEAN S.D. N	73 19.1	19 1.3	1.4 .19	9.4 .36	5.2 * .31	4.2 .35	.3 * .05	10 3.6	112 * 27.0	73 21.0

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Table 24
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/c	AST/SGOT day IU/L		ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
٤	MEAN 39 S.D. 7 N 6	7.7 15.	866 8 296.2 6	136 50.1 6	7 2.6 6	168 32.4 6	392 111.8 6	33 30.3 6	265 71.2 6
5		5 60 7.0 55.4	789 8 401.7 4	131 34.5 4	$egin{array}{c} 4 \\ 1 \cdot 4 \\ 4 \end{array}$	175 42.5 4	465 185.6 4	48 57.9 4	318 125.4 4
8	MEAN 42 S.D. 12 N 6	2.2 22.	851 4 265.3 6	140 58.6 6	6 4.3 6	164 36.2 6	377 94.9 6	27 18.3 6	258 70.1 6
٤	MEAN 36 S.D. 6 N 6	5.3 21.	807 0 428.6 6	127 27.4 6	2 * .6	214 75.7 6	468 149.1 6	32 17.5 6	350 70.4 6

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Table 24
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEAN S.D. N		6.8 .37 6	160 7.1 6	5.1 .56 6	117 5.3 6
0.03 MEAN S.D. N		6.7 .70 4	167 4.9 4	5.7 1.04 4	120 4.1 4
0.15 MEAN S.D. N		6.8 1.05 6	161 4.6 6	5.4 .35 6	118 7.0 6
0.75 MEAN S.D. N		6.4 .94 6	163 5.0 6	5.4 .45 6	117 4.2 6

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Table 24
Summary of Clinical Chemistry Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
	-										
0	MEAN S.D. N	66 20.5 6	20 2.7 6	1.2 .10 6	9.2 .51 6	4.7 .38	4.6 .51 6	.4 .16 6	8 1.5 6	166 42.0 6	67 10.9 6
0.03	MEAN S.D. N	68 14.7 4	22 3.3 4	1.1 .08 4	9.0 .69 4	4.6 .19 4	4.4 .54 4	.5 .27 4	8 1.4 4	134 15.6 4	61 14.0 4
0.15	MEAN S.D. N	60 12.4 6	20 4.2 6	1.0 .05 6	9.1 .24 6	4.4 .41 6	4.6 .32 6	.4 .10 6	10 5.8 6	140 13.1 6	56 18.0 6
0.75	MEAN S.D.	79 15.5	22 6.3	1.2	9.5 .45	4.8 .29	4.7	.3	11 7.0	111 * 26.6	60 14.4

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Table 24

Summary of Clinical Chemistry Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEAN S.D. N	1 54 1 17.	329 9 128.7 6	110 46.5 6	6 2.2 6	786 9 47. 2 6	370 87.4 6	15 17.5 6	236 62.7 6
0.03 MEAN S.D. N	79 26. 4	233 6 57.5 4	103 78.3 4	$\begin{smallmatrix}4\\4\cdot4\\4\end{smallmatrix}$	220 39.4 4	390 99.8 4	18 10.9 4	269 62.5 4
0.15 MEAN S.D. N	67 1 42. 6	324 8 140.3 6	74 19.2 6	4 2.5 6	209 81.8 6	442 127.6 6	40 46.1 6	282 87.7 6
0.75 MEAN S.D. N	8 45 8 13.	388 0 150.1 6	63 22.3 6	2 * .5	416 377.0 6	379 96.5 6	19 13.6 6	263 59.4 6

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Table 24
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE		CA	I PHOS	NA	K	CL
mg/kg/day		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	10.2	5.7	161	5.6	118
	S.D.	1.11	.66	5.9	.74	6.1
	N	6	6	6	6	6
0.03	MEAN	10.2	4.2 *	161	5.2	117
	S.D.	1.21	.44	7.5	.93	6.8
	N	4	4	4	4	4
0.15	MEAN	10.0	5.2	160	5.7	120
	S.D.	.53	.63	3.4	.45	4.2
	N	6	6	6	6	6
0.75	MEAN S.D. N	10.6 .58	5.1 .53	162 4.7	5.8 .54	118 3.9

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Table 25
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da;	GLU / MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0 ME: S.: N		20 3.0 6	1.1 .12 6	8.2 .45 6	4.8 .19 6	3.4 .34 6	.7 .41 6	10 1.5 6	154 29.9 6	60 18.3 6	69 10.6 6
0.03 ME. S.: N		19 2.2 4	1.2 .19 4	8.8 .83 4	5.2 .24 4	3.6 .66 4	.4 .08 4	7 1.0 4	120 16.3 4	60 24.9 4	46 * 4.5 4
0.15 ME S.: N		22 4.5 6	1.2 .18 6	8.8 .55 6	5.0 .31 6	3.8 .61	.5 .20 6	10 2.3 6	149 22.8 6	65 9.5 6	55 * 12.5 6
0.75 ME S.: N	17.0		1.3 .20	9.0 .23	4.9 .48	4.1 .43	.2 *	14 5.5	65 * 20.3	60 26.3	19 * 6.5

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Table 25
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da	AST/SGOT y IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 ME S. N		.9 43 27.	792 3 305.3	142 53.1 6	3 2.6 6	165 28.5 6	392 112.8 6	23 10.5 6	276 74.9 6
0.03 ME S. N		.3 19.	684 8 348.2 4	123 32.2 4	2 1.5 4	133 42.6 4	470 165.2 4	41 40.0 4	339 123.2 4
0.15 ME S. N			853 2 207.5 6	148 63.8 6	4 3.1 6	193 38.4 6	429 69.9 6	166 339.9 6	312 67.7 6
0.75 ME S. N		52 .8 26.	646 6 384.1 6	112 36.1 6	2 1.2 6	352 * 297.5 6	517 124.5 6	32 17.2 6	364 59.9 6

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Table 25
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEAN S.D. N		6.6 .31 6	157 6.1 6	5.4 .48 6	116 4.1 6
0.03 MEAN S.D. N		6.3 1.09 4	159 3.9 4	5.5 .67 4	117 4.1 4
0.15 MEAN S.D. N		6.8 1.01 6	158 3.2 6	5.5 .43 6	115 4.2 6
0.75 MEAN S.D. N		6.8 1.66 6	158 7.9 6	5.8 .73 6	113 7.8 6

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Table 25

Summary of Clinical Chemistry Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0 MEA S.D N		20 4.0 6	1.1 .14 6	8.9 .80 6	4.7 .47 6	4.2 .63	.5 .27 6	9 1.3 6	163 48.5 6	80 47.1 6	59 16.8 6
0.03 MEA S.D N		20 6.0 4	1.1 .17 4	8.6 .25 4	4.4 .40 4	4.2 .29 4	.5 .34 4	8 1.7 4	110 * 22.1 4	82 28.5 4	47 9.5 4
0.15 MEAI S.D N		22 3.1 6	1.1 .08 6	8.8 .33 6	4.5 .37 6	4.2 .48 6	.5 .12 6	10 3.1 6	130 23.2 6	69 13.7 6	41 * 9.2 6
0.75 MEAI S.D N		18 5.3	1.2	8.9 .43	4.5 .41	4.4 .40	.3	15 13.8	91 * 23.1	64 13.5	23 * 4.3

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Table 25

Summary of Clinical Chemistry Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N		77 2 43.	315 3 143.3 6	112 51.2 6	2 .8 6	235 105.0 6	373 74.3 6	18 17.7 5	256 55.7 6
0.03 MEA S.D N		.2 80 52.	262 8 42.2 4	108 97.8 4	2 .8 4	255 131.7 4	378 108.8 4	18 13.5 4	275 67.7 4
0.15 MEA S.D N		66 4 34. 6	308 1 120.9	72 20.3 6	3 2.5 6	242 116.5 6	432 165.5 6	25 15.2 6	293 129.4 6
0.75 MEA S.D N		1 48 10.	336 0 146.9 6	61 24.2 6	2 2.3 6	695 1217.1 6	380 104.1 6	26 10.9 6	281 76.1 6

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Table 25
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEAN S.D. N	10.2 .87	5.6 .34 6	158 8.5 6	6.0 .81 6	119 7.2 6
0.03 MEAN S.D. N	9.8 1.04 4	4.1 * .84 4	155 6.9 4	5.6 .46 4	116 6.8 4
0.15 MEAN S.D. N	9.8 .42 6	5.0 .96 6	154 2.2 6	5.4 .52 6	116 3.6 6
0.75 MEAN S.D. N	10.5 .67 6	4.9 .71 6	158 5.0 6	6.3 .75 6	116 4.4 6

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Table 26 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	lay	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
	MEAN B.D.	60 6.1 6	18 3.9 6	1.1 .16 6	8.2 .54 6	4.8 .23 6	3.5 .40	.6 .23 6	6 .8	152 27.5 6	45 8.7 6	63 11.1 6
	MEAN S.D.	64 9.1 4	18 6.3 4	1.2 .16 4	8.8 .65 4	5.0 .34 4	3.8 .47 4	.3 * .08	5 * .5	110 * 17.0 4	33 6.6 4	42 * 3.7 4
	MEAN S.D.	70 8.3 6	17 2.6 6	1.1 .17 6	8.5 .30 6	4.9 .31 6	3.6 .17 6	.4 .10 6	6 1.3 6	147 24.0 6	36 10.4 6	48 14.3 6
	MEAN S.D.	76 12.6 4	22 4.5 4	1.2 .24 4	9.0 .77 4	4.9 .53 4	4.1 .44 4	.2 * .05	18 * 8.6 4	48 * 18.8 4	30 11.8 4	13 * 5.4 4

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Table 26 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEAI S.D N	.2 39 17.	735 9 318.7 6	150 65.6 6	6 3.7 6	210 158.7 6	393 102.8 6	29 13.4 6	280 68.5 6
0.03 MEAI S.D N	29 2 8. 4	604 8 353.5 4	126 42.6 4	4 1.9 4	138 58.8 4	442 136.5 4	24 10.6 4	314 96.4 4
0.15 MEAI S.D N	47 16.	688 9 178.3 6	148 55.8 6	6 3.8 6	174 101.5 6	381 82.3 6	30 11.8 6	270 59.0 6
0.75 MEAI S.D N	.3 47 .3 19.	389 7 155.7 4	104 25.3 4	3 1.0 4	182 64.5 4	446 65.3 4	36 22.2 4	320 25.2 4

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Table 26
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 MEAI S.D N		6.4 .82 6	154 4.8 6	5.1 .23 6	111 1.5 6
0.03 MEAI S.D N		5.8 .96 4	156 1.5 4	5.0 .32 4	109 2.2 4
0.15 MEAI S.D N		6.2 .82 6	154 4.7 6	5.0 .25 6	110 2.9 6
0.75 MEAI S.D N		6.1 1.22 4	153 6.4 4	5.4 .17 4	106 5.3 4

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Table 26

Summary of Clinical Chemistry Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
	-											
0	MEAN S.D. N	58 15.2 6	20 3.7 6	1.1 .18 6	8.9 .66 6	4.7 .42 6	4.2 .55	.4 .25 6	6 .6	160 46.5 6	56 13.3 6	56 16.0 6
0.03	MEAN S.D. N	54 7.8 4	20 3.4 4	1.0 .17	8.6 .76 4	4.4 .47 4	4.2 .38 4	.5 .24 4	5 1.5 4	122 21.6 4	49 14.7 4	42 9.1 4
0.15	MEAN S.D. N	64 9.0 6	19 3.1 6	1.0 .09 6	8.9 .47 6	4.5 .35 6	4.4 .67	.4 .08 6	8 2.0 6	129 22.3 6	49 15.8 6	36 * 12.1 6
0.75	MEAN S.D. N	73 11.0	20 4.7 6	1.2 .16	9.2 .37	4.6 .31	4.7 .63	.2	7 3.4	82 * 14.7	53 15.8	21 * 7.2

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Table 26

Summary of Clinical Chemistry Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEAI S.D N		87 0 85.	283 9 137.1 6	114 53.3 6	5 3.1 6	212 123.4 6	378 84.6 6	32 37.1 6	258 64.1 6
0.03 MEAI S.D N		6 72 26. 4	239 3 39.7 4	111 99.5 4	6 6.0 4	823 1281.8 4	358 100.7 4	19 15.0 4	260 64.4 4
0.15 MEAI S.D N		53 0 36. 6	254 1 85.3 6	71 19.7 6	7 5.2 6	182 84.7 6	439 140.9 6	33 21.6 6	294 111.7 6
0.75 MEAI S.D N		2 44 2 9.	316 9 172.4 6	64 22.7 6	3 1.5 6	284 119.3 6	375 64.9 6	31 21.2 6	273 43.1 6

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Table 26
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	10.2	5.3	156	5.3	111
	S.D.	.68	.84	6.8	.56	5.0
	N	6	6	6	6	6
0.03	MEAN	9.6	4.4	152	4.8	109
	S.D.	.84	.39	7.2	.94	3.6
	N	4	4	4	4	4
0.15	MEAN	9.8	4.8	154	5.0	110
	S.D.	.16	1.10	3.3	.37	1.8
	N	6	6	6	6	6
0.75	MEAN S.D. N	10.3 .69	5.2 .76 6	156 4.9 6	5.4 .82 6	110 3.1 6

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Table 27
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	MEAN S.D.	57 2.8	16 4.9	1.0	8.0 .21	4.6	3.4 .14	.5 .14	12 1.4	132 28.3	44	58 12.7
	N	2	2	2	2	2	2	2	2	20.3	2	2
0.15												
	MEAN	70	17	.9	9.0	5.1	3.9	.6	16	158	39	61
	S.D.	12.0			.42			.21	. 0	37.5		19.8
1	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
N	MEAN	73	14	1.0	8.7	4.6	4.2	.6	14	137	69	28
S	S.D.	4.2	2.1	.07	.00	.35	.35	.00	3.5	4.2	32.5	7.8
1	N	2	2	2	2	2	2	2	2	2	2	2

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Table 27
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DO mg	SE /kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0										
	MEAN		26	932	150	4	139	338	36	250
	S.D.		.5 3. 2	5 316.1	123.7	.7		87.7 2	7.8	58.7
	N	2	2	2	2	2	2	2	2	2
0.	15									
	MEAN	1 37	44	793	138	12	162	454	46	288
	S.D.	8.	.5 2.	1 175.4	68.6	1.4	21.9	42.4	2.1	62.2
	N	2	2	2	2	2	2	2	2	2
0.	75									
	MEAN	32	48	518	143	2	200	505	38	346
	S.D.	4.	9 28.	3 27.6	22.6	.7	32.5	53.7	21.2	23.3
	N	2	2	2	2	2	2	2	2	2

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Table 27
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	j/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	10.0	6.3	152	5.0	111
	S.D.	.57	1.13	2.8	.49	1.4
	N	2	2	2	2	2
0.15	MEAN	11.0	6.6	155	5.3	108
	S.D.	.78	.00	1.4	.28	2.8
	N	2	2	2	2	2
0.75	MEAN	10.8	6.2	159	5.4	111
	S.D.	.21	1.13	2.8	.07	1.4
	N	2	2	2	2	2

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Table 27

Summary of Clinical Chemistry Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day	GLU / MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0											
ME		16	.8.	8.6	4.6	4.0	. 4	14	119	72	54
S.I N). 11.	3 4.9	.14	.42	.21	.21	.42	1.4	46.7 2	50.2 2	29.0 2
14	2	2	2	2	-	-	2	-	-	2	2
0.15											
ME		18	1.0	8.7	4.0	4.6	. 6	14	145	56	44
S.I		7 2.1		.14	.07	.21	.00	.7	4.2	4.9	24.7
И	2	2	2	2	2	2	2	2	2	2	2
0.75											
ME	AN 75	23	1.0	9.3	4.6	4.7	. 6	19	133	78	34
S.1). 9.	9 2.8	.21	.42	.57	.14	.07	7.1	2.8	21.9	12.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 27
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/k	g/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0										
	MEAN		103	184	61	4 _	137	343	13	244
	S.D.		.7 24.		28.3	.7		48.1	18.4	17.7
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	26	48	182	70	4	657	486	32	350
	S.D.	9.	.9 7.	.8 97.6	2.1	4.2	763.7	244.0	21.9	163.3
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	23	50	220	94	4	165	345	38	256
	S.D.		0 16	.3 29.0	37.5	2.1	29.7	69.3	4.2	47.4
	N	2			2	2	2	2	2	2

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Table 27
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE		CA	I PHOS	NA	K	CL
mg/kg/day		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	9.8	4.8	148	5.4	108
	S.D.	.14	1.56	4.9	.64	6.4
	N	2	2	2	2	2
0.15	MEAN	9.8	5.5	152	5.5	110
	S.D.	.14	.28	3.5	.00	2.1
	N	2	2	2	2	2
0.75	MEAN	10.3	5.8	152	5.0	110
	S.D.	.14	.64	.0	.21	2.1
	N	2	2	2	2	2

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Table 28 Summary of Clinical Chemistry Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
	-											
0												
	MEAN S.D.	101 21.	16 2 1.	1.1 4 .14	8.7 .14	4.8	3.8 .07	.4 .07	8 .7	134 29.0	33 7.1	77 5.7
	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
	MEAN S.D.	81 2.	17 8 .	1.1	9.0	5.2	3.8 .07	.6 .28	8 4.2	160 46.0	48 5.7	84 26.9
	N.	2.	2	0 .14	.14	.07	2	2	2	2	2	20.9
0.75												
	MEAN	72	17	1.0	8.8	4.6	4.2	.4	11	136	64	52
	S.D.	16.			.35	.35			5.7	4.9		2.1
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 28
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
	-									
0	MEAN S.D. N	27 4. 2	28 28.	900 7 334.5 2	144 107.5 2	4 2.8 2	177 45.3 2	358 72.1 2	42 13.4 2	270 50.9 2
0.15	MEAN S.D. N	34 21. 2	2 40 2 .	838 0 62.9 2	142 62.2 2	4 3.5 2	156 46.0 2	462 57.3 2	37 21.2 2	297 79.2 2
0.75	MEAN S.D. N	46 4. 2		680 3 78.5	166 14.1 2	4 3.5	257 111.7	544 118.8	32 21.9	372 54.4

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Table 28
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0	MEAN S.D. N	10.2 .35 2	6.6 .64 2	154 3.5 2	5.0 .00 2	117 2.0
0.15	MEAN S.D. N	10.9 .57 2	6.6 .21 2	160 .7	5.2 .07 2	117 1.4 2
0.75	MEAN S.D. N	10.8 .64 2	7.0 1.13 2	162 3.5 2	5.2 .28 2	116 2.8 2

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Table 28

Summary of Clinical Chemistry Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
	-											
0												
	MEAN S.D.	58 14.	18 1 3.	1.0 5 .35	9.0 .64	4.6 .14	4.4 .49	.6 .35	9 1.4	131 52.3	57 5.7	70 25.5
	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
	MEAN S.D.	87 5.	20 7 1.	1.0 4 .14	9.0 .28	4.1	4.9 .14	.4	11 1.4	150 17.7	71 1.4	72 27.6
	N.	2	, ,	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	92	22	1.2	9.4	4.7	4.7	.2	15	149	95	64
	S.D.				.57	.42			5.7	2.8		13.4
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 28

Summary of Clinical Chemistry Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg,				ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
	-									
0										
	MEAN	36	116	182	58	2 _	168	329	10	242
										27.6
	N	2	2	2	2	2	2	2	2	2
0.15										
	MEAN	3.0	66	188	80	3	392	482	34	346
	S.D.	9.	2 7.	1 105.4		2.8	384.0	242.5	17.7	157.7
	N	2	2	2	2	2	2	2	2	2
0.75										
	MEAN	25	40	236	98	2	148	331	66	250
										54.4
										2
	mg/kg 0 0.15	mg/kg/day 0 MEAN S.D. N 0.15 MEAN S.D. N	mg/kg/day IU/L 0 MEAN 36 S.D. 9, N 2 0.15 MEAN 30 S.D. 9, N 2 0.75 MEAN 25 S.D. 4.	mg/kg/day IU/L IU/L 0 MEAN 36 116 S.D. 9.2 59 N 2 2 0.15 MEAN 30 66 S.D. 9.2 7. N 2 2 0.75 MEAN 25 40 S.D. 4.2 1.	mg/kg/day IU/L IU/L IU/L 0 MEAN 36 116 182 S.D. 9.2 59.4 30.4 N 2 2 2 2 0.15 MEAN 30 66 188 S.D. 9.2 7.1 105.4 N 2 2 2 2 0.75 MEAN 25 40 236 S.D. 4.2 1.4 17.7	mg/kg/day IU/L IU/L IU/L IU/L 0 MEAN 36 116 182 58 S.D. 9.2 59.4 30.4 20.5 N 2 2 2 2 0.15 MEAN 30 66 188 80 S.D. 9.2 7.1 105.4 4.2 N 2 2 2 2 0.75 MEAN 25 40 236 98 S.D. 4.2 1.4 17.7 33.2	mg/kg/day IU/L IU/L IU/L IU/L IU/L 0 MEAN 36 116 182 58 2 S.D. 9.2 59.4 30.4 20.5 .7 N 2 2 2 2 2 0.15 MEAN 30 66 188 80 3 S.D. 9.2 7.1 105.4 4.2 2.8 N 2 2 2 2 2 0.75 MEAN 25 40 236 98 2 S.D. 4.2 1.4 17.7 33.2 .7	mg/kg/day 1U/L 1U/L 1U/L 1U/L 1U/L 1U/L 1U/L 0	mg/kg/day IU/L IU/L IU/L IU/L IU/L IU/L IU/L IU/L	mg/kg/day

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Table 28
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	g/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN S.D. N	9.7 .14 2	4.6 .28 2	150 4.2 2	4.6 2 .21	114 4.9 2
0.15	MEAN	9.8	5.4	152	5.4	118
	S.D.	.49	.28	4.5	9 .71	2.1
	N	2	2	2	2	2
0.75	MEAN	10.6	5.4	160	5.5	120
	S.D.	.57	.71	7.8	8 .99	6.4
	N	2	2	2	2	2

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Table 29

Summary of Clinical Chemistry Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/	day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	MEAN	67	16	1.2	8.5	4.7	3.8	. 4	2	130 26.2	36	64
	S.D. N	18.4 2	3.5	.14	.42	.14	.28	.42	.7	26.2	15.6 2	14.8 2
0.15	MEAN	74	19	1.0	8.8	5.0	3.8	.4	9	168	48	76
	S.D.	2.8			.21	.21		.14	2.8	50.2	13.4	26.2
	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	70	18	1.2	8.8	4.8	4.0	. 3	8	139	74	40
	S.D.	9.2	3.5		.07	.42		.14	3.5	5.7	23.3	7.1
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 29

Summary of Clinical Chemistry Data Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg		AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
	-									
0	MEAN S.D. N	28 12. 2	7 35 5.	842 7 409.4 2	124 90.5 2	7 4.2 2	176 35.4 2	318 71.4 2	36 7.1 2	239 53.7 2
0.15	MEAN S.D. N	26 6. 2	39 4 2.	850 2 105.4 2	146 70.0 2	4 2.8 2	141 22.6 2	444 43.1 2	39 2.8 2	285 75.0 2
0.75	MEAN S.D. N	38 3. 2	54 5 21.	689 2 186.7 2	164 7.8 2	4 .7 2	230 89.8 2	512 84.1 2	35 24.0 2	354 32.5 2

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Table 29
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	CA ay MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
		2 6.0 21 1.1 2 2	154 3 4.	5.8 9 .21 2	116 .7
	EAN 11.:		159 1 7. 2	5.6 1 .35 2	118 6.4 2
		2 6.4 57 .9: 2 2	160 2 3.	5.6 5 .35 2	114 2.1 2

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Table 29

Summary of Clinical Chemistry Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	lay	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	1EAN	56	20	. 8	8.7	4.4	4.3	. 6	8	129	48	62
	5.D.	15.6			.85			.57	2.1	58.0		
N	1	2	2	2	2	2	2	2	2	2	2	2
0.15												
M	1EAN	74	21	.9	8.9	4.0	4.9	. 4	5	144	59	52
S	S.D.	4.9	2.8	3 .14	.28	.00	.28	.21	.0	6.4	11.	3 22.6
N	1	2	2	2	2	2	2	2	2	2	2	2
0.75												
	1EAN	92	23	1.0	9.0	4.4	4.6	.1	6	144	70	56
S	S.D.	3.5	5 4.2	2 .14	.35		.07	.00	2.1	. 7	31.8	
N		2	2	2	2	2	2	2	2	2	2	2

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Table 29

Summary of Clinical Chemistry Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0									
MEAL		104	163	58	3	301	309	9	225
S.D	. 9.	9 34.6	5 35.4	17.7	1.4	189.5	26.9	12.7	9.9
N	2	2	2	2	2	2	2	2	2
0.15									
MEAL	I 37	58	172	76	9	1214	468	74	340
S.D	. 14.	1 2.1	1 94.0	.7	7.1	1557.8	256.0	33.9	177.5
N	2	2	2	2	2	2	2	2	2
0.75									
MEAN	l 29	44	226	87	5	142	316	32	236
S.D	. 18.	4 10.6	5 25.5	29.7	1.4	31.8	113.8	2.1	83.4
N	2	2	2	2	2	2	2	2	2

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Table 29
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	ı/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	9.8	4.4	150	5.0	110
	S.D.	.78	.28	7.6	.92	4.9
	N	2	2	2	2	2
0.15	MEAN	9.5	5.2	150	4.8	111
	S.D.	.00	.07	2.8	.92	5.7
	N	2	2	2	2	2
0.75	MEAN	10.4	5.2	156	6.0	119
	S.D.	.00	.85	2.1	07	2.8
	N	2	2	2	2	2

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Table 30

Summary of Clinical Chemistry Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/d	day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	MEAN	71	18	1.2	8.6	4.8	3.8	. 4	6 _	134	52	69
	S.D.	4.2			.07	.14		.57	.7			
1	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
N	MEAN	62	28	1.4	8.7	5.1	3.6	.7	7	163	61	72
5	S.D.	23.3	3 2.8	.21	.42	.14	.28	.71	1.4	65.1	18.4	26.2
1	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	66	18	1.4	8.6	4.7	3.8	. 4	8	136	90	39
5	S.D.	14.8	3 .7	.35	.49			.28	2.1	. 7	51.6	
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 30 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	OSE g/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0										
	MEAN		38	772	124	4	966	487	94	366
	S.D.				105.4	1.4	149.2		5.7	19.8
	N	2	2	2	2	2	2	2	2	2
0	.15									
	MEAN	I 53	68	882	140	6	570	1297	710	962
	S.D.	9.	9 7.	1 159.1	68.6	.0	77.1	454.0	227.7	326.7
	N	2	2	2	2	2	2	2	2	2
0	. 75									
	MEAN	I 61	76	708	157	2	1048	625	3.0	442
	S.D.	21.	2 23.	3 191.6	1.4	1.4	368.4	144.2	7.8	85.6
	N	2	2	2	2	2	2	2	2	2

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Table 30
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0	MEAN S.D. N	10.4 .49 2	5.4 .57 2	150 3.5 2	5.0 5 .14 2	106
0.15	MEAN S.D. N	11.0 .92 2	5.8 .64 2	154 .(5.0 .07 2	106 2.8 2
0.75	MEAN S.D. N	10.6 .92 2	5.8 1.13 2	154 4.9 2	5.4 9 .35 2	108 .0 2

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Table 30

Summary of Clinical Chemistry Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/da	GL ay MG/		UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	EAN	54	15	1.2	8.4	4.4	4.1	. 5_	10	118	42	58
	.D.	14.1	1.4	.21	.07	.07	.14	.57	4.9			
N		2	2	2	2	2	2	2	2	2	2	2
0.15												
	EAN	64	28	1.3	8.8	3.9	4.8	.5	8	148	86	60
	.D.	7.8	.7		.78	.14	.64	.00	3.5			
N		2	2	2	2	2	2	2	2	2	2	2
0.75												
	EAN	85	18	1.5	8.7	4.3	4.4	.0	6	129	74	60
S	.D.	1.4	9.2		.64	.42	.21	.07	2.1		9.2	
N		2	2	2	2	2	2	2	2	2	2	2

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Table 30 Summary of Clinical Chemistry Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOS mg/	E kg/day		ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0										
	MEAN		87	156	60	4	1118	366	0	268
	S.D.				30.4	2.1	132.9			12.0
	N	2	2	2	2	2	2	2	2	2
0.1	5									
	MEAN	48	78	160	73	6	1058	554	73	406
	S.D.	17.	0 9.	9 64.3	8.5	3.5	644.2	237.6	14.1	166.9
	N	2	2	2	2	2	2	2	2	2
0.7	5									
	MEAN	44	112	235	80	2	1065	449	64	338
	S.D.				35.4	.7				
	N	2	2	2	2	2	2	2	2	2

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Table 30 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN	9.7	4.7	147	5.0	104
	S.D.	.14	.42	1.4	4 .21	4.9
	N	2	2	2	2	2
0.15	MEAN	9.8	5.2	151	5.2	108
	S.D.	.57	.49	4.2	2 .07	1.4
	N	2	2	2	2	2
0.75	MEAN	10.3	4.2	156	5.5	110
	S.D.	.00	.21	2.8	3 .42	1.4
	N	2	2	2	2	2

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Table 31
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	ı/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
	-											
0	MEAN S.D. N	72 2 2	20 1 4.:	1.3 9 .00 2	8.9 .00 2	5.2 .21 2	3.8 .21 2	.5 .28 2	6 .7 2	126 30.4 2	40 1 7.8 2	61 3 14.1 2
0.15	MEAN S.D. N	74 2.: 2	26 1 3.! 2	1.2 5 .07 2	8.6 .64 2	5.2 .35 2	3.4 .28 2	.8 .42 2	6 2.7	166 55.9 2	48 21.1 2	74 27.6 2
0.75	MEAN S.D.	70 9.:	18 2 1	1.2	8.4 .14	4.8 .35	3.6 .21	.4 .21	4 2.1	119 4.2	51 2 21.:	38 2 4.9

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Table 31
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA	N 50	42	714	138	6	2137	376	38	272
S.D N				119.5	3.5 2	19.8	17.7 2	2.7	36.8 2
0.15 MEA	N 60	66	820	143	8	1495	1294	579	958
S.D N				63.6 2	°.7	356.4 2	489.3 2	302.6	351.4 2
0.75									
MEA S.D		66 8 25.5	622 202.2	155 1.4	4 2.8	1310 980.8	516 142.1	33 2.8	358 79.2
N	2	2	2	2	2	2	2	2	2

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Table 31
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	ı/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
	-					
0	MEAN S.D. N	10.6 .49 2	4.7 .71 2	156 2.1 2	5.4 .14 2	111 2.0
0.15	MEAN	10.9	5.6	155	5.4	111
	S.D.	1.41	.14	7.1	.49	2.8
	N	2	2	2	2	2
0.75	MEAN	10.6	4.9	154	5.4	110
	S.D.	.49	.42	2.1	.64	3.5
	N	2	2	2	2	2

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Table 31 Summary of Clinical Chemistry Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	/day	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG	HDL
mg/kg		MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL	MG/DL
	-											
0	MEAN	55	20	1.0	9.0	4.7	4.2	.8	6	137	4 9	60
	S.D.	1.4	1 2.1	.14	.07	.00	.07	.49	.7	35.4	9.9	27.6
	N	2	2	2	2	2	2	2	2	2	2	2
0.15	MEAN	73	24	1.0	8.7	3.9	4.8	.8	6	137	54	54
	S.D.	9.9	2.8	.07	.57	.14	.42	.07	.0	1.4	16.3	24.7
	N	2	2	2	2	2	2	2	2	2	2	2
0.75	MEAN S.D.	88 4.2	23	1.2 3 .07	8.7 .78	4.4 .64	4.2	.4	9 5.7	142 14.8	75 28.3	60 7.8 2

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Table 31
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	g/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0	MEAN S.D. N		202 6 135. 2	162 1 7.1 2	77 45.3 2	6 1.4 2	2408 806.1 2	398 85.6 2	16 23.3 2	300 50.2 2
0.15	MEAN S.D. N		78 24. 2	0 148 55.9	79 1.4 2	12 4.9 2	871 195.2 2	467 230.5 2	47 7.1 2	345 161.2 2
0.75	MEAN S.D. N				86 43.1 2	4 1.4 2	1797 786.3	479 67.9 2	47 .0	370 58.7 2

200

Table 31
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	g/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
0	MEAN	9.9	4.9	148	5.0	106
	S.D.	.28	.99	4.9	.92	4.2
	N	2	2	2	2	2
0.15	MEAN	9.4	4.8	148	5.4	110
	S.D.	.64	.07	3.5	.71	2.1
	N	2	2	2	2	2
0.75	MEAN	10.2	4.4	155	5.4	112
	S.D.	.35	.21	2.8	.21	1.4
	N	2	2	2	2	2

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Table 32 Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE	l g/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	MEAN	74	14	1.2	8.7	5.0	3.6	. 6_	3	132	32	58
	S.D. N	8.5 2	2.8	.00	.28	.21	.07	.35	.0	14.1 2	.7 2	3.5 2
	.,	-	2	-	2	-	-	2	-	2	-	2
0.15									_			
	MEAN S.D.	91 4.2	16 1.4	1.2	9.1 .28	5.4 .07	3.6 .35	.4 .21	6 .7	178 54.4	41 2.8	80 36.1
	N.	2	2	2	.26	.07	. 33	2	2 '	2	2.0	2
		_	_	_	_	_	_	_	-	_	-	_
0.75												
	MEAN	70	14	1.2	8.9	5.0	4.0	. 6	4	118	59	35
	S.D.	7.8	.7		.57	.64	.07	.35	.7	5.7	31.1	12.7
	N	2	2	2	2	2	2	2	2	2	2	2

202

Table 32
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N		1 24 3.	620 5 320.3 2	124 91.9 2	6 5.7 2	102 34.6 2	298 30.4 2	16 7.1 2	233 18.4 2
0.15 MEA S.D N		7 46 2.	871 141.4 2	150 68.6 2	² ₂ .7	141 31.1 2	450 52.3 2	16 2.1 2	294 83.4 2
0.75 MEA S.D N		9 41 12.	418 7 55.9 2	138 13.4 2	0 .7 2	202 32.5 2	422 82.0 2	16 4.9 2	294 44.5 2

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Table 32
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE	g/day	CA	I PHOS	NA	K	CL
mg/kg		MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
0	MEAN	10.2	6.0	153	5.4	111
	S.D.	.21	.49	4.2	.42	2.8
	N	2	2	2	2	2
0.15	MEAN	11.8	6.9	164	6.0	116
	S.D.	1.20	.42	4.2	.49	3.5
	N	2	2	2	2	2
0.75	MEAN	10.6	5.3	155	5.0	111
	S.D.	.78	1.98	4.2	.57	2.8
	N	2	2	2	2	2

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Table 32

Summary of Clinical Chemistry Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0											
MEA		17	1.0	8.5	4.6	3.9	.6	6	120	56	50
S.D			.07	.28	.00	.28	.49	2.1	30.4	5.7	23.3
N	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEA	N 78	17	1.0	8.7	4.1	4.6	. 6	5	144	71	47
S.D		7 1.4	.07	.42	.00	.42	.07	1.4	. 0	17.0	15.6
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEA	N 100	19	1.0	8.7	4.5	4.2	. 2	4	138	78	64
S.D	. 2.	1 2.8	.07	.64	.57	.07	.07	1.4	1.4	50.9	12.0
N	2	2	2	2	2	2	2	2	2	2	2

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Table 32
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N		134 4 69.1 2	156 3 24.7 2	72 33.2 2	4 2.1 2	222 31.1 2	268 34.6 2	10 2.1 2	204 17.0 2
0.15 MEA S.D N		50 22.6 2	140 65.1 2	78 3.5 2	7 4.2 2	183 100.4 2	339 137.2 2	13 2.8 2	250 87.0 2
0.75 MEA S.D N		54 0 14.8 2	232 8 22.6 2	94 43.1 2	2 2.1 2	124 14.1 2	296 89.8 2	18 7.1 2	230 66.5 2

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Table 32
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
	-					
0	MEAN S.D. N	9.9 .42 2	5.2 .35 2	148 5.7 2	5.0 .14 2	108 3.5 2
0.15	MEAN S.D. N	9.8 .42 2	5.2 .21 2	152 1.4 2	5.6 .35 2	112 .7
0.75	MEAN S.D. N	10.4 .14 2	5.4 .35 2	154 .7	6.2 .85 2	116 2.8 2

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Table 33
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/k	g/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0												
	MEAN	82	16	1.2	8.8	4.7	4.1	. 4	6	134	31	70
	S.D.	4.9			.14	.14	.00	.21	.7	21.9	1.4	9.9
	N	2	2	2	2	2	2	2	2	2	2	2
0.15												
	MEAN	79	19	1.2	8.8	5.1	3.7	. 4	4	166	36	92
	S.D.	2.8	.0	.07	.28	.28	.00	.21	1.4	48.1	6.4	31.8
	N	2	2	2	2	2	2	2	2	2	2	2
0.75												
	MEAN	79	16	1.4	9.4	5.1	4.3	. 6	7	138	44	57
	S.D.	5.7	.0	.00	.14	.14	.28	.35	4.2	9.2	10.6	14.1
	N	2	2	2	2	2	2	2	2	2	2	2

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Table 33
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/da	AST/SGOT Y IU/L	ALT/SGPT A	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0									
ME	AN 24	25	505	116	10	111	262	14	202
S.			277.2	94.8	12.7	46.7	4.2	4.9	1.4
N	2	2	2	2	2	2	2	2	2
0.15									
ME	AN 30	34	754	136	3	171	402	12	264
s.	D	7 2.1	130.1	60.1	2.8	58.0	62.9	. 7	81.3
N	2	2	2	2	2	2	2	2	2
0.75									
ME	AN 36	40	404	148	0	165	440	16	297
S.			88.4	1.4	. 0	.0	111.0	7.8	52.3
N	2	2	2	2	2	2	2	2	2

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Table 33
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	J/day	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
	-					
0						
	MEAN	10.6	6.6	160	6.0	116
	S.D.	.21	.07	3.5	.57	6.4
	N	2	2	2	2	2
0.15						
	MEAN	11.2	7.0	166	6.4	120
	S.D.	.28	.92	3.5	.78	3.5
	N	2	2	2	2	2
0.75						
	MEAN	11.9	5.8	172	6.1	118
	S.D.	.14	.57	3.5	.14	3.5
	N	2	2	2	2	2

210

Table 33
Summary of Clinical Chemistry Data

Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
0											
MEA		16	1.0	8.5	4.4	4.1	. 6	6	124	53	64
S.I				.42	.00	.42	.35	.7	39.6	2.8	27.6
И	2	2	2	2	2	2	2	2	2	2	2
0.15											
MEA		18	1.0	8.4	3.8	4.6	. 6	5	138	60	62
S.I				.21	.21	.00	.07	.0	12.7	19.1	34.6
N	2	2	2	2	2	2	2	2	2	2	2
0.75											
MEA	M 96	19	1.2	8.4	4.3	4.2	.3	5	146	76	74
S.I). 4.	. 9	0 .00	.78	.42	.35	.00	1.4	1.4	50.9	7.8
N	2	2	2	2	2	2	2	2	2	2	2

211

Table 33
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
0 MEA S.D N		3 100.4 2	151 1 28.3 2	69 33.9 2	°.0	154 87.0 2	280 50.2 2	12 .7	212 28.3 2
0.15 MEA S.D N		7 4.2	146 70.0 2	79 4.2 2	2 2.7	94 20.5 2	353 142.8 2	11 4.2 2	261 93.3 2
0.75 MEA S.D N		59 0 28.3 2	213 38.2 2	89 39.6 2	2 2.1 2	130 47.4 2	311 86.3 2	15 4.2 2	240 64.3 2

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Table 33
Summary of Clinical Chemistry Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg/day	CA y MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
0 ME S.I N		5.4 .28 2	151 1.4 2	5.2 .14 2	110 2.1 2
0.15 MEA S.I N		5.2 .35 2	156 1.4 2	5.8 .49 2	114 3.5 2
0.75 ME S.I N		5.6 .35 2	162 4.2 2	6.2 .78 2	120 6.4 2

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Table 34
Summary of Clinical Urinalysis Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U	VOL ML	SP	GR	U	PH
	-						
0	MEAN S.D. N		41.5 17.76 6		.026 .0050		7.3 .75 6
0.03	MEAN S.D. N		52.5 10.15 4		.021 .0021 4		7.4 .48 4
0.15	MEAN S.D. N		97.8 71.41 6	1	.019 .0078 6		7.1 .20 6
0.75	MEAN S.D. N		83.5 46.63	1	.018 .0066		7.2 .26

214

Table 34
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U	VOL ML	SP	GR	U	PH
	-						
0	MEAN S.D. N		90.7 75.84 6		.018 .0060 6		7.3 .41 6
0.03	MEAN S.D. N		92.5 88.38 4		.019 .0082 4		7.1 .25 4
0.15	MEAN S.D. N		71.8 33.80 6		.021 .0052 6		7.8 .42 6
0.75	MEAN S.D. N		88.0 78.91 6		.020 .0068 6		7.3 .41 6

215

Table 35
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		U V M		SP	GR	U	PH
	-						
0	MEAN S.D. N		0.2 3.75 6		.018 .0071 6		7.5 .45 6
0.03	MEAN S.D. N		2.5 9.73 4		.021 .0048 4		7.5 .41 4
0.15	MEAN S.D. N		4.3 5.16 6		.019 .0092 6		7.2 .27 6
0.75	MEAN S.D. N		9.0 2.12 6		.018 .0082 6		7.3 .75 6

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Table 35
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		U VOL ML	SP GR	U PH	
	-				
0	MEAN S.D. N	118.5 218.53 6	1.014 .0103	8.0 .32 6	
0.03	MEAN S.D. N	86.8 56.91 4	1.018 .0056 4	7.8 .29 4	
0.15	MEAN S.D. N	83.7 53.05 6	1.017 .0076 6	7.5 .32 6	
0.75	MEAN S.D. N	100.2 155.27 6	1.022 .0094 6	7.8 .61 6	

217

Table 36
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U	VOL ML	SP	GR	U	PH
0	MEAN S.D. N		77.5 50.66	1	.018 .0054 6		8.0 .32 6
0.03	MEAN S.D. N		62.2 34.86 4	1	.018 .0076 4		8.0 .41 4
0.15	MEAN S.D. N		94.5 59.43 6	1	.015 .0095 6		7.8 .42 6
0.75	MEAN S.D. N		68.0 26.39	1	.017 .0051		7.9 .38 6

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Table 36
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U	VOL ML	SP GR	U PH
	-				
0	MEAN S.D. N		74.3 61.32 6	1.019 .0076 6	8.2 .26 6
0.03	MEAN S.D. N		53.5 32.58 4	1.020 .0056 4	7.6 .48 4
0.15	MEAN S.D. N		62.3 28.86 6	1.020 .0061	7.8 .26 6
0.75	MEAN S.D. N		81.0 51.27 6	1.017 .0091	7.6 * .38 6

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Table 37
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	VOL ML	SP	GR	U	PH
	-	 				
0	MEAN S.D. N	47.5 7.31 6		.024 .0046 6		7.5 .77 6
0.03	MEAN S.D. N	65.8 40.43 4		.018 .0062 4		7.8 .29 4
0.15	MEAN S.D. N	01.2 73.16 6		.014 * .0061 6		7.4 .49 6
0.75	MEAN S.D. N	54.0 19.47 6		.020 .0066 6		7.2 .88 6

220

Table 37
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		U	VOL ML	S	SP GR	U	PH
	-						
0	MEAN S.D. N		93.3 68.15 6		1.015 .0053		8.0 .00 6
0.03	MEAN S.D. N		64.8 30.02 4		1.018 .0034 4		7.4 .48 4
0.15	MEAN S.D. N		63.2 22.56 6		1.018 .0073 6		7.5 .63 6
0.75	MEAN S.D. N		120.5 125.14 6		1.017 .0096		7.8 .42 6

221

Table 38
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		U VOL	SP GR	U PH
	-			
0	MEAN S.D. N	131.3 110.42 6	1.013 .0072	7.1 .49 6
0.03	MEAN S.D. N	55.0 21.32 4	1.020 .0052 4	7.4 .48 4
0.15	MEAN S.D. N	137.8 114.54 6	1.011 .0062 6	7.1 .20 6
0.75	MEAN S.D. N	180.0 136.48 6	1.011 .0082 6	7.1 .58 6

222

Table 38
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U	VOL ML	5	SP GR	U	PH
0	MEAN S.D. N		85.2 53.91 6		1.016 .0084 6		7.5 .32 6
0.03	MEAN S.D. N		60.5 36.93 4		1.016 .0029 4		7.0 .41 4
0.15	MEAN S.D. N		40.7 11.15 6		1.022 .0040 6		7.1 .20 6
0.75	MEAN S.D. N		89.0 93.46 6		1.017 .0085		7.1 .66 6

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Table 39
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		U VOL ML	SP GR	U PH	
	-				
0	MEAN S.D. N	116.2 79.33 6	1.0 14 .0072 6	7.9 .20 6	
0.03	MEAN S.D. N	75.5 26.20 4	1.017 .0022 4	7.9 .25 4	
0.15	MEAN S.D. N	122.3 125.43 6	1.013 .0053 6	7.5 1.00 6	
0.75	MEAN S.D. N	121.0 108.83	1.013 .0059 4	7.2 .65	

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Table 39
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/k	g/day	U VOL ML	SP GR	U PH
0	MEAN	85.7	1.016	8.1
	S.D.	40.59	.0050	.20
	N	6	6	6
0.03	MEAN	76.2	1.016	7.6
	S.D.	31.48	.0054	.48
	N	4	4	4
0.15	MEAN	73.3	1.017	7.9
	S.D.	25.33	.0055	.20
	N	6	6	6
0.75	MEAN	131.8	1.014	7.8
	S.D.	156.54	.0058	.26
	N	6	6	6

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Table 40 Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U VOL ML	SP GR	U PH
	-			
0	MEAN S.D. N	179.5 24.75 2	1.010 .0000 2	7.2 .35 2
0.15	MEAN S.D. N	239.5 79.90 2	1.007 .0028 2	7.5 .00 2
0.75	MEAN S.D.	87.5 36.06	1.013 .0028	7.0 .71

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Table 40
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U VOL	SP GR	U PH
	-			
0	MEAN	143.0	1.014	7.8
	S.D. N	77.78 2	.0078	.35
0.15				
	MEAN	121.0	1.015	7.2
	S.D.	80.61	.0000	.35
	N	2	2	2
0.75				
	MEAN	89.0	1.015	7.5
	S.D.	36.77	.0000	.71
	N	2	2	2

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Table 41
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	/day	U VOL ML	SP GR	U PH
	-			
0	MEAN S.D. N	195.5 9.19 2	1.009 .0014 2	7.8 .35 2
0.15	MEAN S.D. N	196.0 132.94 2	1.010 .0064 2	7.5 .00 2
0.75	MEAN S.D.	83.0 29.70	1.017 .0042	7.8 .35

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Table 41

Summary of Clinical Urinalysis Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL ML	SP GR	U PH
0	MEAN S.D. N	117.0 100.41 2	1.018 .0113 2	8.0 .00 2
0.15	MEAN S.D. N	131.5 62.93 2	1.016 .0021 2	7.2 .35 2
0.75	MEAN S.D.	91.5 48.79	1.016	7.8 .35

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Table 42
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL ML	SP GR	U PH
0				
-	MEAN	284.0	1.004	6.8
	S.D.	50.91	.0007	.35
	N	2	2	2
0.15				
	MEAN	234.0	1.007	7.2
	S.D.	169.71	.0042	.35
	N	2	2	2
0.75				
	MEAN	67.5	1.018	7.0
	S.D.	50.20	.0106	.71
	N	2	2	2

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Table 42
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL	SP GR	U PH
	-			
0	MEAN S.D. N	141.5 33.23 2	1.006 .0014 2	7.8 .35 2
0.15	MEAN S.D. N	63.5 37.48 2	1.020 .0050 2	7.5 .00 2
0.75	MEAN S.D. N	64.5 58.69	1.010 .0007	7.2 1.06

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Table 43
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	J/day	U VOL	SP GR	U PH
	-			
0	MEAN	296.0	1.008	6.8
	S.D. N	254.56 2	.0092	.35
0.15				
	MEAN	99.5	1.016	6.5
	S.D.	94.05	.0099	.71
	N	2	2	2
0.75				
	MEAN	47.5	1.020	6.0
	S.D.	4.95	.0092	.00
	N	2	2	2

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Table 43
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DO:	SE /kg/day	U VOL ML	SP GR	U PH
0	MEAN S.D. N	220.5 188.80 2	1.006 .0050 2	8.0 .00 2
0.:	MEAN S.D. N	59.0 24.04 2	1.018 .0042 2	6.5 .71 2
0.	75 MEAN S.D.	92.0 29.70	1.014	6.8 .35

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Table 44
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL ML	SP GR	U PH
0	MEAN S.D. N	206.5 81.32 2	1.017 .0028 2	7.8 .35 2
0.15	MEAN S.D. N	74.5 10.61 2	1.018 .0000 2	7.5 .71 2
0.75	MEAN S.D. N	90.0 14.14 2	1.018 .0050	6.8 1.06

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Table 44
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	J/day	U VOL	SP GR	U PH
	-			
0	MEAN S.D. N	158.0 11.31 2	1.011	8.0 .00 2
0.15	MEAN S.D. N	68.5 13.44 2	1.021 .0014 2	7.0 .00 2
0.75	MEAN S.D. N	76.0 46.67 2	1.018 .0007 2	7.0 .71 2

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Table 45
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL	SP GR	U PH
	-			
0	MEAN S.D. N	185.0 120.21 2	1.010 .0028	8.0 .00 2
0.15	MEAN S.D. N	182.0 147.08 2	1.008 .0050 2	8.0 .00 2
0.75	MEAN S.D.	84.0 8.49	1.012	8.0

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Table 45
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	J/day	U VOL ML	SP GR	U PH
0				
	MEAN	214.0	1.009	8.0
	S.D.	164.05	.0057	.00
	N	2	2	2
0.15				
	MEAN	145.0	1.011	7.8
	S.D.	74.95	.0042	.35
	N	2	2	2
0.75				
	MEAN	118.0	1.005	8.0
	S.D.	82.02	.0042	.00
	M	2	2	2

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Table 46 Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg	g/day	U VOL	SP GR	U PH
	-			
0	MEAN S.D. N	430.0 70.71 2	1.005 .0000 2	8.0 .00 2
0.15	MEAN S.D. N	300.0 148.49 2	1.006 .0028 2	7.8 .35 2
0.75	MEAN S.D.	222.5 173.24	1.010	8.0

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Table 46
Summary of Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNCMOLGUS MONKEYS

DOSE mg/kg	/day	U VOL ML	SP GR	U PH
	-			
0	MEAN S.D. N	132.5 38.89 2	1.011 .0057 2	8.0 .00 2
0.15	MEAN S.D. N	67.5 24.75 2	1.018 .0014 2	8.0 .00 2
0.75	MEAN S.D.	99.0 80.61	1.014 .0050	8.0

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Table 47

Summary of Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Males

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/kg/day		PCOAO IU/G
	-	
0	MEAN S.D. N	5 1.5 4
0.03	MEAN S.D. N	5 1.0 4
0.15	MEAN S.D. N	6 .6 4
0.75	MEAN S.D.	7

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Table 47

Summary of Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Females

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

DOSE mg/k	g/day	PCOAO IU/G
0	MEAN S.D. N	4 4
0.03	MEAN S.D. N	4 1.3 4
0.15	MEAN S.D. N	6 1.0 4
0.75	MEAN S.D.	6 % .8

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LEFT ADRENAL

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 0.2858 0.0195	4 0.0083 0.0012	4 0.0045 0.0002	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 0.2933 0.0650	4 0.0103 0.0016	4 0.0052 0.0014
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 0.3105 0.0367	4 0.0087 0.0015	4 0.0051 0.0008	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 0.3815 0.0508	4 0.0132 0.0033	4 0.0063 0.0010
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 0.2692 0.0298	4 0.0084 0.0006	4 0.0043 0.0003	NUMBER IN GROUP: MEAN: STANDARD DEV:	2768.8 335.9	4 0.3400 0.0589	4 0.0122 0.0012	4 0.0058 0.0010

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LEFT ADRENAL

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 0.3665 0.1237	2 0.0120* 0.0003	2 0.0055 0.0012	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 0.3468 0.0265	4 0.0134 0.0029	4 0.0061 0.0004

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RIGHT ADRENAL

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 0.2093 0.0503	4 0.0059 0.0011	4 0.0033 0.0008	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 0.2178 0.0772	4 0.0076 0.0021	4 0.0039 0.0016
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 0.2240 0.0243	4 0.0063 0.0012	4 0.0036 0.0005	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 0.2768 0.0356	4 0.0095 0.0020	4 0.0046 0.0005
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 0.2135 0.0484	4 0.0067 0.0014	4 0.0033 0.0006	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 0.2425 0.0377	4 0.0088 0.0008	4 0.0042 0.0006

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=A DEATH=T;SUBSET=				RIGHT .	ADRENAL				
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 0.2725 0.0686	2 0.0090 0.0011	2 0.0041 0.0006	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 0.2535 0.0306	4 0.0098 0.0025	4 0.0044 0.0004

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

BRAIN

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 63.1425 1.1363	4 1.8330 0.3051	4 1.0000 0.0000	NUMBER IN GROUP: MEAN: STANDARD DEV:	2821.3 304.9	4 56.6408 4.1710	4 2.0307 0.3056	4 1.0000 0.0000
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 61.7943 5.5692	4 1.7415 0.3701	4 1.0000 0.0000	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 60.6083 2.6726	4 2.1053 0.4471	4 1.0000 0.0000
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 63.3520 5.3720	4 1.9873 0.1406	4 1.0000 0.0000	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 58.3910 3.2163	4 2.1321 0.2735	4 1.0000 0.0000

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES:	
SEX=ALL; GROUP=ALL; WEEKS=ALL	
DEATH=T:SUBSET=ALL	BRAIN

DEATH-1, SOLDEI	-ADL			21.	ETTY .				
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 66.2635 7.8154	2 2.2566 0.5678	2 1.0000 0.0000	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 57.0957 2.2179	4 2.1883 0.3459	4 1.0000 0.0000

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF EPIDIDYMIS

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 1.1407 0.5031	4 0.0314 0.0076	4 0.0180 0.0076		4 2821.3 304.9			
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 1.4208 0.9897		4 0.0243 0.0197		2988.8 723.4			
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 0.9760 0.0910	4 0.0306 0.0027	4 0.0155 0.0025	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF EPIDIDYMIS

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 1.3095 1.0812	2 0.0387 0.0210	2 0.0189 0.0141	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT EPIDIDYMIS

MEAN: 3540.0 1.2160 0.0340 0.0192 MEAN: STANDARD DEV: 765.9 0.4066 0.0063 0.0061 STANDARD DEV:	2821.3	 	
MEAN: 3540.0 1.2160 0.0340 0.0192 MEAN: STANDARD DEV: 765.9 0.4066 0.0063 0.0061 STANDARD DEV: M 2 F 2 NUMBER IN GROUP: 4 4 4 4 4 NUMBER IN GROUP: MEAN: 3631.3 1.3563 0.0353 0.0232 MEAN: STANDARD DEV: 524.0 0.9663 0.0191 0.0192 STANDARD DEV:	2821.3		
NUMBER IN GROUP: 4 4 4 4 NUMBER IN GROUP: MEAN: 3631.3 1.3563 0.0353 0.0232 MEAN: STANDARD DEV: 524.0 0.9663 0.0191 0.0192 STANDARD DEV:	304.9		
MEAN: 3631.3 1.3563 0.0353 0.0232 MEAN: STANDARD DEV: 524.0 0.9663 0.0191 0.0192 STANDARD DEV:		 	
M 3 P 3	4 2988.8 723.4	 	
NUMBER IN GROUP: 4 4 4 4 4 NUMBER IN GROUP: MEAN: 3190.0 1.0213 0.0322 0.0163 MEAN: STANDARD DEV: 199.8 0.0786 0.0039 0.0025 STANDARD DEV:	4	 	

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ORGAN-TO-ORGAN-TO-BODY WT BRAIN WT (%) RATIO

Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL		
DEATH=T;SUBSET=ALL	RT EPIDIDYMIS	

SEX	DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX	DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)
М	4					F	4		

2 2 2 2 2 2 3077.5 1.3805 0.0396 0.0198 1120.8 1.3371 0.0290 0.0178 NUMBER IN GROUP: MEAN: STANDARD DEV: NUMBER IN GROUP: MEAN: STANDARD DEV: 4 2653.8 403.1

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF KIDNEY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 6.2305 0.8729	4 0.1780 0.0147	4 0.0985 0.0120	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 5.5023 0.9665	4 0.1943 0.0191	4 0.0978 0.0214
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 6.6015 0.4812	4 0.1838 0.0231	4 0.1078 0.0163	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 5.8693 0.9019	4 0.1993 0.0191	4 0.0972 0.0166
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 5.8875 0.6683	4 0.1844 0.0157	4 0.0936 0.0150	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 5.5955 0.4375	4 0.2033 0.0174	4 0.0960 0.0090

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=A DEATH=T;SUBSET=		1		LF K	IDNEY				
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP:	2	2	2		NUMBER IN GROUP:	4	4	4	4
MEAN: STANDARD DEV:	3077.5 1120.8	5.5310 1.3916	0.1837 0.0217	0.0828 0.0112	MEAN: STANDARD DEV:	2653.8 403.1	5.7638 0.9586	0.2190 0.0364	0.1007 0.0138

2 2 2 2 2 3077.5 5.5310 0.1837 0.0828 1120.8 1.3916 0.0217 0.0112

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC PAGE: 13
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT KIDNEY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 6.0052 0.9353	4 0.1712 0.0127	4 0.0949 0.0130	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 5.2995 0.7814	4 0.1876 0.0168	4 0.0941 0.0173
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 6.7495 0.6929	4 0.1875 0.0228	4 0.1104 0.0206	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 5.7718 0.8467	4 0.1966 0.0260	4 0.0956 0.0163
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 5.7358 0.6730	4 0.1795 0.0140	4 0.0910 0.0131	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 5.4028 0.4663	4 0.1965 0.0210	4 0.0926 0.0067

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TABLE 48 Covance 6329-223 3M T-6295.7

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT KIDNEY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 5.4045 1.2594	2 0.1801 0.0247	2 0.0810 0.0095	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 5.7878 1.1793	4 0.2191 0.0375	4 0.1011 0.0181

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC PAGE: 15
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LIVER

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 54.9200 8.1496	4 1.5733 0.2144	4 0.8689 0.1203	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 51.0925 9.4330	4 1.8015 0.1518	4 0.9104 0.2199
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 62.0868 5.2757	4 1.7413 0.3311	4 1.0090 0.0994	NUMBER IN GROUP: MEAN: STANDARD DEV:	2988.8 723.4	4 56.8278 12.5811	4 1.9074 0.0398	4 0.9392 0.2089
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	3190.0 199.8	4 57.3325 5.5102	4 1.7955 0.0901	4 0.9059 0.0581	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 57.0393 3.1240	4 2.0747 0.1801	4 0.9783 0.0629

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=AI DEATH=T;SUBSET=i		٠		LI	LIVER						
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO		
M 4					F 4						
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 85.2815 38.3782	2 2.7247* 0.2548	2 1.2616 0.4304	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 75.2997* 13.3835	4 2.8466* 0.3447	4 1.3189* 0.2262		

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

______ TABLE INCLUDES:

		SEZ DE <i>Z</i>									Æ	EΚ	S=1	ALI	Ь											
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LF OVARY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9				NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 0.1688 0.0679	4 0.0059 0.0022	4 0.0030 0.0013
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0				NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 0.1723 0.0729	4 0.0056 0.0011	4 0.0028 0.0012
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8				NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 0.1873 0.0847	4 0.0067 0.0028	4 0.0032 0.0015

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES:		

SEX=ALL; GROUP=ALL; WEEKS=ALL DEATH=T; SUBSET=ALL LF OVARY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8				NUMBER IN GROUP: MEAN: STANDARD DEV:	2653.8 403.1	4 0.1590 0.0563	4 0.0063 0.0031	4 0.0028 0.0009

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT OVARY

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9				NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 0.1423 0.0491	4 0.0050 0.0012	4 0.0025 0.0010
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0				NUMBER IN GROUP: MEAN: STANDARD DEV:	2988.8 723.4	4 0.1788 0.0453	4 0.0061 0.0014	4 0.0029 0.0007
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8				NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 0.1367 0.0353	4 0.0049 0.0010	4 0.0024 0.0007

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TABLE 48 Covance 6329-223 3M T-6295.7

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Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCTANE SULFONIC

		AC	ID POIASSIUM	SALI (FFOS;	1-6295) IN CINOMOLIC	OS MONKEIS			
TABLE INCLUDES: SEX=ALL;GROUP=A DEATH=T;SUBSET=				RT O	VARY				
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8				NUMBER IN GROUP: MEAN: STANDARD DEV:	2653.8 403.1	4 0.1498 0.0169	4 0.0058 0.0015	4 0.0026 0.0003

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF TESTIS

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 6.9795 3.7391	4 0.1918 0.0803	4 0.1100 0.0572		4 2821.3 304.9			
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 7.8848 7.4545		4 0.1369 0.1434		2988.8 723.4			
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 5.0977 0.6925	4 0.1600 0.0215	4 0.0814 0.0173	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLINES.

'ABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF TESTIS

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 7.0340 7.9238	2 0.1946 0.1866	2 0.0998 0.1078	NUMBER IN GROUP: MEAN: STANDARD DEV:	2653.8 403.1			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT TESTIS

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 6.7453 3.3813	4 0.1868 0.0764	4 0.1064 0.0518	NUMBER IN GROUP: MEAN: STANDARD DEV:	2821.3 304.9			
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:		4 8.1230 7.2175	4 0.2089 0.1504	4 0.1403 0.1403		2988.8 723.4			
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 5.0045 0.7091	4 0.1568 0.0194	4 0.0798 0.0163	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL RT TESTIS TERMINAL ORGAN ORGAN-TO- ORGAN-TO- TERMINAL ORGAN ORGAN-TO- ORGAN-TO-

SEX DOSE GROUP	BODY WT (g)	WEIGHT (g)	BODY WT	BRAIN WT RATIO	SEX DOSE GROUP	BODY WT	WEIGHT (g)	BODY WT	BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 6.9155 7.8977	2 0.1906 0.1872	2 0.0980 0.1076	NUMBER IN GROUP: MEAN: STANDARD DEV:	2653.8 403.1			

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE	INCLUDES:
SEX	=ALL;GROUP=ALL;WEEKS=ALL
DEA	TH=T;SUBSET=ALL

PANCREAS

TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
				F 1				
4 3540.0 765.9	4 5.4570 0.8021	4 0.1576 0.0319	4 0.0863 0.0119	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 4.4270 0.4797	4 0.1571 0.0097	4 0.0787 0.0125
				F 2				
4 3631.3 524.0	4 4.8133 1.3674	4 0.1309 0.0234	4 0.0799 0.0298	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2988.8 723.4	4 5.9108* 1.0351	4 0.2030 0.0437	4 0.0982 0.0216
				F 3				
4 3190.0 199.8	4 4.3790 1.1403	4 0.1365 0.0294	4 0.0687 0.0138	NUMBER IN GROUP: MEAN: STANDARD DEV:	2768.8 335.9	4 4.6248 0.4099	4 0.1678 0.0126	4 0.0792 0.0059
	BODY WT (g) 2540.0 765.9 3631.3 524.0	BODY WT (g) (g) 4 3540.0 5.4570 765.9 0.8021	BODY WT (g) WEIGHT (%) (g) (g) (%) 4 4 4 3540.0 5.4570 0.1576 765.9 0.8021 0.0319	BODY WT WEIGHT (g) (%) BRAIN WT (G) (G) (%) (%) BRAIN WT (G) (%) RATIO 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	BODY WT WEIGHT (%) BRAIN WT SEX DOSE GROUP F 1 4 4 4 4 4 4 A MINDER IN GROUP: F 2 4 4 4 4 4 4 A MINDER IN GROUP: F 2 4 4 4 4 4 A MINDER IN GROUP: F 2 4 4 4 4 4 A MINDER IN GROUP: F 2 A 4 4 8133 0.1309 0.0799 MEAN: 524.0 1.3674 0.0234 0.0298 STANDARD DEV: F 3 4 4 4 4 4 A MINDER IN GROUP: F 3 WIMBER IN GROUP: F 3 WEAN: F 3 NUMBER IN GROUP: MEAN: F 3 NUMBER IN GROUP: MEAN: F 3 NUMBER IN GROUP: MEAN: F 3 NUMBER IN GROUP: MEAN:	BODY WT WEIGHT BODY WT RATIO GROUP (g) F 1 4 4 4 4 4 4 MNDER IN GROUP: 4 3540.0 5.4570 0.1576 0.0863 MEAN: 2821.3 765.9 0.8021 0.0319 0.0119 STANDARD DEV: 304.9 F 2 4 4 4 4 4 4 4 MNDER IN GROUP: 4 3631.3 4.8133 0.1309 0.0799 MEAN: 288.8 524.0 1.3674 0.0234 0.0298 STANDARD DEV: 723.4 F 3 F 3 F 3 4 4 4 4 4 4 4 MNDER IN GROUP: 4 3190.0 4.3790 0.1365 0.0687 NUMBER IN GROUP: 4	BODY WT WEIGHT (g) (%) BRAIN WT RATIO GROUP (g) (g) (g) F 1 4 4 4 4 4 4 MUMBER IN GROUP: 4 4 4.4270 765.9 0.8021 0.0319 0.0119 STANDARD DEV: 304.9 0.4797 F 2 4 4 4 4 4 4 4 MUMBER IN GROUP: 4 4 4.4270 3631.3 4.8133 0.1309 0.0799 MEAN: 2821.3 4.4270 3631.3 4.8133 0.1309 0.0799 MEAN: 2888.8 5.9108* 524.0 1.3674 0.0234 0.0298 STANDARD DEV: 723.4 1.0351	BODY WT (g) (%) BRAIN WT GROUP (g) (g) (%) F 1 4 4 4 4 4 4 MUMBER IN GROUP: 4 4 4.4270 0.1571 765.9 0.8021 0.0319 0.0119 STANDARD DEV: 304.9 0.4797 0.0097 F 2 4 4 4 4 4 4 MUMBER IN GROUP: 4 4 4 4.4270 0.1571 765.9 0.8021 0.0319 0.0119 STANDARD DEV: 304.9 0.4797 0.0097 F 2 4 4 4 4 4 4 MUMBER IN GROUP: 4 4 4 4 4.8133 0.1309 0.0799 MEAN: 2988.8 5.9108* 0.2030 524.0 1.3674 0.0234 0.0298 STANDARD DEV: 723.4 1.0351 0.0437

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=A DEATH=T;SUBSET=		1		PANC	REAS				
SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 4.1355 1.5450	2 0.1341 0.0014	2 0.0615 0.0161	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2653.8 403.1	4 4.3725 0.4273	4 0.1659 0.0119	4 0.0768 0.0089

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF THYROID/PARA

SEX DOSE GROUP	TERMINAL (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 0.1675 0.0479	4 0.0047 0.0004	4 0.0026 0.0007	NUMBER IN GROUP: MEAN: STANDARD DEV:	2821.3 304.9	4 0.2567 0.1415	4 0.0088 0.0037	4 0.0047 0.0029
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 0.2750 0.1374	4 0.0074 0.0028	4 0.0046 0.0027	NUMBER IN GROUP: MEAN: STANDARD DEV:	2988.8 723.4	4 0.2138 0.0751	4 0.0071 0.0013	4 0.0035 0.0012
М 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 0.2075 0.0792	4 0.0064 0.0022	4 0.0032 0.0011	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2768.8 335.9	4 0.1542 0.0382	4 0.0057 0.0018	4 0.0027 0.0007

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

LF THYROID/PARA

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN: STANDARD DEV:	2 3077.5 1120.8	2 0.2020 0.1174	2 0.0063 0.0015	2 0.0030 0.0014	NUMBER IN GROUP: MEAN: STANDARD DEV:	2653.8 403.1	4 0.1872 0.0463	4 0.0071 0.0017	4 0.0033 0.0008

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE	INCLUDES:
SEX	K=ALL; GROUP=ALL; WEEKS=ALL
DEA	ATH=T;SUBSET=ALL

RT THYROID/PARA

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 1					F 1				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3540.0 765.9	4 0.1690 0.0711	4 0.0046 0.0009	4 0.0027 0.0011	NUMBER IN GROUP: MEAN: STANDARD DEV:	4 2821.3 304.9	4 0.2455 0.1300	4 0.0084 0.0034	4 0.0044 0.0027
M 2					F 2				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3631.3 524.0	4 0.2632 0.1614	4 0.0070 0.0035	4 0.0045 0.0031	NUMBER IN GROUP: MEAN: STANDARD DEV:	2988.8 723.4	4 0.2350 0.0815	4 0.0078 0.0016	4 0.0039 0.0013
M 3					F 3				
NUMBER IN GROUP: MEAN: STANDARD DEV:	4 3190.0 199.8	4 0.2575 0.1150	4 0.0080 0.0032	4 0.0040 0.0016	NUMBER IN GROUP: MEAN: STANDARD DEV:	2768.8 335.9	4 0.1332 0.0279	4 0.0048 0.0007	4 0.0023 0.0005

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TABLE 48 Summary of Organ Weight Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;SUBSET=ALL

RT THYROID/PARA

SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO	SEX DOSE GROUP	TERMINAL BODY WT (g)	ORGAN WEIGHT (g)	ORGAN-TO- BODY WT (%)	ORGAN-TO- BRAIN WT RATIO
M 4					F 4				
NUMBER IN GROUP: MEAN:	2 3077.5	2 0.2360	2 0.0072	2	NUMBER IN GROUP: MEAN:	4 2653.8	4 0.1945	4	4 0.0034
STANDARD DEV:	1120.8	0.1556	0.0024	0.0019	STANDARD DEV:	403.1	0.0633	0.0019	0.0011

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TABLE 49 Covance 6329-223 3M T-6295.7

PAGE: 1

Incidence of Macroscopic Observations

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

			NUM	1 B E	R - C	F -	ANI	ма	L S -	A F F E C T E D
TABLE INCLUDES: SEX=ALL; GROUP=ALL; WEEKS=ALL DEATH-T: SUBSET=ALL	SEX:	:MALE					FEM	IALE		
BBATH-1,506BB1-ABB	GROUP:	-1-	-2-	- 3 -	- 4 -	-1-	-2-	- 3 -	-4-	
ORGAN AND KEYWORD(S) OR PHRASE	NUMBER:	4	4	4	2	4	4	4	4	
** TOD OF TIET **										
GENERAL COMMENT (GC)	NUMBER EXAMINED:	4	4	4	2	4	4	4	4	
GENERAL COMMENT (GC)	NOT REMARKABLE:	0	0	0	0	0	0	0	0	
BONE MARROW SMEAR TAKEN		4	4	4	2	4	4	4	4	
EYES - DAVIDSONS		4	4	4	2	4 4 1 0	4	4	4	
NO MACROSCOPIC LESIONS		2	2	3	0	1	0	1	0	
ANIMAL OBESE		0	0	0	0	0	1	0	0	
LUNG (LU)	NUMBER EXAMINED:	4	4	4	2	4	4	4	4	
	NOT REMARKABLE:	3	3	3	2	2	1	1	0	
ADHESION(S)			1	1	0	2 0 0	3	1	0	
RED FOCUS(I)/AREA(S)			0	0	0	0	0	1	2	
DARK FOCUS(I)/AREA(S)		0	0	0	0	0	2	1	2	
LIGHT FOCUS(I)/AREA(S)		0	0	0	0	0	0	0	1	
LIVER (LI)	NUMBER EXAMINED:	4	4	4	2	4	4	4	4	
	NOT REMARKABLE:	4	4	4	0	3	3	4	3	
MOTTLED		0	0	0	2	0 0 1	0	0	1	
ADHESION(S)		0	0	0	0	0	1	0	0	
LIGHT FOCUS(I)/AREA(S)		0	0	0	0	1	0	0	0	
SPLEEN (SP)	NUMBER EXAMINED:	4	4	4	2	4	4	4	4	
	NOT REMARKABLE:	3	3	4	2	4	4	3	4	
LARGE ** CONTINUED ON NEXT PAGE **		1	1	0	0	0	0	0	0	

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Incidence of Macroscopic Observations

Terminal Sacrifice

PAGE: 2

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

--- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=T;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-ORGAN AND KEYWORD(S) OR PHRASE NUMBER: 4 ** FROM PREVIOUS PAGE **
SPLEEN (SP) LIGHT FOCUS(I)/AREA(S) LN, MESENTERIC (MS) NUMBER EXAMINED: NOT REMARKABLE: DIFFUSELY RED 0 DIFFUSELY DARK 0 RED FOCUS(I)/AREA(S) NOT REMARKABLE: RED FOCUS(I)/AREA(S)
DARK FOCUS(I)/AREA(S)

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Incidence of Macroscopic Observations

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES:			NUM	в Е	R - C	F -	ANI	A M	ьв-	A F F E C T E	D
	EX:MALE				FEMALE						
	OUP:	-1-	-2-	- 3 -	-4-	-1-	-2-	- 3 -	-4-		
ORGAN AND KEYWORD(S) OR PHRASE NUMBER	BER:	4	-=-	4	2	4	4	- 4	-=-		
COLON (CO)	JED.	4	4								
COLON (CO)	BLE:	4	4	4	2	4	4	4	3		
DARK FOCUS(I)/AREA(S)		0	0	0	0	0	0	0	1		
SKIN (SK)	NED:	4	4	4	2	4	4	4	4 2		
		-							_		
ABRASION(S)/ULCERATION(S) ALOPECIA-DIFFUSE		0	0	0	0	0	0	0	1		
ALOPECIA-FOCAL		ō	0	ō	ō	ō	ō	0	1		
TESTIS (TE)	NED:	4	4	4	2	0	0	0	0		
NOT REMARKAE	306:	4	3	4	2	U	U	U	0		
LARGE		0	1	0	0	0	0	0	0		
ADIPOSE TISSUE (AT)	VED:	4	4	4	2	4	4	4	4		
NOT REMARKAE	BLE:	4	4	3	2	4	4	4	3		
RAISED FOCUS(I)/AREA(S) ** END OF LIST **		0	0	1	0	0	0	0	1		

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TABLE 50 Covance 6329-223 3M T-6295.7

Incidence of Macroscopic Observations

Recovery Sacrifice

PAGE: 1
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

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Incidence of Microscopic Observations

PAGE: 1
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

Terminal Sacrifice

2015 19419000			NUM	ВЕ	R - C	OF-ANIMALS					
ABLE INCLUDES: SEX=ALL; GROUP=ALL; WEEKS=ALL DEATH_REIND_ALL; CHROCE_ALL	SEX:	MALE					FEMALE				
DEATH=T;FIND=ALL;SUBSET=ALL	GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-		
RGAN AND FINDING DESCRIPTION	NUMBER:	4	4	4	2	4	4	4	4		
TOP OF LIST **			-=-								
E, FEMUR (FE)	NOT REMARKABLE:	0	0	0	0	3	0	0	4 3		
GROWTH PLATE OPEN		4	0	0	2	1	0	0	1		
ROW, FEMUR (FM)	NUMBER EXAMINED:	1	0	0	0	2	0	0	1		
	NOT REMARKABLE:	1	0	0	0	2	0	0	1		
ROW, STERNUM (SE)	NUMBER EXAMINED:	4	0	0	2	4	0	0	4		
	NOT REMARKABLE:	4	0						4		
HYPOCELLULAR, MARROW		0	0	0	0	1	0	0	0		
, STERNUM (SB)	NUMBER EXAMINED:	4	0	0	2	4	0	0	4		
	NOT KENAKKABUB:	-2	0	·	-	-2					
E (EY)	NUMBER EXAMINED:	4	0	0	2	4	0	0	4		
	NOT REMARKABLE:	4	U	0	2	4	O	0	4		
AIN (BR)		4	0	0	2	4	0	0	4		
	NOT REMARKABLE:	2							1		
INFILTRATE, LYMPHOHISTICCYTIC, PERIVASCULARINFILTRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR		0 2	0	0	1 2	0	0	0	0 2		
INFLAMMATION, LYMPHOHISTICCYTIC		õ	ō	Ö	õ	ō	ō	Ö	1		

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Incidence of Microscopic Observations

Terminal Sacrifice

PAGE: 2
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-NUMBER: 4 ORGAN AND FINDING DESCRIPTION --INFILTRATE, LYMPHOHISTICCYTIC
--GLOMERULOSCLEROSIS
--MINERALIZATION, CORTEX
--MINERALIZATION, MEDULLA 0 0 0 0 0 2 2 0 0 2 ō ō NOT REMARKABLE: --HYPERPLASIA, LYMPHOCYTIC, PERIBRONCHIOLAR/PERIVASCULAR
--FIBROSIS, PLEURAL/SUBPLEURAL
--FIBROSIS, INTERSTITIAL
--INFLITRATE, MACROPHAGE, ALVEOLAR
--HEMORRHAGE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 HEART (HT) NUMBER EXAMINED: 0 0 NOT REMARKABLE: 4 0 --INFILTRATE, LYMPHOHISTIOCYTIC -- TWISTRAIL, DIMPROFISTION TO -- GRANULOMA
-- HYPERTROPHY, HEPATOCELLULAR, CENTRILOBULAR
-- HYPERTROPHY, HEPATOCELLULAR
** CONTINUED ON NEXT PAGE **

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Incidence of Microscopic Observations

PAGE: 3
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

Terminal Sacrifice

BLE INCLUDES:			N U M	ВЕ	R - C	F -	ANI	M A	LS-
SEX=ALL; GROUP=ALL; WEEKS=ALL	SEX:		FEMALE						
DEATH=T; FIND=ALL; SUBSET=ALL	GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-
AN AND FINDING DESCRIPTION	NUMBER:	4	4	4	2	4	4	4	4
ROM PREVIOUS PAGE **		-=-	-=-	-=-	-=-	-=-	-=-	-=-	-=-
(LI)	NUMBER EXAMINED:	4	4	4	2	4	4 0	4	4
	NOT REMARKABLE:	0	1	3	0	0	0	1	0
-VACUOLATION, HEPATOCELLULAR, CENTRILOBULAR		0	0	0	1	0	0	0	1
-VACUOLATION, HEPATOCELLULAR		0	1	0	0	1	0	0	
-STASIS, BILE -DEGENERATION/NECROSIS, HEPATOCELLULAR		0	1	0	0	0	0	0	0
-DEGENERATION/NECROSIS, HEFATOCEBBOOLAR		•	0		v	0		_	0
LADDER (GB)	NUMBER EXAMINED: NOT REMARKABLE:	4	0	0	2 1	4	0	0	4
	NOT REMARKABLE:	3	0	0	1	3	0	0	2
-INFILTRATE, LYMPHOHISTIOCYTIC		1	0	0	1	1	0	0	2
(SP)1	NUMBER EXAMINED:	4	0	0	2	4	0	0	4
	NUMBER EXAMINED: NOT REMARKABLE:	4	0	0	2	4	0	0	4
(TH)	NUMBER EXAMINED:	4	4	4	2	4	4	4	4
	NOT REMARKABLE:	3	4 1	1	2 0	4	4 0	0	1
-CYST		0	1	0	1	0	1	1	2
ATROPHY		1	1 2	0	1 2	0	1 4	1 4	3
ENTERIC (MS)	NIMBER EXAMINED.	4	0	0	2	4	0	0	4
	NOT REMARKABLE:		0	0	2 1	3	0	ŏ	4
EMORRHAGE		1	0	0	1	0	0	0	0
NFILTRATE, MACROPHAGE, PIGMENTED		î	ŏ	ŏ	ō	í	ŏ	ŏ	ŏ

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TABLE 51 Covance 6329-223
3M T-6295.7

Incidence of Microscopic Observations

Terminal Sacrifice

--HYPERTROPHY, CORTICAL CELL --INFILTRATE, LYMPHOHISTICCYTIC --PIGMENT

PAGE: 4 PAGE: 4
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-ORGAN AND FINDING DESCRIPTION NUMBER: 4 TRACHEA (TR) NUMBER EXAMINED: --INFILTRATE, LYMPHOHISTIOCYTIC --INFLAMMATION, ACUTE 4 0 --INFILTRATE, LYMPHOHISTIOCYTIC 0 0 1 THYROID (TY) NUMBER EXAMINED: --INFILTRATE, LYMPHOHISTIOCYTIC
--CYST, ULTIMOBRANCHIAL 0 NOT REMARKABLE:

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Incidence of Microscopic Observations

Terminal Sacrifice

PAGE: 5 PAGE: 5
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-NUMBER: 4 ORGAN AND FINDING DESCRIPTION NOT REMARKABLE: NOT REMARKABLE: --PROLIFERATION, INTIMAL PITUITARY (PI) NUMBER EXAMINED: NUMBER EXAMINED: 4 NOT REMARKABLE: 4 --INFILTRATE, LYMPHOHISTIOCYTIC 0 0 1 0 0 2 MUSCLE, SKELETAL (SM) NUMBER EXAMINED: NOT REMARKABLE: --INFILTRATE, LYMPHOHISTICCYTIC
--DEGENERATION
--INFLAMMATION, GRANULOMATOUS
--REGENERATION, MYOPIBER
--PARASITES, CYST

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Incidence of Microscopic Observations

Terminal Sacrifice

--INFILTRATE, MACROPHAGE, PIGMENTED

PAGE: 6
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-ORGAN AND FINDING DESCRIPTION NUMBER: 4 NOT REMARKABLE: 0 0 0 0 --PIGMENT, NEURONAL --INFILTRATE, MACROPHAGE, PIGMENTED 1 0 0 0 0 0 NOT REMARKABLE: --INFILTRATE, LYMPHOHISTIOCYTIC 4 1 0

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0

Incidence of Microscopic Observations

Terminal Sacrifice

PAGE: 7 PAGE: 7
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES:
SEX=ALL;GROUP=ALL;WEEKS=ALL
DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-ORGAN AND FINDING DESCRIPTION NUMBER: 4 ILEUM (IL) NUMBER EXAMINED: NOT REMARKABLE: 0 0 -- INFILTRATE, MACROPHAGE, PIGMENTED 1 2 --INFILTRATE, MACROPHAGE, PIGMENTED --PARASITISM 0 1 COLON (CO) NUMBER EXAMINED: --INFILTRATE, EOSINOPHILIC --PARASITISM, INTRAMUSCULAR RECTUM (RE) NUMBER EXAMINED: NOT REMARKABLE:

282

--HYPERPLASIA, EPIDERMAL (ACANTHOSIS)
--INPLAMMATION, CHRONIC-ACTIVE
--ULCERATION
--HAIR FOLLICLES, DECREASED

0

PAGE: 8

Incidence of Microscopic Observations

0 n 0 0

Terminal Sacrifice

--AMYLOID

--MINERALIZATION --AMYLOID --ONE EXAMINED

PAGE: 8

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS --- N U M B E R - O F - A N I M A L S - A F F E C T E D ---TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;FIND=ALL;SUBSET=ALL SEX: -----FEMALE-----GROUP: -1- -2- -3- -4- -1- -2- -3- -4-ORGAN AND FINDING DESCRIPTION NUMBER: 4 NOT REMARKABLE: --INFLAMMATION, ACUTE
--INFILTRATE, LYMPHOHISTIOCYTIC 0 NOT REMARKABLE: --INFILTRATE, LYMPHOHISTIOCYTIC

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Incidence of Microscopic Observations

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

TABLE INCLUDES: SEX=ALL;GROUP=ALL;WEEKS=ALL DEATH=T;FIND=ALL;SUBSET=ALL	SEX:				R - C		AFFECTED			
	GROUP:	-1-	-2-	-3-	-4-	-1-	-2-	-3-	-4-	
ORGAN AND FINDING DESCRIPTION	NUMBER:	4	4	4	2	4	4	4	4	
VAGINA (VA)	NUMBER EXAMINED: NOT REMARKABLE:	0	0	0	0	4	0	0	4 4	
CERVIX (CV)	NUMBER EXAMINED: NOT REMARKABLE:	0	0	0	0	4	0	0	4	
PROSTATE (PR)	NUMBER EXAMINED: NOT REMARKABLE:		0	0	2	0	0	0	0	
INPLAMMATION, LYMPHOHISTIOCYTIC		2	0	0	2	0	0	0	0	
SEMINAL VESICLES (SV)	NUMBER EXAMINED: NOT REMARKABLE:		0	0	2 2	0	0	0	0	
EPIDIDYMIDES (EP)	NUMBER EXAMINED: NOT REMARKABLE:			0	2	0	0	0	0	
HYPOSPERMIA		1	0	0	1	0	0	0	0	
TESTIS (TE)	NUMBER EXAMINED: NOT REMARKABLE:			0	2 1	0	0	0	0	
IMMATURE		1	0	0	1	0	0	0	0	

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TABLE 51 Covance 6329-223
3M T-6295.7

Incidence of Microscopic Observations

Terminal Sacrifice

** END OF LIST **

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TABLE 52 Covance 6329-223
3M T-6295.7

Incidence of Microscopic Observations

Recovery Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLOGIS MONKEYS

--- N U M B E R - O F - A N I M A L S - A F F E C T E D --SEX=ALL; GROUP=4; WEEKS=ALL
DEATH=U; FIND=ALL; SUBSET=ALL
GROUP: -4- -4
ORGAN AND FINDING DESCRIPTION
NUMBER: 2 2
** TOP OF LIST **
LIVER, BIOPSY³ (LIO)
NUMBER EXAMINED: 2 2
--PIGMENT, HEPATOCELLULAR
NUMBER EXAMINED: 2 2
NOT REMARKABLE: 1 2
--INPILITRATE, LYMPHOHISTICCYTIC
--PIGMENT, HEPATOCELLULAR
1 0
--INPILITRATE, LYMPHOHISTICCYTIC
--PIGMENT, HEPATOCELLULAR
1 0
--HYPERFLASIA, BILE DUCT
--INPILMMATION, EOSINOPHLIC, PERI-BILE DUCT
1 0
--PIBROSIS, CAPSULAR
0 1

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^{**} END OF LIST **

a The liver biopsy was taken during Week 57 of recovery.

APPENDIX 1

Protocol Deviations

Protocol

Protocol Amendment No. 1

Protocol Amendment No. 2

Protocol Amendment No. 3

Protocol Amendment No. 4

Protocol Deviations

Protocol. Reserve (Archive) Samples. "These samples will be transferred to the Sponsor after completion of the in-life phase."

Actual Procedure. These samples were shipped to the Sponsor after the dosing phase was competed, which was prior to the end of the in-life phase.

Protocol. Dosing Procedures. Method of Administration. "Orally by gelatin capsules, daily (7 days/week) for at least 26 weeks."

Actual Procedure. On Day 3, Animal Nos. I05520 (Group 1 male) and I05529 (Group 1 female) did not receive a dose administration due to bleeding and irritation in the throat. Dosing was discontinued for Animal No. I05530 (Group 1 female) from Days 10 through 14 due to a sore inside its mouth.

Protocol. Observation of Animals. Clinical Observations. "Once weekly, each animal will be observed; abnormal findings or an indication that the animal was normal will be recorded."

Actual Procedure. During the course of the study, several animals did not have a weekly observation of normal of abnormal recorded on various scheduled days.

Protocol. Observation of Animals. Ophthalmic Examinations. Before initiation of treatment and before each scheduled sacrifice; the anterior portion of the eye, optic media, and ocular fundus will be examined using an indirect ophthalmoscope by a board-certified ophthalmologist.

Actual Procedure. An ophthalmic examination was completed during Week 52 instead of prior to the recovery sacrifice during Week 79.

Protocol. Clinical Pathology. Frequency. Scheduled Collections. "Once before initiation of treatment; after at least 30, 60, 90, 150, and 180 days of treatment (before the daily dose); and after at least 30, 60, 90, 135, 180, 274, and 365 days of recovery"

Actual Procedure. On Day 184, urine samples were collected for several animals; however, these samples were not required by the protocol and were discarded.

Samples were collected on Days 273 and 363 of recovery.

Protocol. Clinical Pathology. Tests. Hematology. Eleven hematological parameters were to be tested at all intervals.

Actual Procedure. In addition to the required hematology tests at the pretreatment interval, mean platelet volume, red blood cell distribution width, platelet distribution width, and plateletcrit were also inadvertently tested for.

Protocol. Blood Hormone Determination. Frequency. "Three times before initiation of treatment; after at least 30, 60, 90, and 180 days of treatment; and after at least 30, 60, 90, 135, 180, 274, and 365 days of recovery."

Actual Procedure. Samples were collected on Days 273 and 363 of recovery.

Protocol. Serum PFOS Level Determination. Method of Collection. "Animals will be fasted overnight; blood (approximately 2 mL) will be collected from a femoral vein without an anticoagulant."

Actual Procedure. Animals were not fasted overnight for the scheduled collection on Day 197; however, animals were fasted the following night and collection was done on Day 198.

Protocol. Urine and Feces PFOS Level Determination. Method of Collection. "Animals will not be fasted (except for the first day of recovery); urine (at least 2 mL) and feces (at least 5 g) will be collected overnight."

Actual Procedure. The amount of urine collected was not documented at the time of each collection and therefore cannot be verified.

Protocol. Additional Fecal Samples. "The samples will be collected in the early afternoon after pans are cleaned in the morning to ensure that they are no more than 6 hours old."

Actual Procedure. On Day 160, some fecal samples were collected in the late morning rather than the early afternoon.

Protocol. Interim Liver Biopsy Samples. "Kris J. Hansen or her alternate will be notified regarding the shipment of the samples."

Actual Procedure. The phone call made to notify Kris J. Hansen prior to shipment of these samples was not documented and therefore cannot be verified.

Protocol. Terminal Liver Biopsy Samples. "A sample of liver (approximately 1 g) will be collected by biopsy from all animals in Groups 3 during recovery (Week 79, within 1 day of the serum PFOS blood collection)."

Actual Procedure. These samples were collected during Week 80, and were not collected within one day of the serum PFOS blood collection.

Protocol. Postmortem Procedures. Cell Proliferation Evaluation. "After fixation, samples for proliferation cell nuclear antigen (PCNA) evaluation will be embedded in paraffin and shipped to:"

Actual Procedure. PCNA analysis was not done for Animal No. I05509 (Group 4 male).

Protocol. Termination. Postmortem Procedures. Additional Lung Tissue Samples. "At the terminal necropsy, a sample of lung (approximately 5 g) will be collected from an animal in the high-dose group. This sample will be weighed, flash-frozen in liquid nitrogen, and stored in a freezer, set to maintain -60 to -80°C, until shipped. This frozen sample, and a sample of lung (approximately 1 g, stored in formalin) from Animal No. I05509 (Group 4 male, died January 27, 1999) will be sent separately under appropriate conditions (ambient or packed on dry ice) to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone: 651.778.6018 Facsimile: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples."

Actual Procedure. This procedure was inadvertently not done at the terminal sacrifice; thus no samples were available for shipment to Kris J. Hansen, PhD.

Protocol. Termination. Postmortem Procedures. Tissue Preservation. "The following tissues (when present) from each animal will be preserved in 10% neutral-buffered formalin, unless otherwise specified, for possible future microscopic examination."

Actual Procedure. Femoral bone marrow from Animal Nos. I05517, I05519, I05527 (Group 1 males), I05507, I05509, I05512 (Group 4 males), I05531, I05535 (Group 1 females), I05536, I05540, and I05551 (Group 4 females); mammary gland from Animal Nos. I05508, I05519 (Group 1 males), and I05512 (Group 4 male); and parathyroid from Animal No. I05544 (Group 1 female) were insufficient. These tissues, therefore, were not examined microscopically. Additionally, one ovary of a possible two was examined from Animal No. I05536 (Group 4 female). Missing tissues are listed with appropriate comments in the pathology data sheets for individual animals. Summary tables do not include them as having been examined.

These deviations are not expected to have affected the results of the study.



Sponsor:

3M St. Paul, Minnesota

PROTOCOL

Study Title:

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Date:

August 20, 1998

Performing Laboratory:

Covance Laboratories Inc. 3301 Kinsman Boulevard Madison, Wisconsin 53704-2595

Laboratory Study Identification:

Proposal No. 90545B

Covance 6329-223

Sponsor Project Identification:

3M Study No. T-6295.7

Study

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Purpose

To assess the effect of the test material on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by capsule to cynomolgus monkeys for at least 26 weeks

Sponsor

3M **Toxicology Services** Building 220-2E-02, 3M Center St. Paul, Minnesota 55144-1000

Study Monitor

Andrew M. Seacat, PhD 3M

Telephone No.: 651.575.3161 Facsimile No.: 651.733.1773

Alternate Study Monitor

Marvin T. Case, DVM, PhD 3M Toxicology Services Telephone No.: 651.733.5180

Facsimile No.: 651.733.1773

Study Location

Covance Laboratories Inc. 3301 Kinsman Boulevard Madison, Wisconsin 53704-2595

Mailing Address: PO Box 7545

Madison, Wisconsin 53707-7545

Study Director

Peter J. Thomford, PhD Covance Laboratories Inc. Telephone No.: 608.241.7207 Facsimile No.: 608.242.2736

Study Toxicologist

Dale Aldridge, BS Covance Laboratories Inc.

Proposed Study Timetable

Experimental Start Date: August 26, 1998
In-life Start Date: August 26, 1998
In-life Termination Date: To be determined
Audited Draft Report Date: To be determined
Experimental Termination Date: To be determined

Regulatory Compliance

This study will be conducted in compliance with the Environmental Protection Agency Good Laboratory Practice Regulations as set forth in Title 40 of the US Code of Federal Regulations, Part 792, issued November 29, 1983 (effective December 29, 1983), and with any applicable amendments.

Animal Care and Use Statement

All procedures in this protocol are in compliance with the Animal Welfare Act Regulations, 9 CFR 1-4. In the opinion of the Sponsor and study director, the study does not unnecessarily duplicate any previous work.

Quality Assurance

The protocol, study conduct, and final report will be audited by the Covance Quality Assurance Unit (QAU). The proliferation cell nuclear antigen evaluation data and report will be audited by the QAU of Pathology Associates International. The dose analysis and serum and liver PFOS analysis and report will be audited by the QAU of 3M Environmental Laboratories. The blood hormone determinations and report will be audited by the QAU of Ani Lytics Inc.

Test Material

Identification

Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295)

Lot Number

The lot number will be maintained in the raw data.

Purity

Responsibility of the Sponsor

Stability

Responsibility of the Sponsor

Storage Conditions

At room temperature

Characteristics

Information on synthesis methods, composition, or other characteristics that define the test material is on file with the Sponsor.

Vehicle

Identification

Lactose

Lot Number

The lot number will be maintained in the raw data.

Purity

On file with the manufacturer

Stability

On file with the manufacturer

Storage Conditions

At room temperature

Gelatin Capsules

Capsules (Size No. 2) obtained from Torpac, Inc. (Fairfield, New Jersey); lot number will be supplied by the manufacturer. Gelatin capsules will be stored at room temperature. A copy of the Certificate of Analysis provided by the manufacturer will be maintained in the data.

Reserve (Archive) Samples

A reserve sample of each lot of test material, vehicle, and each test material/lactose dilution (1 g each) will be taken and stored at room temperature. These samples will be transferred to the Sponsor after completion of the in-life phase.

Disposition of Test Material

Any remaining test material will be retained at Covance for use in possible future studies.

Animals

Species

Cynomolgus monkey

Source

Covance Research Products Inc.

Age at Initiation of Treatment

Young adult/adult

Weight at Initiation of Treatment

Approximately 2 to 5 kg

Number and Sex

22 males and 22 females

Identification

Collar tag

Husbandry

Housing

Individual; animals will be housed in suspended, stainless steel cages.

Diet

Certified primate diet (#8726C, Harlan Teklad) once or twice daily. The diet is routinely analyzed by the manufacturer for nutritional components and environmental contaminants. Results of specified nutrient and contaminant analyses are on file at Covance-Madison. Fruit, vegetables, or other supplements may be provided but will not require analysis.

Water

Ad libitum. Samples of the water are routinely analyzed for specified microorganisms and environmental contaminants. The results are on file at Covance-Madison.

Contaminants

There are no known contaminants in the diet or water at levels that might interfere with this study.

Environment

Environmental controls for the animal room will be set to maintain 18 to 29°C, a relative humidity of 30 to 70%, and a 12-hour light/12-hour dark cycle. The dark cycle may be interrupted to accommodate in-life procedures.

Acclimation

Minimum of 4 weeks

Randomization

Animals will be weighed, stratified by body weight, and allocated to the number of blocks equal to the number of animals to be selected for each group. Animals in each block will then be assigned to groups using computer-generated random numbers.

Justification

PFOS is a known hepatic peroxisome proliferator (PP) in the rat. When exposed to PP, nonhuman primates (such as the cynomolgus monkey) respond similarly to humans (i.e., low to no hepatic response) and therefore are an appropriate human surrogate species.

Group Designations and Dosage Levels

	Dose Level	Total Material Dose	Number of Animals	
Group	(mg/kg/day) ^a	Level (mg/kg/day) ^b	Males	Females
1	Oª	30ª	6^{d}	6 ^d
2	0.03	15 ^b	4	4
3	0.15	6°	6^{d}	6 ^d
4	0.75	$30^{\rm c}$	6^{d}	6^{d}

- a Dose levels will be provided. The control group (Group 1) will receive an equivalent amount of lactose in gelatin capsules as the total material administered to Group 4.
- b The low-dose (Group 2) will receive the test material diluted with lactose (1:499, w:w).
- c The mid-dose (Group 3) and high-dose (Group 4) groups will receive the test material diluted with lactose (1:39, w:w).
- d Two animals in Groups 1, 3, and 4 designated as recovery animals will be treated for at least 26 weeks, then treatment will be discontinued, and the animals will be observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 13 weeks posttreatment. Based on plasma test material levels and clinical pathology findings, the recovery may be reduced or extended, at the discretion of the study director and after consultation with the Sponsor.

Dosing Procedures

Method of Administration

Orally by gelatin capsules, daily (7 days/week) for at least 26 weeks

Reason for Dosing Route

To compare with data from previous toxicology studies using the oral route, which is the most likely route of exposure

Dose Preparation

Capsules will be prepared at least weekly. The size and number of capsules will depend on the physical characteristics of the test material, the dose level, and the weight of the monkey. Individual daily doses will be based on the most recent individual body weights, with the exception of body weight collection days when the previous body weight will be used. Dose levels will be based on the vehicle as supplied for Group 1.

For the Groups 2 through 4 dose preparations, the test material will be dissolved in acetone and diluted with lactose (1:499, 1:39, and 1:39, w:w, respectively) once before initiation of treatment. Dilution with lactose is necessary to facilitate capsule preparation. All dose preparations will be stored at room temperature until dosed.

Dose Analyses

Dose analyses will be done by the Sponsor.

Homogeneity

Samples (approximately 1 g each) will be collected from the top, middle, and bottom of the test material/lactose preparations for the low- and high-dose groups and analyzed for test material content. All samples will be stored at room temperature until analyzed.

Stability

Homogeneity samples collected from the middle of the preparations will be used for the prestudy stability analysis. One set of samples (approximately 1 g each) will be taken from the low- and high-dose test material/lactose preparations at the end of the in-life phase and analyzed for test material content.

Sample Shipping

Samples will be shipped under ambient conditions to:

Kris J. Hansen, PhD 3M E. T. & S Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone: 651.778.6018

Telephone: 651.778.6018 Facsimile: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Analysis of for test material content will be done on the samples. Results will be provided for inclusion in the final report.

Observation of Animals

Clinical Observations

Each animal will be observed twice daily (a.m. and p.m.) for mortality and moribundity; findings will be recorded as they are observed.

Each animal will be observed daily and food consumption will be assessed qualitatively; abnormal findings will be recorded. Once weekly, each animal will be observed; abnormal findings, or an indication that the animal is normal will be recorded. During treatment, each animal will be observed for signs of poor health or abnormal behavior approximately 30 to 90 minutes after the last animal on test has been dosed; abnormal findings will be recorded.

Additional findings will be recorded as they are observed.

Body Weights

Weekly before initiation of treatment, on the first day of treatment, and weekly thereafter. An additional body weight will be recorded on Day -1 for the Day 1 dose calculations.

Ophthalmic Examinations

Before initiation of treatment and before each scheduled sacrifice; the anterior portion of the eye, optic media, and ocular fundus will be examined using an indirect ophthalmoscope by a board-certified ophthalmologist.

Clinical Pathology

Frequency

Unscheduled Collections

When possible, blood will be collected for clinical pathology tests from animals sacrificed at unscheduled intervals

Scheduled Collections

Once before initiation of treatment; and (before the daily dose) after at least 30, 60, 90, and 180 days of treatment; and after at least 30, 60, and 90 days of recovery

Method of Collection

Animals will be fasted overnight; blood will be collected from a femoral vein. Anticoagulant will be potassium EDTA for hematology tests. No anticoagulant is required for clinical chemistry tests. Urine will be collected overnight on wet ice:

Tests

Hematology

red blood cell (erythrocyte) count platelet count

hemoglobin white blood cell (leukocyte) count hematocrit differential blood cell count mean corpuscular volume blood cell morphology mean corpuscular hemoglobin reticulocyte count

mean corpuscular hemoglobin

concentration

Clinical Chemistry

glucose aspartate aminotransferase gamma

urea nitrogen glutamyltransferase creatinine sorbitol dehydrogenase

total protein creatine kinase albumin calcium

globulin inorganic phosphorus

total bilirubin sodium direct bilirubin (if total bilirubin is greater than 2.0 mg/dL) chloride cholesterol bile acids triglycerides amylase alanine aminotransferase lipase

alkaline phosphatase pancreatic-specific amylase

Urinalysis

appearance glucose volume (approximately 16 hours) ketones specific gravity bilirubin pH blood

protein microscopic examination of sediment

urobilinogen

Blood Hormone Determination

Frequency

Three times before initiation of treatment; after at least 30, 60, 90, and 180 days of treatment; and after at least 30, 60, and 90 days of recovery

Number of Animals

All

Method of Collection

Animals will be fasted overnight; blood will be collected from a femoral vein. Approximately 5 mL of blood will be collected without anticoagulant and allowed to clot for serum samples.

Sample Handling

Samples for serum will be centrifuged within 1 hour after collection, and serum will be harvested. Serum will be divided into two approximately equal aliquots and stored in a freezer set to maintain -60 to -80°C until packed on dry ice and shipped to:

Dr. Saroj Das Ani Lytics Inc. 200 Girard Street, Suite 200 Gaithersburg, Maryland 20877 Telephone No.: 301.921.0168 Facsimile No.: 301.977.0433

Ani Lytics Inc. will be notified regarding shipment of samples.

Tests

Samples will be analyzed by Ani Lytics Inc., for cortisol, testosterone, estradiol, estrone, estriol, thyroid stimulating hormone, triiodothyronine (T3), and thyroxin (T4).

Serum PFOS Level Determination

Frequency

Before initiation of treatment, and during Weeks 1 (Day 7), 2, 4, 6, 8, 12, 16, 20, 24, 26, 28, 30, 32, 34, and 39.

Number of Animals

All

Method of Collection

Animals will be fasted overnight; blood (approximately 2 mL) will be collected from a femoral vein without an anticoagulant.

Sample Handling

Samples will be centrifuged within 1 hour after collection, and serum will be harvested. Serum samples will be stored in a freezer set to maintain -60 to -80°C.

Sample Shipping

Serum samples will be packed on dry ice and shipped to:

Kris J. Hansen, PhD 3M E. T. & S Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone: 651.778.6018 Facsimile: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Analysis of serum for PFOS will be done on the samples. Results will be provided for inclusion in the final report.

Additional Serum Collection

At scheduled and unscheduled necropsies, blood (as much as possible, up to 20 mL) will be collected from the vena cava without an anticoagulant from animals at the time of exsanguination. Samples will be centrifuged within 1 hour after collection, and serum will be harvested. Serum from each animal will be transferred into an appropriate container and stored in a freezer set to maintain -60 to -80 °C until shipped to the Sponsor (Kris J. Hansen) for possible future analysis.

Urine and Feces PFOS Level Determination

Frequency

On the first day of recovery and after at least 6, 30, and 90 days of recovery

Number of Animals

All

Method of Collection

Animals will not be fasted; urine (approximately 2 mL) and feces (approximately 5 grams) will be collected overnight.

Sample Handling

Samples will be stored in a freezer set to maintain -10 to -30°C.

Sample Shipping

Samples will be packed on dry ice and shipped to:

Kris J. Hansen, PhD 3M E. T. & S Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone: 651.778.6018

Facsimile: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Analysis of urine and feces for PFOS will be done on the samples. Results will be provided for inclusion in the final report.

Termination

Unscheduled Sacrifices and Deaths

Necropsies will be done. Animals to be sacrificed will be anesthetized with ketamine and xylazine, weighed, bled for required tests, and exsanguinated.

Scheduled Sacrifices

After at least 26 weeks of treatment, four animals/sex/group will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

After at least 26 weeks of treatment and at least 13 weeks without treatment, the remaining animals will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

Postmortem Procedures

cervical tissues and organs

Necropsy

The necropsy will include examination of:

all orifices
cranial cavity
external surface of the brain; the external surface of the spinal cord and cut surfaces of
the brain and spinal cord will be examined when tissue trimming is performed.

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thoracic, abdominal, and pelvic cavities and viscera external surface of the body nasal cavity and paranasal sinuses

Organ Weights

From each animal at scheduled and unscheduled sacrifices, the following organs (when present) will be weighed; paired organs will be weighed separately:

adrenal (2) ovary (2)
brain pancreas
epididymis (2) testis (2)
kidney (2) thyroid (2) with parathyroid
liver

Organ-to-body weight percentages and organ-to-brain weight ratios will be calculated.

Palmitoyl CoA Oxidase Determinations

Representative samples of the right lateral lobe of liver will be collected from each animal at the scheduled sacrifice, weighed, flash-frozen in liquid nitrogen, and stored in a freezer set to maintain -60 to -80°C until analyzed for palmitoyl CoA oxidase activity.

Cell Proliferation Evaluation

Representative samples of the left lateral lobe of the liver, left and right testes, and pancreas will be collected and preserved in zinc formalin.

After fixation, samples for proliferation cell nuclear antigen (PCNA) evaluation will be embedded in paraffin and shipped to:

Sandra R. Eldridge, PhD Pathology Associates International 15 Worman's Mill Court Suite I Frederick, Maryland 21701 Telephone: 301.663.1644 ext. 2036

Facsimile: 301.663.8994

Pathology Associates International will be notified regarding shipment of samples. PCNA evaluation will be done on the samples. Results will be provided for inclusion in the final report.

Liver PFOS Determination

A section (approximately 20 g) of liver will be collected from each animal at the scheduled sacrifice, weighed, flash-frozen in liquid nitrogen, and stored in a freezer set to maintain -60 to -80°C until shipped with plasma samples to 3M (Kris Hansen) for analysis. Results will be provided for inclusion in the final report.

Tissue Preservation

The following tissues (when present) from each animal will be preserved in 10% neutral-buffered formalin, unless otherwise specified, for possible future microscopic examination:

adrenal (2) mesenteric lymph node aorta pancreas brain pituitary cecum prostate cervix rectum colon salivary gland [mandibular (2)] sciatic nerve duodenum epididymis (2) seminal vesicle (2) esophagus skeletal muscle (thigh) eye [(2) to be preserved in Davidson's fixative for sacrificed animals only] spinal cord (cervical, thoracic, and femur with bone marrow (articular lumbar) surface of the distal end) spleen gallbladder sternum with bone marrow heart stomach ileum testis [(2) to be preserved in Bouins' jejunum solution for sacrificed animals only] kidney (2) thymus lesions thyroid (2) with parathyroid liver trachea lung urinary bladder mammary gland uterus ovary (2) vagina

Bone Marrow Smear

From the sternum of each animal at unscheduled and scheduled sacrifices (made and held for possible future examination).

Histopathology

Tissues from each animal in the control and high-dose groups will be embedded in paraffin, sectioned, stained with hematoxylin and eosin, and examined microscopically. Tissues from all other animals will be retained for possible future examination.

Reports

Letter Report

A letter report will be prepared following the terminal sacrifice.

Final Report

A draft report that includes the following information will be prepared and submitted:

Experimental Design and Methods

Results

mortality clinical observations body weights food consumption ophthalmic examinations clinical pathology results palmitoyl CoA oxidase activities hormone analyses (provided by Ani Lytics) serum, urine, feces, and liver PFOS levels (provided by 3M) cell proliferation evaluations (provided by Pathology Associates International) dose analyses (provided by 3M) organ weights organ-to-body weight percentages organ-to-brain weight ratios macroscopic observations microscopic observations

Statistical Evaluation

Levene's test will be done to test for variance homogeneity. In the case of heterogeneity of variance at $p \le 0.05$, transformations will be used to stabilize the variance. Comparison tests will take variance heterogeneity into consideration.

One-way analysis of variance (ANOVA) will be used (if applicable) to analyze initial body weights, palmitoyl CoA oxidase activities, and continuous clinical pathology values. If the ANOVA is significant, Dunnett's t-test will be used for control versus treated group comparisons.

One-way analysis of covariance (ANCOVA) will be used to analyze body weights, with initial body weights as the covariate. If the ANCOVA is significant, covariate-adjusted means will be used for control versus treated group comparisons.

Group comparisons (Groups 2 through 4 versus Group 1) will be evaluated at the 5.0% two-tailed probability level. Only data collected on or after the first day of treatment will be analyzed statistically.

At the end of 1 year after issuance of the audited draft report, if no requested revisions or instructions to finalize have been communicated by the Sponsor, then the audited draft report will be considered 'final' and issued as the final report, signed by the study director, and submitted to the Sponsor.

Any modifications or changes to the audited draft report requested 1 year after issuance will be performed at additional cost to the Sponsor.

Record Retention

All raw data, documentation, records, protocol, specimens, and final report generated as a result of this study generated by Covance will be archived in the storage facilities of Covance for a period of 1 year following submission of the final report to the Sponsor. One year after submission of the final report, all of the aforementioned materials will be sent to the Sponsor, and a return fee will be charged. The Sponsor may elect to have the materials retained in the Covance archives for an additional period of time, and Covance will charge a storage fee. If the Sponsor chooses to have Covance dispose of the materials, a disposal fee will be charged. All raw data stored on magnetic media will be retained by Covance.

Within 1 year after submission of the final report, all of the aforementioned materials from the Sponsor's designees (Ani Lytics Inc., 3M E. T. & S, and Pathology Associates International) will be sent to the Sponsor (Andrew Seacat, PhD, 3M) by the Sponsor's designees.

PROTOCOL APPROVAL

Andrew M. Seacat, PhD

Study Monitor

3**M**

Peter J. Thomford, PhD Study Director

Covance Laboratories Inc.



PROTOCOL AMENDMENT NO. 1

Covance 6329-223 3M T-6295.7

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Sponsor: 3M, St. Paul, Minnesota Study Monitor: Andrew M. Seacat, PhD

Testing Facility: Covance Laboratories Inc., Madison, Wisconsin

Study Director: Peter J. Thomford, PhD

This amendment modifies the following portions of the protocol.

Effective August 20, 1998

1. **Page 4, Vehicle, Storage Conditions.** To include the solvent used to dissolve the test material before mixing with the lactose, add the following after this section.

Solvent

Identification

Acetone

Lot Numbers

The lot numbers will be maintained in the raw data.

Purity

On file with the manufacturer

Stability

On file with the manufacturer

Storage Conditions

At room temperature

Characteristics

Information on synthesis methods, composition, or other characteristics that define the solvent is on file with the manufacturer.

2. Page 7, Group Designations and Dosage Levels, Footnote a, Sentence 1. To correct an error, delete this sentence.

Effective September 2, 1998

3. **Page 5, Gelatin Capsules, Sentence 1.** To change the size of the gelatin capsules, delete this sentence and replace with the following.

Capsules (Size Nos. 2 or 4) obtained from Torpac, Inc. (Fairfield, New Jersey); lot number will be supplied by the manufacturer.

Effective December 15, 1998

4. Page 14, Postmortem Procedures, Cell Proliferation Evaluation,
Paragraph 3, Sentence 2. To include evaluation of slides stained with
hematoxylin and eosin in the PCNA evaluation, delete this sentence and replace
with the following.

PCNA evaluation (including examination of slides stained with hematoxylin and eosin) will be done on the samples.

Effective January 21, 1999

5. **Page 10, Clinical Pathology, Tests, Clinical Chemistry.** To include an additional clinical chemistry test, add the following.

High density lipoprotein (HDL)

Effective January 21 and 28 and February 2, 1999

6. Page 12, Urine and Feces PFOS Level Determination, Sample Shipping. At the request of the Sponsor to collect additional fecal samples (effective January 21, 1999) and to clarify the sample collection requirements (effective January 28 and February 2, 1999), add the following after this section.

Additional Fecal Samples

During Week 23, a fresh fecal sample of at least 5 g, if possible, will be collected from 6 males and 6 females each in the control and high-dose groups, survival permitting. The samples will be collected in the early afternoon after pans are cleaned in the morning to ensure that they are no more than 6 hours old. The samples will be collected in white polypropylene containers and sent on dry ice to:

Joe McConnell
Porphyrins and Nutritional Chemistry Group
Mayo Clinic
200 First Street SW
Rochester, Minnesota 55905
Telephone: 507.284.2150

Telephone: 507.284.2150 Lab Telephone: 507.284.3232

Dr. McConnell will be contacted before shipping the samples.

Effective January 21 and February 12 and 16, 1999

7. Page 9, Clinical Pathology, Frequency, Scheduled Collections. To reflect the decision of the Sponsor and the Study Director to add a collection interval after 150 days of treatment (effective January 21, 1999), to extend the length of recovery (effective February 12, 1999), and to clarify the collection requirement (effective February 12, 1999), delete the text in this section and replace with the following.

Once before initiation of treatment; and after at least 30, 60, 90, 150, and 180 days of treatment (before the daily dose); and after at least 30, 60, 90, 135, and 180 days of recovery

Effective February 10 and 16, 1999

8. Page 12, Urine and Feces PFOS Level Determination, Method of Collection. To modify the amount of sample to be collected (effective February 10, 1999) and to permit collection of samples from fasted animals on the first day of recovery (effective February 16, 1999), delete the text in this section and replace with the following.

Animals will not be fasted (except for the first day of recovery); urine (at least 2 mL) and feces (at least 5 g) will be collected overnight.

Effective February 12, 1999

- 9. **Page 7, Group Designations and Dosage Levels, Footnote d.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery, delete the text in this footnote and replace with the following.
 - d Two animals in Groups 1, 3, and 4 designated as recovery animals will be treated for at least 26 weeks, then treatment will be discontinued, and the animals will be observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 26 weeks posttreatment.

Effective February 12 and 15, 1999

10. Page 11, Serum PFOS Level Determination, Frequency. To reflect the decision of the Sponsor and the Study Director to extend the length of recovery (effective February 12, 1999) and to revise the requirements for these collections during recovery (effective February 15, 1999), delete the text in this section and replace with the following.

Before initiation of treatment; during Weeks 1 (Day 7), 2, 4, 6, 8, 12, 16, 20, 24, 26, and 27 (Day 183) during treatment; and during Weeks 27 (Days 184, 185, and 187), 28 (Day 190), 29 (Day 197), 30 (Day 204), 31 (Day 211), 35, 39, 43, 47, 51, and 53.

11. Page 13, Termination, Scheduled Sacrifices. To reflect the decision of the Sponsor and the Study Director to extend the length of recovery (effective February 12, 1999) and to prioritize the number of animals designated for recovery (effective February 15, 1999), delete the text in this section and replace with the following.

After at least 26 weeks of treatment, up to four animals/sex/group will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

After at least 26 weeks of treatment and at least 26 weeks without treatment, two animals/sex/group will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

Effective February 12 and 16, 1999

12. **Page 10, Blood Hormone Determination, Frequency.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery (effective February 12, 1999) and to clarify the requirements (effective February 16, 1999), delete the text in this section and replace with the following.

Three times before initiation of treatment; after at least 30, 60, 90, and 180 days of treatment; and after at least 30, 60, 90, 135, and 180 days of recovery

13. Page 12, Urine and Feces PFOS Level Determination, Frequency. To reflect the decision of the Sponsor and the Study Director to extend the length of recovery (effective February 12, 1999) and to clarify the requirements (effective February 16, 1999), delete the text in this section and replace with the following.

On the first day of recovery and after at least 6, 30, 90, 135, and 180 days of recovery

Effective February 15, 17, and 18, 1999

14. **Page 13, Postmortem Procedures.** To facilitate a request by the Sponsor to transfer samples of lung tissue (effective February 15 and 18, 1999) and gallbladder and bile (effective February 17, 1999), add the following.

Additional Lung Tissue Samples

At the terminal necropsy, a sample of lung (approximately 5g) will be collected from an animal in the high-dose group. This sample will be weighed, flash-frozen in liquid nitrogen, and stored in a freezer, set to maintain -60 to -80°C, until shipped. This frozen sample and a sample of lung (approximately 1 g, stored in formalin) from Animal No. I05509 (Group 4 male, died January 27, 1999) will be sent separately under appropriate conditions (ambient or packed on dry ice) to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106

Telephone: 651.778.6018 Facsimile: 651.778.6176 Kris J. Hansen or her alternate will be notified regarding the shipment of the samples.

Additional Gallbladder and Bile Samples

At the scheduled necropsies, the gallbladder and bile will be collected and stored according to a special collection and fixation procedure. Frozen gallbladder and bile samples will be packed on dry ice and transferred to:

Kris J. Hansen, PhD 3M E. T. & S Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone: 651.778,6018

Facsimile: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the

Effective February 24 and March 9, 1999

15. Page 13, Postmortem Procedures. To facilitate a request by the Sponsor to prepare (effective February 24, 1999) and transfer (effective March 9, 1999) samples of liver for electron microscopy and to prepare and transfer hematoxylin and eosin-stained slides for light microscopy (effective March 9, 1999), add the following.

Electron Microscopy

samples.

At the terminal necropsy, samples of liver will be collected and processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy will be transferred to:

Sharon Ambrose Division Director Pathology Associates International 4915 D. Prospectus Drive Durham, North Carolina 27713 Telephone: 919.544.5257

Facsimile: 919.544.3218

Tissues will be processed and evaluated by electron microscopy by Pathology Associates International (PAI). A report will be provided by PAI for inclusion in the final report. PAI is responsible for the quality assurance auditing and maintenance of any raw data or specimens produced by PAI.

Sharon Ambrose or her alternate will be notified regarding the shipment of the samples.

Effective April 22, 1999

16. Page 16, Reports, Statistical Evaluation, Paragraph 2, Sentence 1. To add statistical analysis of organ weight and hormone values, delete this sentence and replace with the following.

One-way analysis of variance (ANOVA) will be used (if applicable) to analyze initial body weights, palmitoyl CoA oxidase activities, continuous clinical pathology values, hormone values, and organ weight data.

Effective April 26, 1999

17. Page 14, Postmortem Procedures, Cell Proliferation Evaluation,
Paragraph 1. To add a second set of tissues for cell proliferation evaluation, add
the following to this paragraph.

A second set of tissues (representative samples of the left lateral lobe of the liver, left and right testes, and pancreas) preserved in formalin without zinc will also be prepared.

Effective April 28, 1999

18. **Page 8, Dose Analyses, Stability, Sentence 2.** To change the schedule for the return of the samples, delete this sentence and replace with the following.

One set of samples (approximately 1 g each) will be taken from the low- and high-dose test material/lactose preparations at the end of the treatment phase and will be analyzed for test material content.

Effective May 6, 1999

19. **Page 16, Reports, Letter Report.** To change the letter report to an interim report, delete the text in this section and replace with the following.

Interim Report

An interim report, including all items from the final report as appropriate, will be prepared following the terminal sacrifice.

Effective May 17, 1999

20. **Page 16, Postmortem Procedures, Histopathology, Sentence 2.** To include target organs for animals in the low- and mid-dose groups, delete this sentence and replace with the following.

In addition, liver and thymus for all animals in the low- and mid-dose groups and spinal cord gray matter from females in the low- and mid-dose groups will be embedded in paraffin, sectioned, stained with hematoxylin and eosin, and examined microscopically. Other tissues, as appropriate, will be retained for possible future examination.

Effective May 18, 1999

21. **Page 3, Proposed Study Timetable.** To include proposed dates for in-life termination, the unaudited draft interim report, and the audited draft report, delete the text in this section and replace with the following.

Experimental Start Date: August 26, 1998 In-life Start Date: August 26, 1998 In-life Termination Date: August 27, 1999

Unaudited Draft Interim Report Date: May 11, 1999 Audited Draft Report Date: December 28, 1999 Experimental Termination Date: To be determined

AMENDMENT APPROVAL

Andrew M. Seacat, PhD

Study Monitor 3M

Peter J. Thomford, PhD

Study Director

Covance Laboratories Inc.



PROTOCOL AMENDMENT NO. 2

Covance 6329-223 3M T-6295.7

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Sponsor: 3M, St. Paul, Minnesota Study Monitor: Andrew M. Seacat, PhD

Testing Facility: Covance Laboratories Inc., Madison, Wisconsin

Study Director: Peter J. Thomford, PhD

This amendment modifies the following portions of the protocol.

Effective February 19, 1999

1. Page 9, Observation of Animals, Clinical Observations, Paragraph 2, Sentence 2. To add an observation on the day of scheduled sacrifice, delete this sentence and replace with the following.

Once weekly and on the day of scheduled sacrifice, each animal will be observed; abnormal findings or an indication that the animal is normal will be recorded.

Effective June 11, 1999

2. **Page 11, Blood Hormone Determination, Tests.** To add free triiodothyronine (T3) and free thyroxin (T4) tests, delete the text in this section and replace with the following.

Samples will be analyzed by Ani Lytics Inc. for cortisol, testosterone, estradiol, estrone, estriol, thyroid stimulating hormone, total and free triiodothyronine (T3), and total and free thyroxin (T4).

3. **Page 16, Reports, Final Report, Statistical Evaluation.** To add repeated measure statistical analysis of cholesterol and total and free triiodothyronine (T3), add the following to the end of the section.

Cholesterol and total and free triiodothyronine (T3) will be analyzed by repeated measures analysis of covariance (ANCOVA) procedure with average pretreatment measurements for the parameters as covariates. Treatment effects under ANOVA or ANCOVA procedures will be evaluated at p = 0.05 level. All post-hoc control-versus-treated-group mean comparisons (including values during recovery) will be conducted using Dunnett's many-on-one t procedure.

Analyses will be carried out with SAS procedure PROC MIXED or BMDP, or both.

Effective August 24, 1999

- 4. **Page 7, Group Designations and Dosage Levels, Footnote d.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery, delete the text in this footnote and replace with the following.
 - d Two animals in Groups 1, 3, and 4 designated as recovery animals will be treated for at least 26 weeks, then treatment will be discontinued, and the animals will be observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 52 weeks posttreatment.
- 5. **Page 9, Clinical Pathology, Frequency, Scheduled Collections.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery, delete the text in this section and replace with the following.
 - Once before initiation of treatment; after at least 30, 60, 90, 150, and 180 days of treatment (before the daily dose); and after at least 30, 60, 90, 135, 180, 274, and 365 days of recovery
- 6. **Page 10, Blood Hormone Determination, Frequency.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery, delete the text in this section and replace with the following.
 - Three times before initiation of treatment; after at least 30, 60, 90, and 180 days of treatment; and after at least 30, 60, 90, 135, 180, 274, and 365 days of recovery

7. **Page 11, Serum PFOS Level Determination, Frequency.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery, delete the text in this section and replace with the following.

Before initiation of treatment; during Weeks 1 (Day 7), 2, 4, 6, 8, 12, 16, 20, 24, 26, and 27 (Day 183) during treatment; and during Weeks 27 (Days 184, 185, and 187), 28 (Day 190), 29 (Day 197), 30 (Day 204), 31 (Day 211), 35, 39, 43, 47, 51, 53, 57, 61, 65, 69, 73, 77, and 79

Effective August 24, 1999, and January 12 and 21, 2000

8. **Page 13, Termination, Scheduled Sacrifices.** To reflect the decision of the Sponsor and the Study Director to extend the length of recovery (effective August 24, 1999), to reflect the decision of the Sponsor to cancel the recovery necropsy (effective January 12, 2000), and to subsequently clarify the requirement (effective January 21, 2000), delete the text in this section and replace with the following.

After at least 26 weeks of treatment, up to four animals/sex/group will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

After at least 26 weeks of treatment and at least 52 weeks without treatment, the remaining animals will be removed from the study as follows.

Two animals/sex in Group 1 will be returned to the Covance stock.

Two animals/sex in Group 3 will be transferred to a subsequent study (Covance 6329-268).

Two animals/sex in Group 4 will be fasted overnight, then anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied.

Effective August 24 and September 22, 1999

9. **Page 12, Additional Fecal Samples.** At the request of the Sponsor to collect liver samples by biopsy (effective August 24, 1999) and to modify the procedures (effective September 22, 1999), add the following after this section.

Interim Liver Biopsy Samples

A sample of liver (approximately 1 to 2 g) will be collected by biopsy from animals in Group 4 only during recovery (Week 57, within 1 day of the serum PFOS blood collection). This sample will be divided into four portions as follows.

One subsample will be preserved in 10% neutral-buffered formalin, embedded in paraffin, sectioned, stained with hematoxylin and eosin (duplicate slides will be prepared), and examined microscopically.

The second subsample will be flash-frozen in liquid nitrogen, and stored in a freezer, set to maintain -60 to -80°C, until shipped for analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Results will be provided for inclusion in the final report.

The third subsample will be processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy will be transferred to:

Sharon Ambrose
Division Director
Pathology Associates International
4915 D. Prospectus Drive
Durham, North Carolina 27713
Telephone No.: 919.544.5257
Facsimile No.: 919.544.3218

Tissues will be processed and evaluated by electron microscopy by Pathology Associates International (PAI). A report will be provided by PAI for inclusion in the final report. Sharon Ambrose or her alternate will be notified regarding the shipment of the samples.

The fourth subsample will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, and transferred to the Sponsor for possible future analysis.

Effective January 12 and 21, 2000

10. **Page 12, Interim Liver Biopsy Samples.** At the request of the Sponsor to collect liver samples by biopsy, then terminate the study and transfer the animals to a subsequent study (effective January 12, 2000) and to modify the requirement (effective January 21, 2000), add the following after this section.

Terminal Liver Biopsy Samples

A sample of liver (approximately 1 g) will be collected by biopsy from all animals in Groups 3 during recovery (Week 79, within 1 day of the serum PFOS blood collection). This sample will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped for analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Results will be provided for inclusion in the final report.

Effective January 21, 2000

11. **Page 12, Additional Serum Collection.** To reflect the decision of the Sponsor to analyze additional serum samples for specified thyroid hormones, add following to the end of this section.

An aliquot (0.8 ml) of the additional serum collection samples collected from all animals from Groups 1, 2, 3 and 4 sacrificed at the terminal necropsy will be sent on dry ice by the Sponsor to Dr. Saroj Das, Ani Lytics, for free T3, free T4, total T3, and total T4 determinations.

12. **Page 12, Urine and Feces PFOS Level Determination, Frequency.** To reflect the decision of the Sponsor to collect a 24-hour urine and fecal sample after one year of recovery, delete the text in this section and replace with the following.

On the first day of recovery and after at least 6, 30, 90, 135, and 180 days of recovery. In addition, a 24-hour sample of urine and feces will be collected before the completion of 52 weeks of recovery.

13. **Page 16, Postmortem Procedures, Histopathology.** To define the postmortem procedures for recovery animals in the high-dose group, add the following after this section.

Postmortem Procedures for Recovery Animals in the High-Dose Group At necropsy of the recovery animals in the high-dose group, procedures (including organ weights and collection of tissues for histopathological examination) described previously are not required. The following procedures will be done.

Necropsy

all orifices

The necropsy will include examination of:

cranial cavity
external surface of the brain; the external surface of the spinal cord and cut
surfaces of the brain and spinal cord will be examined when tissue trimming
is performed
cervical tissues and organs
thoracic, abdominal, and pelvic cavities and viscera
external surface of the body
nasal cavity and paranasal sinuses

Liver Samples

A sample of liver (approximately 1 to 2 g) will be collected. This sample will be divided into three portions as follows.

One subsample will be preserved in 10% neutral-buffered formalin, embedded in paraffin, sectioned, stained with hematoxylin and eosin (duplicate slides will be prepared), and examined microscopically.

The second subsample will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped for analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Results will be provided for inclusion in the final report.

The third subsample will be processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy will be transferred to:

Sharon Ambrose
Division Director
Pathology Associates International
4915 D. Prospectus Drive
Durham, North Carolina 27713
Telephone No.: 919.544.5257
Facsimile No.: 919.544.3218

Tissues will be processed and evaluated by electron microscopy by Pathology Associates International (PAI). A report will be provided by PAI for inclusion in the final report. Sharon Ambrose or her alternate will be notified regarding the shipment of the samples.

Additional Tissue and Serum Samples

Samples of lung, kidney, spleen, thyroid, brain, abdominal fat, heart, bile, (approximately 3 g each), and serum (as much as possible) will be collected. These samples will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped for possible future analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176 Kris J. Hansen or her alternate will be notified regarding the shipment of the samples.

Effective February 11 and 15, 2000

14. **Page 3, Proposed Study Timetable.** To change proposed dates for in-life termination (effective February 11, 2000) and the audited draft report (effective February 15, 2000), delete the text in this section and replace with the following.

Experimental Start Date: August 26, 1998

In-life Start Date: August 26, 1998 In-life Termination Date: March 7, 2000

Unaudited Draft Interim Report Date: May 11, 1999

Audited Draft Report Date: May 29, 2000

Experimental Termination Date: To be determined

AMENDMENT APPROVAL

Andrew M. Seacat. PhD

Study Monitor

3M

Peter J. Phomford, PhD

Study Director

Covance Laboratories Inc.

3/30/200

Date

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PROTOCOL AMENDMENT NO. 3

Covance 6329-223 3M T-6295.7

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Sponsor: 3M, St. Paul, Minnesota Study Monitor: Andrew M. Seacat, PhD

Testing Facility: Covance Laboratories Inc., Madison, Wisconsin

Study Director: Peter J. Thomford, PhD

This amendment modifies the following portions of the protocol.

Effective August 20, 1998

1. Page 16, Reports, Final Report, Statistical Evaluation, Paragraph 4. To correct an omission, add the following to the end of the section.

Data collected during recovery will not be analyzed statistically due to the small sample size.

Effective January 21, 2000

2. **Protocol Amendment No. 2, Item 13.** To correct a typographical error, change the font to bold on the following heading.

Postmortem Procedures for Recovery Animals in the High-Dose Group

Effective February 18, 2000

3. Page 12, Serum PFOS Level Determinations, Sample Shipping, Paragraph 3, Sentence 3. To indicate that the results of the Sponsor's analysis of serum samples for PFOS will be reported separately, delete this sentence and replace with the following.

Results will be reported separately.

4. Page 12, Interim Liver Biopsy Samples, Paragraph 3, Sentence 2. To indicate that the results of the Sponsor's analysis of the interim liver biopsy samples will be reported separately, delete this sentence and replace with the following.

Results will be reported separately.

5. Page 12, Terminal Liver Biopsy Samples, Paragraph 2, Sentence 2. To indicate that the results of the Sponsor's analysis of the terminal liver biopsy samples will be reported separately, delete this sentence and replace with the following.

Results will be reported separately.

6. Page 15, Postmortem Procedures, Liver PFOS Determinations, Sentence 2. To indicate that the results of the Sponsor's analysis of the liver samples will be reported separately, delete this sentence and replace with the following.

Results will be reported separately.

7. Page 16, Reports, Final Report, Statistical Evaluation, Paragraph 4. To remove repeated measure statistical analysis of cholesterol and total and free triiodothyronine (T3) at the request of the Sponsor, delete the following.

Cholesterol and total and free triiodothyronine (T3) will be analyzed by repeated measures analysis of covariance (ANCOVA) procedure with average pretreatment measurements for the parameters as covariates. Treatment effects under ANOVA or ANCOVA procedures will be evaluated at p=0.05 level. All post-hoc control-versus-treated-group mean comparisons (including values during recovery) will be conducted using Dunnett's many-on-one t procedure.

Analyses will be carried out with SAS procedure PROC MIXED or BMDP, or both.

Effective February 18 and 22, 2000

8. **Page 16, Reports, Final Report, Results.** To indicate that the results of the Sponsor's analysis of the serum and liver samples (effective February 18, 2000) and urine and feces samples (effective February 22, 2000) will be reported separately, delete the following.

serum, urine, feces, and liver PFOS levels (provided by 3M)

9. Page 16, Postmortem Procedures for Recovery Animals in the High-Dose Group, Liver Samples. To indicate that the results of the Sponsor's analysis of the liver samples will be reported separately (effective February 18, 2000) and to modify the amount of liver collected at necropsy (effective February 22, 2000), delete the text in this section and replace with the following.

Samples of liver will be collected as follows.

One sample will be preserved in 10% neutral-buffered formalin, embedded in paraffin, sectioned, stained with hematoxylin and eosin (duplicate slides will be prepared), and examined microscopically.

The second sample will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped for analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples. Results will be reported separately.

The third sample will be processed to block stage for electron microscopic evaluation. The tissue blocks and a hematoxylin and eosin-stained slide for light microscopy will be transferred to:

Sharon Ambrose **Division Director** Pathology Associates International 4915 D. Prospectus Drive Durham, North Carolina 27713 Telephone No.: 919.544.5257

Facsimile No.: 919.544.3218

Tissues will be processed and evaluated by electron microscopy by Pathology Associates International (PAI). A report will be provided by PAI for inclusion in the final report. Sharon Ambrose or her alternate will be notified regarding the shipment of the samples.

Effective February 22, 2000

10. Page 13, Urine and Feces PFOS Determination, Sample Shipping,
Paragraph 2, Sentence 3. To indicate that the results of the Sponsor's analysis
of the urine and feces samples will be reported separately, delete this sentence and
replace with the following.

Results will be reported separately.

11. Page 16, Postmortem Procedures for Recovery Animals in the High-Dose Group, Additional Tissue and Serum Samples, Paragraph 1. To modify the amount of tissue collected at necropsy, delete this paragraph and replace with the following.

Samples of lung, kidney, spleen, thyroid, brain, abdominal fat, heart, (approximately 3 g each, if possible), and bile and serum (each as much as possible) will be collected. These samples will be flash-frozen in liquid nitrogen and stored in a freezer, set to maintain -60 to -80°C, until shipped for possible future analysis to:

Kris J. Hansen, PhD 3M E. T. & S. Bldg. 2-3E-09 935 Bush Avenue St. Paul, Minnesota 55106 Telephone No.: 651.778.6018 Facsimile No.: 651.778.6176

Kris J. Hansen or her alternate will be notified regarding the shipment of the samples.

Effective April 6, 2000

12. **Page 3, Regulatory Compliance.** To include a compliance exception for the fecal analysis done at the Mayo Clinic, delete the text in this section and replace with the following.

This study will be conducted in compliance with the Environmental Protection Agency Good Laboratory Practice Regulations as set forth in Title 40 of the US Code of Federal Regulations, Part 792, issued November 29, 1983 (effective December 29, 1983), and with any applicable amendments with the following exception. Analysis of fecal samples for urobilinogen at the Mayo Clinic will not be done in compliance with GLPs.

13. **Page 3, Quality Assurance.** To include an exception for the fecal analysis done at the Mayo Clinic, add the following to the end of the section.

Analysis of fecal samples for urobilinogen at the Mayo Clinic will not be done in compliance with GLPs and will not be audited by a Quality Assurance Unit.

14. **Page 12, Additional Fecal Samples.** To clarify analysis and reporting requirements for fecal analysis, add the following to the end of this section.

The samples will be analyzed for urobilinogen using a routine standardized colormetric assay. The results of these analyses will be provided for inclusion in the final report.

15. Page 17, Record Retention, Paragraph 2. To include the record retention requirements for fecal analysis, delete this paragraph and replace with the following.

Within 1 year after submission of the final report, all of the aforementioned materials from the Sponsor's designees (Ani Lytics Inc., 3M E. T. & S, Mayo Clinic, and Pathology Associates International) will be sent to the Sponsor (Andrew Seacat, PhD, 3M) by the Sponsor's designees.

Effective April 7, 2000

16. **Page 2, Purpose.** To modify the purpose of the study, delete the text in this section and replace with the following.

To assess the effect of the test material on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by capsule to cynomolgus monkeys for at least 26 weeks. The treatment period will be followed by an approximate 52-week recovery period.

Effective April 17, 2000

17. **Page 12, Additional Serum Collection.** To reflect the decision of the Sponsor to analyze additional serum samples for specified thyroid hormones and lipoproteins, add following to the end of this section.

An additional aliquot (1.0 ml) of the additional serum collection samples collected from specified animals sacrificed at the terminal and recovery necropsies will be sent on dry ice by the Sponsor to Dr. Saroj Das, Ani Lytics, for thyroid stimulating hormone (TSH), high-density lipoprotein (HDL), low-density lipoprotein (LDL), total lipoprotein, and calculated very low-density lipoprotein determinations. Results of these analyses will be provided for inclusion in the final report.

AMENDMENT APPROVAL

Andrew M Seacat PhD

Study Monitor

3M

Peter J. Thomaford, PhD

Study Director

Covance Laboratories Inc.

5/9/2000

Date Date

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PROTOCOL AMENDMENT NO. 4

Covance 6329-223 3M T-6295.7

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Sponsor: 3M, St. Paul, Minnesota Study Monitor: Andrew M. Seacat, PhD

Testing Facility: Covance Laboratories Inc., Madison, Wisconsin

Study Director: Peter J. Thomford, PhD

This amendment modifies the following portions of the protocol.

Effective 24 May 2001

1. Page 13, Postmortem Procedures, Electron Microscopy, and all other occurrences of "Pathology Associates International." To reflect a change in the name of the subcontractor, delete all occurrences of "Pathology Associates International" in the protocol and replace with the following.

Pathology Associates North Carolina Division, A Charles River Company

Effective 27 August 2001

2. **Page 12, Additional Serum Collection** To reflect the Sponsor's decision to do additional hormone analyses at Ani Lytics, Inc. on serum samples, add the following to the end of the section.

At the request of the sponsor, serum samples collected at the terminal and recovery sacrifices will be transferred by the sponsor to Ani Lytics, Inc. for analysis of estradiol, follicle stimulating hormone (FSH), and lutenizing hormone (LH) for females, and estradiol in males. Results of these analyses will be provided for inclusion in the final report.

Effective 17 September 2001

3. Page 12, Additional Serum Collection To reflect the Sponsor's decision to do additional analyses at Mayo Clinic on serum samples, add the following to the end of the section.

At the request of the sponsor, specified serum samples will be transferred by the sponsor to R. Singh, PhD, Hilton 730, Mayo Clinic, Rochester, MN for analysis of triiodothyronine (T3), total thyroxin (T4), free thyroxin (free T4), and thyroid stimulating hormone (TSH). Additional reserve samples of serum will be transferred for possible future analysis for estradiol. Any unused serum will be returned to the sponsor. Results of these analyses will be provided for inclusion in the final report.

AMENDMENT APPROVAL

Andrew M. Seacat, PhD

Study Monitor

3M

Date

Peter J. Thomatord, J

Study Director

Covance Laboratories Inc.

APPENDIX 2

Individual Animal Fate Data Individual Clinical Observations Individual Ophthalmic Observations

APPENDIX 2 Individual Animal Fate Data

PAGE: 1 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		SEX	DEATH CODE	TYPE OF DEATH	description of death	DATE OF DEATH	DAY OF STUDY	WEEK OF STUDY
105508	1	MALE	т-	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105517	ī	MALE	T T T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105519	ī	MALE	Ť	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105520	ī	MALE	Ō	UNSCHEDULED	UNSCHEDULED DEATH	02/25/00	549	79
105526	ī	MALE	ō	UNSCHEDULED	UNSCHEDULED DEATH	02/25/00	549	79
105527	ī	MALE		SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105514	2	MALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105515	2	MALE	Ť	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05516	2	MALE	Ť	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
105521	2	MALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
105505	3	MALE	T T T T T 6 T T	SCHEDULED	SIXTH INTERIM SACRIFICE	03/08/00	561	81
105510	3	MALE	Ť	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
105518	3	MALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
105523	3	MALE	6	SCHEDULED	SIXTH INTERIM SACRIFICE	03/08/00	561	81
I05524	3	MALE	T T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05528	3	MALE	$^{\mathrm{T}}$	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05506	4	MALE	M	UNSCHEDULED	UNSCHEDULED DEATH	02/20/99	179	26
I05507	4	MALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05509	4	MALE	D	UNSCHEDULED	UNSCHEDULED DEATH	01/27/99	155	23
I05511	4	MALE	Ŭ T U	SCHEDULED	FIRST POST-RECOV SAC	02/25/00	549	79
I05512	4	MALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105522	4	MALE	U	SCHEDULED	FIRST POST-RECOV SAC	02/25/00	549	79
I05529	1	FEMALE	P	UNSCHEDULED	UNSCHEDULED DEATH	02/25/00	549	79
I05530	1	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05531	1	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05535	1	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05544	1	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05549	1	FEMALE	T P T	UNSCHEDULED	UNSCHEDULED DEATH	02/25/00	549	79
I05537	2	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05541	2	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05547	2	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05550	2	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05532	3	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05538	3	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27

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APPENDIX 2 Individual Animal Fate Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	DOSE GROUP	SEX	DEATH CODE	TYPE OF DEATH	DESCRIPTION OF DEATH	DATE OF DEATH	DAY OF STUDY	WEEK OF STUDY
105539	3	FEMALE	6	SCHEDULED	SIXTH INTERIM SACRIFICE	03/08/00	561	81
105545	3	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/25/99		27
105548	3	FEMALE	Ť	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
105552	3	FEMALE	6	SCHEDULED	SIXTH INTERIM SACRIFICE	03/08/00	561	81
105533	4	FEMALE	U	SCHEDULED	FIRST POST-RECOV SAC	02/25/00	549	79
I05534	4	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05536	4	FEMALE	Т	SCHEDULED	TERMINAL SACRIFICE	02/25/99	184	27
I05540	4	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27
I05542	4	FEMALE	U	SCHEDULED	FIRST POST-RECOV SAC	02/25/00	549	79
105551	4	FEMALE	T	SCHEDULED	TERMINAL SACRIFICE	02/26/99	185	27

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCOTANE SULFONIC

ACID FOTASSIUM SALT (PFOS;7-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	DEATH CODE	WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: M1	DOSE:	0 MG/KG/DA	Y DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	PED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
I05508	T	27	NORMAL				_	_			
			NO REMARKABLE	OBSERVATIO	NS		1	0.	-	-	-
							8	₽	-	-	-
							15 22 29 36	P	-	-	-
							22	P	-	-	-
							29	₽	-	-	-
							36	P	-	-	-
							43	P	-	-	-
							50	₽	-	-	-
							57	P	-	-	-
							64	P	-	-	-
							71	P	-	-	-
							78	P	-	-	-
							85	P	-	-	-
							92	P	-	-	-
							99	P	-	-	-
							106	P	-	-	-
							113	P P P P	-	-	-
							120		-	-	-
							127	P	-	-	-
							134	P	-	-	-
							141	P	-	_	-
							148	P	-	-	-
							155	P	-	-	-
							162	P P P	-	-	-
							169	P	_	_	_
							176	P	_	_	_
							183	P	_	_	_
							184	P	_	_	P
								-			-

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QUALITATIVE FOOD CONSUMPTION LOW

													PAGE:	2
				26-WEEK	CAPSU	LE TOX	ICITY STUD	Y WITH P	ERFLUOROO	CTANE SULFO	NIC			-
				ACI	D POTA	SSIUM	SALT (PFOS	;T-6295)	IN CYNOM	OLGUS MONKE	YS			
			CATEGORY	CROUD.	MI	DOCE.	o Markara	7.77	Lat a	OMMENING LIC	mer va eve	OF OBSERVATION	C FOR	CRY /CROUD
ANIMAL	שייגישו	MK OR	KEYWORD	GROUP:	MT	DOSE:	0 MG/KG/D	41	AM OBS	UNSCHED	JED WI FND	DISPATCH	S FOR	SEA/GROUP
NUMBER			QUALIFIER		DAYS 1	-185		DAY	An Obb	ONDCILLE	30-30 OD	DIDIRICH		
I05517	T	27	NORMAL											
			NO REMARKABLE	E OBSERV	ATIONS			1	P	-	-	-		
								8	P	-	-	-		
								15 22 29	P P P	-	-	-		
								22	P	-	-	-		
								29	P	-	-	-		
								36	P	-	-	-		
								43	₽	-	-	-		
								50	P	-	-	-		
								57	P	-	-	-		
								64	P	-	-	-		
								71	P	-	-	-		
								78	P	-	-	-		
								85 92	P	-	-	-		
								92	P	-	-	-		
								99	P	-	-	-		
								106	₽	-	-	-		
								113	P	-	-	-		
								120	P	-	-	-		
								127	P	-	-	-		
								134	P	-	-	-		
								141	P	-	-	-		
								148	P	-	-	=		
								155	P	-	-	=		
								162	P	_	_	_		

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26-WEEK CAPSULE TOXICITY STU	IITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFO	6295) IN CYNOMOLGUS MONKEYS

		WK OF	KEYWORD	GROUP: M		E: 0 MG/KG/DA		'C' - CO AM OBS	MMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
NUMBER		DEATH	QUALIFIER		YS 1-185		DAY					
			VIOUS PAGE)									
105517		27	QUALITATIVE FOOI	CONSUMP	FION							
			LOW				141	P P P	-	-	-	
							176	P	_	_	-	
							177	P	-	-	-	
							179	P	-	-	-	
105519	т	27	NORMAL									
103313	-	21	NO REMARKABLE	OBSERVAT	IONS		1	P	_	_	_	
							1 8	P	_	_	_	
							15	0,	-	-	_	
							22	P	-	-	-	
							29	P	-	-	-	
							36	P	-	-	-	
							43	P	-	-	-	
							50	P	-	-	-	
							57	P	-	-	-	
							64	P	-	-	-	
							71	P	-	-	_	
							78	P	-	-	-	
							85	P	-	-	-	
							92		-	-	-	
							99	P	-	-	-	
							106	₽	-	-	=	
							113	₽	-	-	-	
							120	₽	-	-	-	
							127	₽	-	-	-	
							134	P	-	-	-	
							141	P	-	-	-	
							148	Þ	-	-	-	
							155	0.	-	-	-	
							162	P	-	-	-	
							169	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC

NIMAL I	נוייי מישר	MK OF	CATEGORY KEYWORD	GROUP:	M1	DOSE:	0 MG/KG/DA	Y	'C' - CON AM OBS	MENTS LIST	ED AT END	OF OBSERVATIONS DISPATCH	FOR SEX/GROT
JMBER (CODE	DEATH	QUALIFIER		DAYS :			DAY		ONSCHED	30-30 06	DISPRICE	
			VIOUS PAGE)										
5519		27	NORMAL										
			NO REMARKABLE	OBSERV	ATION	3		176	P	-	-	-	
								183	P	-	-	-	
								184	P	-	-	P	
05520	0	79	DISCHARGE										
			VOMITUS										
			CONTAINING	FOOD				141	P	-	-	-	
			EXCRETION										
			LIQUID FECES					29	_	_	P	_	
			NON-FORMED FE	CES				29	P	-	P P	-	
			NORMAL										
			NO REMARKABLE	OBSERV	истем	2		1	Þ	_	_	_	
			no mananda	ODDER	211 1 011			8	P P P	_	_	_	
								15	P	_	_	=	
								15 22	P	_	_	_	
								36	P	_	_	_	
								43	P	_	-	_	
								50	P	-	-	-	
								57	P	-	-	-	
								64	P P	-	-	-	
								71	P	-	-	-	
								78	P	-	-	-	
								85	P	-	-	-	
								92	P P	-	-	-	
								99	P	-	-	-	
								106	P	-	-	-	
								113	P	-	-	-	
								120	P	-	-	-	
								127	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
ANIMAL			KEYWORD				'C' - CO AM OBS	MMENTS LIST UNSCHED	ED AT END	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
NUMBER				DAYS	1-185	DAY					
			VIOUS PAGE)								
105520	0	79	NORMAL								
			NO REMARKABLE	OBSERVATION	S	134	P	-	-	-	
						148	P	-	-	-	
						155	P P	-	-	-	
						162	P	-	-	-	
						169	P	-	-	-	
						176	₽	-	-	-	
						183	P	-	-	-	
			QUALITATIVE FOO	D CONSUMPTION	N						
			LOW			122	P	-	-	-	
105526	0	79	EXCRETION NON-FORMED FE	CES		179	P	-	-	-	
			NORMAL								
			NO REMARKABLE	ORGEDVATION	e e	1	D	_	_	_	
			NO REMARKABLE	ODDBRVATION	ь	8	P P P	_	_	_	
						15	P	_	_	_	
						22	P	_	_	_	
						29	P	_	_	_	
						36	P	-	-	-	
						43	P	-	-	=	
						50	P	-	-	-	
						57		-	-	-	
						64	P	-	-	-	
						71	P	-	-	-	
						78	P	-	-	-	
						85	P	-	-	-	
						92	P	-	-	-	
						99	P	-	_	-	
						106	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC	
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS	

ANIMAL DEATH WK OF NUMBER CODE DEATH		G/KG/DAY DAY	'C' - CO AM OBS	MMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PR	ENTONG DAGE)					
105526 O 79	NORMAL					
	NO REMARKABLE OBSERVATIONS	113	P	_	_	-
		120	P	-	-	-
		127	P	-	-	-
		134	P	-	-	-
		141	P	-	-	-
		148 155	P P P	-	-	-
		162	E E	-	-	-
		169	P		- 1	
		176	P	_	_	_
		183	P	_	_	_
I05527 T 27	DISCHARGE UNKNOWN SOURCE FOUND IN FAN RED IN COLOR	144	P	-	-	-
	EXCRETION NON-FORMED FECES	2	P	-	-	-
	SKIN & PELAGE BROKEN SKIN		_			
	HAND-LEFT	37 38	P.	-	-	-
		39	P P P	-	P P	=
		40	P	_	_	_
		43	P	_	_	_
	TAIL	168	_	-	P	-
		169	P	-	-	-
		170	<u> </u>	-	P	-
		176	P	-	-	-
		177	-	-	P	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
CATEGORY ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER	GROUP: M1 DOSE DAYS 1-185	: 0 MG/KG/DAY	'C' - C	OMMENTS L UNSCHE	ISTED AT E D 30-90	ND OF OBSERVATIONS FOR SEX/GROUP OB DISPATCH					
NONDER CODE DEATH GOADITIES											
(CONTINUED FROM PREVIOUS PAGE) 105527 T 27 SKIN & PELAGE BROKEN SKIN											
TAIL		178	P P	-	P -	-					
		179	P	-	-	-					
		180	P	-	-	-					
		181	-	-	P	-					
		183	P	_	-	-					
		184	P	-	-	P					
TAIL-DISTAL		145	-	-	P - - P - P	-					
NORMAL											
NO REMARKABLE	ODCCDVATIONC	7	D								
NO KENAKKADIE	OBSERVATIONS	1 8	D	_	_						
		1.5	D D	_	_	_					
		15	Ē.	_	_	_					
		15 22 29	E D	_	_	_					
		36	E D	-	-	-					
		50	P P P P P P	-	-	=					
		57	P	-	-	-					
		64	P	-	-	-					
		71	P	-	-	-					
		78	P	-	_	-					
		85	P P P P	-	-	-					
		85	P	-	-	=					
		92 99	P	-	-	=					
			P	-	-	=					
		106	P	-	-	-					
		113	P P	-	-	=					
		120	P	-	-	=					
		127	P	-	-	=					
		134	P	-	-	-					
		141	P	-	-	-					
		148	P	-	-	-					

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCCTAME SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL DEATH WK OF KEYWORI NUMBER CODE DEATH QUAL)	: 0 MG/KG/DAY	'C' - (AM OBS	COMMENTS LIST UNSCHED		OF OBSERVATIONS F DISPATCH	OR SEX/GROUP				
(CONTINUED FROM PREVIOUS PAGE 105527 T 27 NORMAL NO REMA	E) ARKABLE OBSERVATIONS	155 162	P P	- - -	-	- -					
QUALITAT: LOW	IVE FOOD CONSUMPTION	43	P	-	-	-					

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CATEGORY GROUP: M2 DOSE: 0.03 MG/KG/DAY C1	OBSERVATIONS FOR SEX/GROUD
LIQUID FECES 91 P	
LIQUID FECES 91 P	
NOÑ-FORMED FECES 105 P - 132 P - NORMAL	
NORMAL	
NORMAL	
NO REMARKABLE OBSERVATIONS 1 P	
NO REMARKABLE OBSERVATIONS 1 P 8 P	
15 \$	
15 F 22 P	
22 P 29 P	
29 F 36 P	
36 P	
443 PP	
50 5	
57 P 64 P	
78 ₽	
85 P	
92 F	
99 P	
106 P	
113 P	
120 P	
127 P	
134 P	
141 P	
148 P	
155 P	
162 P	
169 P	
176 P	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS:T-6295) IN CYNOMOLGUS MONKRYS

				ACID	POTASSIUM	SALT (PFOS;T-62	195) IN C	YNOMOLGUS MONE	EYS		
ANTMAT.	DEATH	WK OF	CATEGORY KEYWORD	GROUP: M	12 DOSE	: 0.03 MG/KG/DAY	'C'	- COMMENTS LI	STED AT END	OF OBSERVATIONS	FOR SEX/GROU
		DEATH	QUALIFIER	DA	AYS 1-185	DAY					
CONTE	TIPD P	DOM DDE	VIOUS PAGE)								
05514		27	NORMAL								
00011	-		NO REMARKABLE	OBSERVAT	CIONS	183	P	_	_	_	
						184		-	-	P	
			QUALITATIVE FOO	D CONSUMP	PTION	100	. 5				
			LOW			102 179	P	-	-	-	
						1/2	, ,	-	-	-	
05515	Т	27	EXCRETION								
			NON-FORMED FE	CES		69	-	-	P	-	
			MODELLE								
			NORMAL NO REMARKABLE	ODCEDVAT	TONG	1	P				
			NO REMARKABLE	OBSERVAL	LOND	8				Ξ.	
						15	2222	_	_		
						15 22	P	_	_	_	
						29	P	_	_	=	
						36	P	_	-	_	
						43	P	_	-	=	
						50	P	-	-	_	
						57	P	-	-	-	
						64	P	-	-	-	
						71	P	-	-	-	
						78	P	=	-	=	
						85	P	-	-	-	
						92	P	-	-	-	
						99	P	-	-	-	
						106		-	-	-	
						113 120		-	-	-	
						120		-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

				ACID POT	ASSIUM SALT (P	FOS;T-6295)	IN CYNOMO	DLGUS MONKE	YS 		
ANIMAL	DD2.001	O.D.	CATEGORY KEYWORD	GROUP: M2	DOSE: 0.03 M	g/kg/day	'C' - CC AM OBS	MMENTS LIST	TED AT END 30-90 OB	OF OBSERVATIONS	FOR SEX/GROU
NUMBER			QUALIFIER	DAYS	1-185	DAY	AM OBS	UNSCHED	30-30 OB	DISPATCH	
/ CONTIT			VIOUS PAGE)								
I05515		27 ROM PRE	NORMAL								
103313	-	2,	NO REMARKABLE	OBSERVATION	S	141	P	_	_	=	
			110 11111111111111111111111111111111111	ODDERVILLEON		148	P	_	_	_	
						155	P	_	_	_	
						162	P	_	_	_	
						169	P	_	_	_	
						176	P	-	-	_	
						183	P	_	_	_	
						185	P	-	-	P	
			QUALITATIVE FOO	D CONSUMPTIC	N		-				
			LOW			141	P	-	-	-	
						162	P	-	-	-	
105516	т	27	DISCHARGE								
	-		VOMITUS								
			CONTAINING	FOOD		179	P	-	_	_	
			PARTIAL CAP			85	Ξ.	_	- P	_	
			NORMAL				_				
			NO REMARKABLE	OBSERVATION	S	1	P	-	-	-	
						8	P	-	-	-	
						15	P	-	-	-	
						22	₽	-	-	-	
						29	Ę	-	-	-	
						36	5	-	-	-	
						43	Þ	-	-	-	
						50	P	-	-	-	
						57	P	-	-	-	
						64 71	P	-	-	-	

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PAGE:
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: M2 DOSE: 0.03 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP ANIMAL DEATH WK OF NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY

(CONTINUED FROM PREVIOUS PAGE)

105516 T 27 NORMAL NO REMARKABLE OBSERVATIONS OBSERVATIONS FOR SEX/GROUP AND OBSERVATIONS OF SEX/GROUP AND OBSERVATIONS OF SEX/GROUP AND OBSERVATIONS FOR SEX/GROUP AND OBSERVATIONS OF SEX/GROUP AND 92 99 106 113 120 127 134 141 148 155 162 169 176 183 QUALITATIVE FOOD CONSUMPTION LOW Р 179 SKIN & PELAGE I05521 T 27 BROKEN SKIN PERI-ORBITAL-RIGHT Ρ 20 Ρ NORMAL NO REMARKABLE OBSERVATIONS

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC	
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS	

CATEGORY GROUP: M2 DOSE ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER DAYS 1-185	: 0.03 MG/KG/DAY		MENTS LISTED UNSCHED 30	AT END OF 0-90 OB D	OBSERVATIONS FOR SEX/GROUP
(CONTINUED FROM PREVIOUS PAGE)					
I05521 T 27 NORMAL					
NO REMARKABLE OBSERVATIONS	4.3	P		-	
	50	P		-	
	57	P		-	
	64	P P		-	
	71			-	
	78	P		-	
	85	P		-	
	92	P		-	
	99	Ę		-	
	106	P		-	
	113	P		-	
	120 127	P		-	
	134	P		-	
	141	P		_	
	148	P	-	_	
	155	D D	I I		
	162	P		_	
	169	P		_	
	176	P		_	
	183	P		_	
	185	P		P	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

				ACID PO	DTASSIUM SAL	T (PFOS;T-6295	IN CYNC	MOLGUS MON	KEYS		
ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP: M3	DOSE: 0.	15 MG/KG/DAY DAY	'C' - AM OBS	COMMENTS L UNSCHE	ISTED AT E	ND OF OBSERVAT OB DISPATCH	CIONS FOR SEX/GROUP
105505	6	81	DISCHARGE VOMITUS CONTAINING	FOOD		141	P	-	-	-	
			NORMAL NO REMARKABLE	ODGDDUAGE	MIG.	•	Б				
			NO REMARKABLE	OBSERVATIO	JINS	8	P P P	_	_	-	
						15	P D		-		
						15 22	P		_		
						29	P	_	_	_	
						36	P	_	_	_	
						43	P	_	_	_	
						50	P	_	_	_	
						57	P	-	-	_	
						64	P	-	-	=	
						71	P	-	-	-	
						78	P	=	-	=	
						85	P	_	_	_	
						92	P	-	-	-	
						99	P	-	-	-	
						106	P	-	-	-	
						113	P	-	-	-	
						120	P	-	-	=	
						127	P	-	-	-	
						134	P	-	-	-	
						148	P	-	-	-	
						155	P	-	-	-	
						162	P	-	-	-	
						169	P	-	-	_	

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	ACID	POTAS	SIUM		STUDY WITH 1					PAGE: 15
CATEGORY	GROUP:	Ma								
		M3	DOSE:	0.15		'C' - CC	OMMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATION	IS FOR SEX/GROU
NUMBER CODE DEATH QUALIFIER		AYS 1-			DAY					
(CONTINUED FROM PREVIOUS PAGE) 105505 6 81										
QUALITATIVE FOOD	CONSUM	PTION								
LOW					80	P	-	-	-	
					141	P	-	-	-	
					180	P	-	-	-	
I05510 T 27 EXCRETION DISCOLORED URI: RED IN COLOR					97	-	-	P	-	
NORMAL										
NO REMARKABLE	OBSERVA	TIONS			1	P	-	-	_	
					8	P P P	-	-	-	
					15	P	-	-	-	
					22	P	-	-	-	
					29		-	-	-	
					36	P	-	-	_	
					43	P	-	-	-	
					50	P	-	-	-	
					57	P	-	-	-	
					64	P	-	-	-	
					71	P	-	-	-	
					78 85	P	-	-	-	
					92	P	-	-	-	
					92	P P	-	-	-	
					106	P	-	-	-	
					113	P	-	-	-	
					120	P	- <u>-</u>	-	-	
					134	P	-	_	=	
					141	P	-	-	-	
					141	E	-	-	-	

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Individual Clinical Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLGUS MONKRYS

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL	DEATH	MK O	CATEGORY KEYWORD	GROUP: M3	DOSE: 0.15	MG/KG/DAY	'C' - CO	OMMENTS LIS	TED AT END	OF OBSERVATIONS	FOR SEX/GROUP
NUMBER		DEATE	QUALIFIER	DAYS 1		DAY		011001122	30 30 02	222111111	
(CONTIN	ם משודה	DOM DI	REVIOUS PAGE)								
105510		27									
	_			OBSERVATIONS		155	P	_	_	=	
						162	P	_	_	_	
						169	P	_	_	_	
						176	P	-	-	_	
						183	P P	-	_	_	
						185	P	-	-	P	
			OUALITATIVE FOO	n concurrence							
			LOW LOW	D CONSUMPTION		67	P				
			DOM.			73	P				
						109	P			_	
						127	P			_ <u>_</u>	
						141	P			_	
						142	P	_	_	_	
						148	P		_	_	
						154	P	_	_	_	
						180	P	_	_	_	
						183	P	_	_	_	
	_										
105518	T	27	DISCHARGE VOMITUS								
			CONTAINING	FOOD		179	P				
			CONTAINING	TOOD		1/2	-				
			NORMAL								
			NO REMARKABLE	OBSERVATIONS		1	P	-	-	-	
						8	P P P	-	-	-	
						15		-	-	-	
						22	P	-	-	-	
						29	P	-	-	-	
						36	P	-	-	-	
						43	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFCS;T-6295) IN CYNOMOLGUS MONKEYS										
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	M3 DAYS 1	DOSE:	0.15 M	g/kg/day day	'C' - AM OBS	COMMENTS LI UNSCHED	STED AT END 30-90 OF	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PRE	VIOUC DACE)									
103310 1 27	NO REMARKABLE	OBSERV	ATTONS	:		5.0	P	-	_	=
						57	P	_	_	_
						64	P	-	-	_
						71	P	-	-	-
						78	P	-	-	-
						85	P	-	-	-
						92	P	-	-	-
						99	P	-	-	-
						106	P	-	-	-
						113	Б	-	-	-
						120	P	-	-	-
						134	P	-	-	=
						141	P	-	-	=
						148	E D			
						155	Ď	-		
						162	Ď	_	_	_
						169	P	_	_	_
						176	P	-	-	=
						183	P	-	-	-
						185	P	-	-	P
				_						
	QUALITATIVE FOOI	CONSU	MALION				-			
	LOW					141 179	P P	-	-	-
						1/9	P	-	-	-

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PAGE: 1
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: M3 DOSE: 0.15 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
ANIMAL DEATH WK OF KEYWORD
NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY

CATEGORY
GROUP: M3 DOSE: 0.15 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
AM OBS UNSCHED 30-90 OB DISPATCH
DAYS 1-185 DAY 105523 6 81 SKIN & PELAGE BROKEN SKIN 149 TAIL NORMAL NO REMARKABLE OBSERVATIONS

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Individual Clinical Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

JTMAT.	DEATH	WK OF	CATEGORY GF	OUP: M3	DOSE: 0.15	MG/KG/DAY	'C' - CC	OMMENTS LI	STED AT END	OF OBSERVATIONS FOR SEX/GF DISPATCH
	CODE	DEATH	QUALIFIER	DAYS	1-185	DAY	111. 025	011001122	30 30 02	
CONTIN	TUED F		VIOUS PAGE)							
			QUALITATIVE FOOD C	ONSUMPTIO	ON					
			LOW			6	P P	-	-	-
						141	P	-	-	-
						179	P	-	-	-
5524	Т	27	DISCHARGE VOMITUS CONTAINING FOO	חפ		141	p	_	_	_
			CONTINUING TOO			111	-			
			EXCRETION							
			NON-FORMED FECES	:		179	P	_	-	_
						180	P	-	-	-
			NORMAL							
			NO REMARKABLE OF	CEPVATTO	TC.	1	D	_	_	_
			NO REMARKIDADES OF	DERVETTO	40	8	Þ	_	_	_
						15	P P P P	_	_	_
						22	P	_	_	_
						29	P	_	_	_
						36	P	_	_	_
						50		_	_	_
						57	P	_	_	_
						64	P	_	_	_
						71	P P P P	_	_	_
						78	Ď	_	_	_
						85	P	_	_	_
						92	P	_	_	_
						99	P P	_	_	_
							Ē.			
						106				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	7 KEYWORD	GROUP: M3 DOSE DAYS 1-185	: 0.15 MG/KG/DAY	'C' - CC AM OBS	OMMENTS LIS UNSCHED		OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PE							
I05524 T 27	NORMAL						
	NO REMARKABLE	OBSERVATIONS	120	P	-	-	=
			127	P	-	-	-
			134	P	-	-	-
			148	P	-	-	-
			155	P	-	-	-
			162	P	-	-	-
			169	P	-	-	-
			176	P	-	-	-
			183	P	-	-	-
			185	P	-	-	P
	QUALITATIVE FOOD	CONSUMPTION					
	LOW		43 65	P	-	-	-
			65	P	-	-	-
			141	₽	-	-	-
			179	P	-	-	=
			180	P	-	-	-
I05528 T 27	NORMAL						
105520 1 27	NO REMARKABLE	OBSERVATIONS	1	P	_	_	_
	no manantana	ODDBRVATIONS	8	P	_	_	_
				-			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		ACID	POTASSIU	M SALT	(PFOS; T-6295)	IN CYNOM	OLGUS MONKEY	S		
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER		B DOS		MG/KG/DAY DAY	'C' - C' AM OBS	OMMENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PRE 105528 T 27	VIOUS PAGE) NORMAL									
	NO REMARKABLE	OBSERVAT	IONS		92	P	-	_	_	
					99	P	-	-	_	
					106	P P P P	-	_	_	
					120	P	-	-	-	
					134	P	-	-	-	
					141	P	-	-	-	
					148	P	-	-	-	
					155	P	-	-	-	
					162	P	-	-	-	
					169	P P	-	-	-	
					176	P	-	-	-	
					183	P	-	-	=	
					185	P	-	-	P	
	OUALITATIVE FOO	D GONGIND	OT ON							
	LOW	D CONSUMP	LION		78	ъ				
	LOW				113	P P P	-	-	=	
					116	D	-	-	-	
					127	D	-	_	_	
					134	P		_	_ <u>_</u>	
					162	D		_	_	
					176	P P	-	_	=	
					179	P	_	_	_	
					1/3	-				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK NUMBER CODE DE	COF F EATH	KEYWORD QUALIFIER		AYS 1-	185	0.75 MG/KG	DAY	'C' - COMI AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
	26 BEH	QUALIFIER DAYS 1-185 BEHAVIOR ATAXIC <unspecipied> HYPOACTIVE <unspecipied> DISCHARGE EXCESSIVE SALIVATION RESPIRATION LABORED NORMAL NO REMARKABLE OBSERVATIONS</unspecipied></unspecipied>					- - - - - - -	P P P	-	P	
							29 36 43 50 57 64 71 78 85 92 99 106 113 120 127	ט ס ס ס ס ס ס ס ס ס ס ס ס ס ס ס ס ס ס ס			

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				TY STUDY WITH T (PFOS;T-6295					PAGE: 23
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	GROUP: M4	-185	75 MG/KG/DAY	AM OBS	OMMENTS LI UNSCHED		ID OF OBSERVAT: B DISPATCH	IONS FOR SEX/GROU
(CONTINUED FROM PRE	VIOUS PAGE)								
I05506 M 26	NORMAL NO REMARKABLI	E OBSERVATIONS	3	134 141 148 155 162 169 176	P P P P P P P	- - - -	- - - - -	-	
	QUALITATIVE FOO	DD CONSUMPTION	I	3 141 178 179	P P P P	- - - -	- - -	- - - -	
I05507 T 27	DISCHARGE VOMITUS PARTIAL CAI	PSULE		11 111 178	- - -	- - -	P P P	<u>.</u>	
	SKIN & PELAGE BROKEN SKIN DIGIT(S)-FI	RONT-LEFT		97 98 99 100 101 102 104 106 107	- P P P P P P	-	P P P - P P P	- - - - - - -	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS:T-6295) IN CYNOMOLGUS MONKRYS

ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP: M4	DOSE: 0.75 MG/K	3/DAY	'C' - CO	MMENTS LIST	TED AT END	OF OBSERVATIONS DISPATCH	FOR SEX/GROU
NUMBER CODE DEATH	QUALIFIER	DAYS 1-	185	DAY	AM OBS	ONSCRED	30-30 OB	DISPAICE	
(CONTINUED FROM PR 105507 T 27	EVIOUS PAGE) SKIN & PELAGE BROKEN SKIN								
	DIGIT(S)-FRO	NUT T TOTAL		108	P				
	DIGIT(S)-FRO	NI-DEFI		111	-	-	D.	-	
				112	P	-	P P	-	
				112	P	-	P	-	
	NORMAL								
	NO REMARKABLE	ODGEDWATTONG		1	D	_	_	_	
	ALIGHAAAAAA ON	CDSEKVMIIONS		1 8	5	- 2			
				15	D D		_	Ξ.	
				22	D D		_	Ξ.	
				29	D		_	_	
				36	D	_	_	_	
				43	Ď			_	
				43 50	Ď			_	
				57	Ď	_	_	_	
				64	D D	_	_	_	
				71	טיטיטיטיטיטיטיטיטיטיטיטיטיטיטיטיטיטיטי	_	_	_	
				78	P	_	_	_	
				85	P	_	_	_	
				92	P	_	_	_	
				113	P	_	_	_	
				120	P P	_	_	_	
				127	P	_	_	_	
				134	P	_	_	=	
				141	P	_	_	_	
				148	P	_	_	_	
				155	P	_	_	_	
				162	P	_	_	_	
				169	P	_	_	_	
				100	D.				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: M4 DOSE: 0.75 M KEYMORD QUALIFIER DAYS 1-185	G/KG/DAY DAY	'C' - COI AM OBS	MMENTS LIS' UNSCHED		OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PRE I05507 T 27	VIOUS PAGE) NORMAL NO REMARKABLE OBSERVATIONS	184	P	-	-	Р
	QUALITATIVE FOOD CONSUMPTION LOW	141	P	-	-	-
I05509 D 23	APPEARANCE APPEARS DEHYDRATED OTHER	155 155	-	P -	-	P PC
	BEHAVIOR HYPOACTIVE <unspecified></unspecified>	155	-	P	-	P
	EXCRETION DISCOLORED FECES BLACK IN COLOR FEW FECES	155 152	P P	-	-	-
	LIQUID FECES MUCOID FECES NO FECES	152 155 155 155 154	P P P	- - -	-	-
	EYES CONSTRICTED PUPIL EYES	154		_	P	-
	RESPIRATION LABORED	154	-	P	-	P

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									CTANE SULFO			PAGE: 26
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	M4 DAYS	DOSE 1-185	: 0.75	MG/KG	/DAY DAY	'C' - CC AM OBS	OMMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATION DISPATCH	ONS FOR SEX/GROU
(CONTINUED FROM PRE 105509 D 23		.=====										
	SKIN & PELAGE											
	COLD TO TOUCH BODY-ENTIRE PALE SKIN						155	-	P	-	P	
	GUMS						154 155	-	- P	P -	- P	
							155	-	P	-	P	
	NORMAL NO REMARKABLE	or grant	TE TON				1	Р				
	NO REMARKABLE	S OBSERV	ATTON	5			8	P	-	_	-	
							15	P	-	-	-	
							22	P	-	-	-	
							29	P	_	_	_	
							36	P				
							43	P				
							50	P	_	_	_	
							57	P	_	_	_	
							64	P	_	_	_	
							71	P	_	_	_	
							78	P	_	_	_	
							85	P	_	_	-	
							92	P	-	_	-	
							99	P	-	-	=	
							106	P	_	-	_	
							113	P	-	_	_	
							120	P	_	-	_	
							127	P	-	-	-	
							134	P	-	-	-	
							141	P	-	-	-	
							148	P	-	-	-	

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Animal Death NK of Number Code Dath Date Da					TY STUDY WITH I					PAGE: 27
CONTINUED FROM PREVIOUS PAGE 141		KEYWORD				'C' - C AM OBS	COMMENTS L UNSCHE	ISTED AT E	ND OF OBSERVA OB DISPATCH	TIONS FOR SEX/GROUP
LOW	(CONTINUED FROM PRE									
LOW		OHALITATIVE FOOI	CONSUMPTION	N						
152					141	P	_	_	_	
154		2011				P	_	_	_	
155 P							_	_	_	
Top Top							_	_	_	
VOMITUS CONTAINING FOOD PARTIAL CAPSULE NORMAL NO REMARKABLE OBSERVATIONS 1 P					200	-				
PARTIAL CAPSULE NORMAL NO REMARKABLE OBSERVATIONS 1	I05511 U 79	VOMITUS			7.00					
NORMAL NO REMARKABLE OBSERVATIONS 1							-		-	
NO REMARKABLE OBSERVATIONS 1		PARTIAL CAPS	SULE		155	-	-	Р	-	
8 P		NORMAL								
15 P		NO REMARKABLE	OBSERVATIONS	S	1	P	-	-	-	
15 P					8	P	-	_	_	
29 P					15	P	_	_	_	
29 P					22	P P	_	_	_	
36 P					29	P	_	_	_	
43 P					36	D	_	_	_	
50 P							_	_	_	
57 P								_		
71 P 78 P 78 P 79 P 79 P 79 P - 79						D.	-	-	-	
71 P 78 P 78 P 79 P 79 P -						Ē.	-	-	-	
78 P						Ē.	-	-	-	
85 P							-	-	-	
99 P 106 P 113 P						£	-	-	-	
99 P 106 P 113 P						Ę	-	-	-	
106 P 113 P						P.	-	-	-	
113 P							-	-	-	
							-	-	-	
120 P							-	-	-	
					120	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

		WK OF	CATEGORY KEYWORD	GROUP: M4	DOSE	0.75 MG/	KG/DAY	'C' - AM OBS	COMMENTS UNSCH	LISTED AT END HED 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROU
UMBER	CODE	DEATH	QUALIFIER	DAY	S 1-185		DAY					
COMPTA	TIED E		/IOUS PAGE)									
05511	UED F.		NORMAL									
05511	U	, ,	NO REMARKABLE	OBSERVATI	ONS		127	P	_	_	_	
			110 11111111111111111111111111111111111	ODDBIRVIII	0110		134	P	_	_	_	
							141	P	_	_	_	
							148	P	_	_	_	
							155	P P P P P	-	-	_	
							162	P	_	-	_	
							169	P	-	-	-	
							176	P	-	-	-	
							183	P	-	-	-	
			QUALITATIVE FOOI	O CONSUMPT	ION							
			LOW				57	P	-	-	-	
							60	P	-	-	-	
							100	P P P	-	-	=	
							102	₽	-	-	-	
							141	₽	-	=	=	
							145	P P P	-	-	-	
							148	P	-	-	-	
							154	P	-	-	-	
							155	P	-	_	-	
							170	P P P	-	-	-	
							171 172	Ę	-	-	-	
							173	E E	-	-	-	
							174	P	-	=	=	
							175	P	-	-	-	
							176	P	_		-	
							177	P			-	
							179	P		-	-	
							180	P	-	=	=	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLGUS MONKRYS

				ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
ANIMAL	DEATH	MK OF	CATEGORY KEYWORD	GROUP:	M4	DOSE:	0.75 MG	KG/DAY	'C' - AM OBS	COMMENTS L	ISTED AT END	OF OBSERVATIONS	FOR SEX/GROU	
NUMBER		DEATH	QUALIFIER			1-185		DAY	02.	31,501,21	30 30 02			
105512	T	27	DISCHARGE VOMITUS											
			PARTIAL CA	DCIII.T				32	_	_	D	_		
			FARTIAL CA	FOODE				37			P P	_		
								5,			E			
			EXCRETION											
			FEW FECES					100	P	_	_	_		
			1211 12020					102	P	_	_	_		
								105	P	_	_	_		
								106	P	_	_	_		
								110	P	_	_	_		
								125	P	-	-	_		
								126	P P P	_	_	_		
								127	P	-	-	_		
								128	P	-	-	-		
								129	P	-	-	-		
								130	P	-	-	-		
								133	P P	_	_	_		
								134	P	_	_	=		
								155	P	_	-	-		
								156	P	-	-	-		
								157	P	-	-	_		
								158	P P P	-	-	=		
								159	P	-	-	=		
								161	P	-	-	-		
								181	P	-	-	_		
								183	P	-	-	-		
								184	P	-	-	-		
			NO FECES					99	P	-	-	-		
								131	P	-	-	-		
								132	P	-	-	-		
			NON-FORMED F	ECES				130	P	-	-	_		

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				STUDY WITH E					PAGE:	30
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: M4		MG/KG/DAY DAY	'C' - C' AM OBS	OMMENTS LIS UNSCHED	red at end 30-90 ob	OF OBSERVATIONS DISPATCH	FOR	SEX/GROUP
(CONTINUED FROM PRE 105512 T 27	VIOUS PAGE) EXCRETION NON-FORMED F	ECES		133	P	-	-	-		
	NORMAL NO REMARKABL	E OBSERVATION	3	1 8	P	-	-	-		
				15	P P P	-	-	-		
				22 29		-	-	-		
				36 43	P P P	-	-	-		
				50 57	P P	-	_			
				64 71	P P P	-	-	- -		
				78 85	P P	-	-	-		
				92 113	P P P	-	-	- -		
				120 141	P P	-	-	-		
				148 162	P P	-	-	-		
				169 176	P P	-	=	=		
				184	-	-	-	P		
	QUALITATIVE FO	OD CONSUMPTION	4	17	Р					
	TOW			98	P	-	-	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

					PFOS;T-6295)					
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: I	M4 DOSE AYS 1-185	: 0.75 I	MG/KG/DAY DAY	'C' - CC AM OBS	OMMENTS I UNSCHE	ISTED AT END D 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
7										
(CONTINUED FROM PRE 105512 T 27		DE CONCUM	DELON							
105512 T 27	QUALITATIVE FOO	DD CONSUM.	PTION		102	P				
	LOW				102	P	-	-	=	
					110	P	-	-	-	
					116	P P P			_	
					125	P D			_	
					126	P	_	_	_	
					127	P	_	_	_	
					128	P				
					129	P	_	_	_	
					130	P	_	_	_	
					131	P	_	_	_	
					132	P	_	_	_	
					133	P P	_	_	_	
					134	P	_	_	_	
					155	P	_	_	_	
					156	P P P P	_	_	_	
					157	P	_	_	_	
					158	P	_	_	_	
					159	P	_	_	_	
					160	P	-	_	_	
					161	P	-	-	_	
					162	P	-	_	_	
					164	P	-	-	-	
					168	P P P	-	-	_	
					174	P	-	-	-	
					175	P	-	-	-	
					176	P	-	-	-	
					178	P	-	-	-	
					179	P	-	-	_	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS	

ANIMAL DEATH WINDER CODE I	DEATH	QUALIFIER	GROUP:	M4 DAYS 1	DOSE:	0.75 N	MG/KG/DAY DAY	'C' - C' AM OBS	OMMENTS LI UNSCHED	STED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
I05512 T	27	QUALITATIVE FOO LOW	D CONSU	MPTION			183	P	-	=	=	
I05522 U	79	EXCRETION MUCOID FECES					179	P	-	-	-	
		NORMAL										
		NO REMARKABLE	OBSERV	ATIONS			1	P	_	_	_	
							8	P	_	_	_	
							15	P	-	-	_	
							22	P	-	-	_	
							29	P	-	-	-	
							36	P	-	-	_	
							43 50	P	-	-	_	
							50	P	-	-	_	
							57	P	-	-	_	
							64	P	_	_	_	
							71	P	_	_	_	
							78	P	_	_	_	
							85	P	-	_	_	
							92	P	-	_	_	
							99	P	-	_	_	
							106	P	-	-	-	
							113	P	-	-	-	
							120	P	-	-	-	
							127	P	-	_	_	
							134	P	-	_	_	
							141	P	-	-	_	
							148	P	_	-	_	
							155	P	-	-	_	
							162	P	_	_	_	
							169	P	_	_	_	
								_				

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		26-WEEK CAPSU ACID POTA				CTANE SULFON: OLGUS MONKEYS			
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: M4	.75 MG/KG/	DAY DAY	'C' - C' AM OBS			OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PRE	VIOUS PAGE)		 		.======				
I05522 U 79	NORMAL NO REMARKABLE	ORSEDVATIONS		176	Р	_	_	_	
	NO KENAKKABEE	OBBERVATIONS		183	P	-	-	-	
	QUALITATIVE FOC	D CONSUMPTION		102	P	_	_	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	GROUP	STUDY DAY WK	CATEGORY KEYWORD QUALIFIER	FREE-TEXT COMMENT
105509	M4	155 23	APPEARANCE OTHER	APTER DOSING ANIMAL BECAME RECUMBENT. VET WAS CALLED. ANIMAL DIED PRIOR TO VET EXAM.

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: P1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
ANIMAL DEATH WK OF KEYWORD
NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY

CATEGORY
GROUP: P1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
AM OBS UNSCHED 30-90 OB DISPATCH
DAYS 1-185 DAY 105529 P 79 APPEARANCE APPEARS DEHYDRATED BEHAVIOR HYPOACTIVE <UNSPECIFIED> 6 7 8 P DISCHARGE NASAL CLEAR 56789 ORAL CLOUDY 6785678 EXCESSIVE SALIVATION EXCRETION LIQUID FECES

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NON-FORMED FECES

SKIN & PELAGE ALOPECIA FEET

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: P1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
ANIMAL DEATH WK OF NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY

(CONTINUED FROM PREVIOUS PAGE)

105529 P 79 EXCRETION LIQUID FECES 40 - - P - - P - - P - - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - - P - P - - P - P - - P - P - - P - P - - P - P - P - P - - P - P - P - - P

40 41 42 43 44 65 66 70 90 101 102 71 73 77 103 115 105 106 107 108 109 110

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM	SALT (PFOS;T-6295)	IN CYNOM	OLGUS MON	NKEYS		
CATEGORY ANIMAL DEATH WK OF KEYWORD	GROUP: F1 DOSE	: 0 MG/KG/DAY	'C' - C	OMMENTS I UNSCHI	LISTED AT E	ND OF OBSERVATION	ONS FOR SEX/GROUP
NUMBER CODE DEATH QUALIFIE	R DAYS 1-185	DAY					
(CONTINUED FROM PREVIOUS PAGE) 105529 P 79 SKIN & PELAG ALOPECIA FEET		112 113 114 115 117 118 119 120 121 122 124 125 126 127 128 129 130					
		133 134 135 136 137 138	P P P P P	- - - - -	P P P P	- - - -	
		139 140 142	P P P	-	P P P	- - -	
		143 146	P P	-	P P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	DEATH	MK OF	KEKMODD				'C'	- COMMENTS	LISTED AT EN	D OF OBSERVATION	S FOR SEX/GROUP
NUMBER			QUALIFIER	DAYS	1-185	DAY		ODD OMBCI	100 30-30 0	b bibirich	
			VIOUS PAGE)								
I05529	P	79	SKIN & PELAGE ALOPECIA								
			FEET			1.45	P		P		
			PEET			148			-		
						149	P P P P		- 66666		
						150	P	_	P	_	
						151	P	_	P	_	
						152	P	_	P	_	
						153	P	_	P	_	
						154	P P P	_	_	_	
						155	P	-	-	-	
						156	P	-	-	-	
						157	P	-	- 6.4444444	-	
						158	-	-	P	-	
						162	P P	-	P	_	
						163	P	-	P	-	
						164	P P	=	P	-	
						165	P	-	P	-	
						166	P	-	P	_	
						167	P P P	-	P	-	
						168	P	-	P	-	
						169	P P P P	-	P	-	
						170	P	-	₽	-	
						171	P	-	₽	-	
						172	Ę	-	₹	-	
						173	P	-	P P	-	
						174 175	Ę	-	5	-	
						175 176	P P	-	5	-	
						176 177	P	-	មាចមាចមាចមាច	-	
						178	P	-	P	-	
						179	P		P	_	
						1/9	P	-	E'	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT (P	FOS;T-6295)	IN CYNOM	OLGUS MON	KEYS		
ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIF		DAY	AM OBS	UNSCHE	ISTED AT E	ND OF OBSERVATIONS FOR SEX/ODB DISPATCH	GROUP
(CONTINUED FROM PREVIOUS PAGE) 105529 P 79 SKIN & PEL ALOPECIA							
FEET		180	P	-	P	-	
		181	-	-	P	_	
		182	P	_	P	_	
		183	P P P	_	P P P P	_	
		184	Þ	_	_	_	
		185	P	_	_	_	
LIMBS-	HIND	92	- 1	_	D	_	
EITES	11110	93	_	_		_	
		94	P P P	_	Ď	_	
		95	D	_	D		
		96	D	_	D		
		98	D.		E D		
		99	Ē.		5		
		100	P P P	_	-	-	
		101	P	-	P	-	
			P	-		-	
		102	P	-	P	=	
		142	-	-	P	-	
		144	-	-	р р р р	-	
TAIL		134	P P P	-	P	-	
		135	P	-	P	-	
		136	Ь	-	Р	=	
		137	P P P P	-		=	
		138	P	-	-	=	
		139	P	-	P	-	
		140	P	-	P	-	
		142		-	- P P P P	-	
		143	P	-	P	-	
		146	P	-	P	-	
		147	P	-	P	-	
		148	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP: F1	DOSE: 0 MG/	KG/DAY	'C' - C	OMMENTS I	ISTED AT END	OF OBSERVATIONS	FOR SEX/GROUP
NUMBER CODE DEATH	QUALIFIER	DAYS		DAY				DISPAICH	
(CONTINUED FROM PRE									
105529 P 79	SKIN & PELAGE ALOPECIA								
	TAIL			149	P		P		
	IAIL			150	D D	_	P.	-	
				151	P D	_	D D	_	
				152	P P P P	_	P P P	_	
				153	5		. D		
				154	P.	=	F	=	
				155	P	_	-	-	
				156	P	- 2			
				157	P		P	Ξ	
				158	-		P		
				162	P	_	P	_	
				163	P	_	P	_	
				164	P		÷	_	
				165	P		Ď	_	
				166	P	_	Ď	_	
				167	P		D D	Ξ.	
				168	P	_	D	_	
				169	P	_	D	_	
				170	P		P		
				171	P	_	Ď	_	
				172	D	_	P P P	_	
				173	P P P	_	Ď	_	
				174	Ď	_	P	_	
				175	P	_	P	_	
				176	P	_	P	_	
				177	P	_	Ď	_	
				178	Ď	_	Ď	_	
				179	P P	_	P	_	
				100	D.		5		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		ACID POT	ASSIUM SALT (PFOS	;T-6295)	IN CYNOMOI	LGUS MONKEY	S		
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F1 DAYS		DAY		MMENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PRE	VIOUS PAGE) SKIN & PELAGE ALOPECIA								
	TAIL			182	D	_	D	_	
	TATE			183	E D	_	E D	_	
				184	P P P	-	P	-	
					P	-	-	-	
				185	P	-	-	-	
	NORMAL								
	NO REMARKABLE	ODCEDUATION	-	1	D				
	ALIGAMMANAMEN ON	ODDEKANTION	•	15	P P P	-	-	-	
				12	E	-	-	-	
				22	Р	-	-	-	
				36	P	-	-	-	
				50	P	-	-	-	
				57	P	_	_	_	
				64	P	_	_	_	
				78	P	_	_	_	
				85	P	_	_	_	
				92	Ď.				
				141	P	-	-	-	
				141	P	-	-	-	
	QUALITATIVE FOO	D CONSUMPTION	J						
	LOW	D COMBONIETTO	•	5	D	_	_	_	
	LOW			5 8	D.	=	_	-	
				•	<u> </u>	-	-	-	
				41	P	-	-	-	
				42	P	-	-	=	
				41 42 69	P	-	-	_	
				72	000000	-	-	=	
				73	P	_	-	-	
				75	P	_	_	_	
				102	P	_	_	_	
				102	=				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY G KEYWORD QUALIFIER		DOSE:	0 MG/KG/DA	y DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
105530	Т	27	DISCHARGE VOMITUS PARTIAL CAPSU APPEARS TO BE M.	LE ENSTRUAT	NG		97 39 40 92 176 180	<u>-</u>	-	P P - -	- - - -	
			EXCRETION DISCOLORED FECER RED IN COLOR LIQUID FECES	S			28 27 28 29 31 32 33 34 35 36 37 38 40	P P P P - P P P P P P P P P P P P P P P				
			MUCOID FECES NON-FORMED FECE	S			49 50 51 55 28 12 31	P P P P P P P P P P		- P - -		

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				CITY STUDY WITE					PAGE: 43	
NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F1 DAYS :	L-185	DAY	AM OBS	COMMENTS L UNSCHE	ISTED AT EN D 30-90 (ND OF OBSERVA OB DISPATCH	TIONS FOR SEX/C	GROUP
(CONTINUED FROM PRE				41 54 55 57	P P P P	- - - - -	- - - - -	- - - -		
	SKIN & PELAGE BROKEN SKIN MOUTH			10 12 15 22 23 25 26 27 28 29 30	ים יטי טי		0.1 1 D D D D D D D D			
	NORMAL NO REMARKABLI	C OBSERVATION:	5	1 8 43 64 71 78 85 99 106 113	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-	- - - - - - -	-		

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			CITY STUDY WITH P				P <i>)</i>	AGE:	44
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GRO KEYWORD QUALIFIER	UP: F1 DAYS 1	MG/KG/DAY	'C' - CC AM OBS	OMMENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR	SEX/GROUP
(CONTINUED FROM PRE									
I05530 T 27	NORMAL		400	_					
	NO REMARKABLE OBS	ERVATIONS	120	P	-	_	-		
			127	P P	-	-	-		
			134		-	-	-		
			141	P	-	-	-		
			148	P	-	-	-		
			155	P	-	-	-		
			162	P P	-	-	-		
			169		-	-	-		
			183	P P	-	-	- P		
			184	P	-	-	P		
	QUALITATIVE FOOD COL	ALCHMIDIT ON							
	LOW FOOD CO.	NSUMPTION	26	ъ.					
	LCW .		27	E D	_	_	_		
			29	P P P	_	_	_		
			141	D.	_	-	-		
			141	P	-	-	=		
I05531 T 27	DISCHARGE								
	VOMITUS		150						
	CONTAINING FOOD		179 176	P P	-	-	-		
	APPEARS TO BE MEN	STRUATING	1.76	P	-	-	-		
	NORMAL								
	NO REMARKABLE OBS	PRINTENIE	1	P					
	NO REMARKABLE OBS	PUALICINS	8	P		_	_		
			15	P	_	_	_		
			22	P	-	-			
			29	5	-	-			
			36	P D	-	_			
			36	5	-	-	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT	(PFOS;T-6295)	IN CYNOMO	LGUS MONKEY	(S	
CATEGORY ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIE		G/KG/DAY DAY	'C' - CO AM OBS	MMENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PREVIOUS PAGE) 105531 T 27 NORMAL						
	BLE OBSERVATIONS	57	P	_	_	_
		64	P	_	_	-
		71	P	_	_	_
		71 78 85 92 99	0.0000000000000000000000000000000000000	_	-	_
		85	P	-	-	-
		92	P	_	-	=
		99	P	-	-	-
		106	P	-	-	-
		113		-	-	-
		120	P	-	-	-
		127	P	-	-	-
		134	P	-	-	-
		141	P	-	-	-
		148	P P P P P P P	-	-	=
		155	P	-	-	-
		162		-	-	=
		169	P	-	-	=
		183	P	-	-	<u>-</u>
		185	P	-	-	P
0113.757.557	TOOR GOVERNMENTON					
	FOOD CONSUMPTION		-			
LOW		141	P P	-	-	-
		179	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	DEATH	WK OF	CATEGORY KEYWORD	GROUP: F1 DOS	E: 0 MG/KG/DAY	7	C' - COM	MENTS LIST	ED AT END	OF OBSERVATIONS FOR SE	X/GROUP
NUMBER				DAYS 1-185	DAY						
105535	TP.	27	DISCHARGE								
103333	1	21	APPEARS TO BE	MENSTRUATING	37	_		_	P	_	
			111111111111111111111111111111111111111	770770777777	3.8	_		_	_	_	
					108	3 Ē	,	_	P	_	
					137	Ž	,	_	P	_	
					138	3 E	•	-	-	_	
					166	5 E	•	-	P	-	
					167	7 E	•	-	P	-	
			SKIN & PELAGE								
			RED SKIN								
			LIMB-FRONT-	RIGHT	22	-		-	P P	-	
					23			-	P	-	
					24	E	•	-	P	=	
			SCAB(S)			_					
			LIMB-FRONT-		183			-	P P	-	
			LIMB-FRONT-	RIGHT	22	-		-	₽	=	
					23			-	P	-	
					24	E	•	-	P	-	
			NORMAL								
			NO REMARKABLE	OD GEDULET ONG	-	-					
			NO REMARKABLE	OBSERVATIONS	8		,	-	-	-	
					0			-	-	=	
					15 22			-	-	-	
					29	E E E		-	_	=	
					36	Ē	,	-	-	_	
					43	- -		-	-		
					50 50	E		-	-		
					50	-		-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID P	OTASSIUM SALT	(PFOS;T-6295)	IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: F1 D KEYWORD QUALIFIER DAYS 1-1	OOSE: 0 MG/KG/DAY	'C' - (AM OBS	COMMENTS LI UNSCHEE	STED AT ENI 30-90 OF	OF OBSERVATIONS FOR SEX DISPATCH	/GROUP
(CONTINUED FROM PRI							
I05535 T 27	NORMAL		_				
	NO REMARKABLE OBSERVATIONS	78	Ь	-	-	-	
		85		-	-	-	
		92	P	-	-	-	
		99	P	-	-	-	
		106	P	-	-	-	
		113	P	-	-	-	
		120	₽	-	-	-	
		127	P	-	-	-	
		134	P	-	-	-	
		141	P P	-	-	-	
		148	P	-	-	-	
		155	P	-	-	-	
		162	P	-	-	-	
		169	P	-	-	-	
		176	P	-	-	-	
		185	P	-	-	P	
I05544 T 27	DISCHARGE VOMITUS						
	CONTAINING FOOD	141	P	-	-	-	
	PARTIAL CAPSULE	29	-	-	P P P P	-	
		33	-	-	P	=	
		34	-	-	P	=	
		66	-	-	P	=	
		117	_	_	P	-	
		141	-	-	P	-	
	DISCHARGE UNKNOWN SOURCE FOUND IN PAN						
	RED IN COLOR	112	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: P1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AN OBS UNSCHED 30-90 OB DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105544 T 27 NORMAL NO REMARKABLE OBSERVATIONS 1 8 15229 5574 7785 9906 1120 11348 11562 11676 1183 QUALITATIVE FOOD CONSUMPTION LOW

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS CATECORY GROUP: F1 DOSE: 0 MG/KG/DA
ANIMAL DEATH WK OF KEYWORD
NUMBER CODE DEATH QUALIFIER DAYS 1-185

(CONTINUED FROM PREVIOUS PAGE)
105544 T 27 QUALITATIVE FOOD CONSUMPTION
LOW GROUP: F1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH 79 DISCHARGE
VOMITUS
INTACT CAPSULE
PARTIAL CAPSULE
APPEARS TO BE MENSTRUATING I05549 P 111 97 175 SKIN & PELAGE BROKEN SKIN HEAD-CRANIAL PERI-ORBITAL-LEFT 3 7 8 15 NORMAL NO REMARKABLE OBSERVATIONS 1 22 29 36 43 50 57 64 71 78

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS												
		ACID POTA	SSIUM SALT (PFOS;	r-6295)	IN CYNOMOL	GUS MONKEY	S 					
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F1 DAYS 1	DOSE: 0 MG/KG/DA	y DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP			
(CONTINUED FROM PRE 105549 P 79	VIOUS PAGE) NORMAL											
	NO REMARKABLE	OBSERVATIONS		85	P	-	_	_				
				92	P P	_	-	_				
				99	P P	-	-	-				
				106	P	-	-	-				
				113	P	-	-	-				
				120	P	-	-	-				
				127	P	-	-	-				
				134	P	-	-	-				
				141	P	-	-	-				
				148	P	-	-	-				
				155	P	-	-	-				
				162	P	-	-	-				
				169	P	-	-	-				
				176	P	-	-	=				
				183	P	-	-	-				
	QUALITATIVE FOO	D CONSUMPTION										
	LOW			141	P	_	-	_				
				175	P	_	-	-				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F2 DOSE: 0.03 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH

NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY 105537 T 27 DISCHARGE VOMITUS WHITE IN COLOR APPEARS TO BE MENSTRUATING 1 45 46 47 48 49 72 73 74 75 104 105 106 169 SKIN & PELAGE BROKEN SKIN HEAD-MAXILLARY-RIGHT 50 52 8 9 10 3 4 6 7 PERI-ORBITAL-LEFT PERI-ORBITAL-RIGHT

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS													
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	F2 DAYS 1	DOSE:	0.03	MG/KG/DAY DAY	'C' - AM OB	COMMENTS LI S UNSCHED	STED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP		
(CONTINUED FROM PRE 105537 T 27													
	NORMAL												
	NO REMARKABLE	OBCEDU	ATTONG			1	D			_			
	NO KEMAKKADEE	ODDERV	MITOIND			15	Ď		_				
						22	P P P	- - - - -	_	_			
						29	P	_	_	_			
						36	P	_	_	_			
						43	P	_	_	_			
						50	P	-	-	_			
						57	P	-	-	_			
						64	P	-	-	_			
						71	P	-	-	_			
						78 85 92	P	-	-	=			
						85	P	-	-	-			
						92	P P P	-	-	-			
						99	P	-	-	=			
						113	P	-	-	_			
						120	P	-	-	-			
						127	P	-	-	_			
						134	P	-	-	-			
						141	P	-	-	-			
						148	P	-	-	-			
						155	P P	=	-	-			
						162	P	=	-	-			
						176	P	-	-	-			
						183	P	-	-	-			
						184	P	-	-	P			

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PAGE: 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PROS.T-6295) IN CYNOMOLGUS MONKEYS	53

ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER DAYS 1-185	3 MG/KG/DAY DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
I05541 T 27	DISCHARGE APPEARS TO BE MENSTRUATING	99	=	-	P	-
		102 152 154	P - -	-	P P	-
	EXCRETION FEW FECES	141	P	-	-	-
	SKIN & PELAGE BROKEN SKIN PERI-ORBITAL-RIGHT	98 99 102	- P P	- - -	P P -	
	NORMAL NO REMARKABLE OBSERVATIONS	1 8	P P P	- -	- -	<u>-</u>
		15 36 50 57	P P	- -	-	-
		64 71 78	P P P P	= = = -	- - -	-
		85 92 106	P P	-	-	- - -
		120 127 134 148	P P P	-	- - -	- -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC
ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS CATECORY GROUP: F2 DOSE: 0.03 MG/KG
ANIMAL DEATH WK OF KEYWORD
NUMBER CODE DEATH QUALIFIER DAYS 1-185

(CONTINUED FROM PREVIOUS PAGE)
105541 T 27 NORMAL
NO REMARKABLE OBSERVATIONS 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH GROUP: F2 DOSE: 0.03 MG/KG/DAY QUALITATIVE FOOD CONSUMPTION LOW 3 22 28 29 43 55 76 87 113 140 169 174 179 105547 T 27 DISCHARGE APPEARS TO BE MENSTRUATING Ρ EXCRETION FEW FECES

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
CATEGORY ANIMAL DEATH WK OF KEYWORD	GROUP: F2 DOSE:	0.03 MG/KG/DAY	'C' - AM OBS	COMMENTS L	ISTED AT E	ND OF OBSERVATION	IS FOR SEX/GROUP			
NUMBER CODE DEATH QUALIFIER	DAYS 1-185	DAY								
(CONTINUED FROM PREVIOUS PAGE)										
I05547 T 27 EXCRETION										
FEW FECES		151	P	-	-	=				
		152	P P P P	-	-	_				
		156	P	-	-	-				
		168	P	-	-	-				
NO FECES		154	P	-	-	-				
		155	P	-	-	_				
NON-FORMED	FECES	178	P	-	-	_				
		181	-	-	P	_				
SKIN & PELAGE										
BROKEN SKIN										
HEAD-MAXI	LLARY-LEFT	170	P P P	-	P	_				
		171	P	-	P	_				
		172	P	-	P	_				
		173		_	P	_				
		174	P	_	P P P P	=				
		175	P	_	_	-				
SCAB(S)										
	LLARY-LEFT	176	P	_	_	-				
		178	P	_	P	_				
NORMAL										
	LE OBSERVATIONS	1	P	_	_	=				
110 11111111111111111111111111111111111		8	P	_	_	=				
		15	P	_	_	_				
		22	- D	_	_	_				
		1 8 15 22 29	P P P P	_	_	_				
		36	5	_	_	_				
		50	D D		_	_				

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP	: F2 DAYS 1	-185		/KG/DAY DAY		COMMENTS LI S UNSCHEI	STED AT END	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PREV	/TOUS PAGE)										
	NORMAL										
	NO REMARKABLE	OBSERV	ZATIONS			71 78	P	-	-	_	
						78	P	-	_	_	
						85 92	P	-	-	-	
						92	P	-	-	-	
						106	P	-	-	-	
						113	P	-	-	-	
						134	P	-	-	-	
						141	P	-	-	-	
						148	P	-	-	-	
						162	P	-	-	-	
						169	P	-	-	-	
						183	P	-	-	-	
						185	P		-	P	
		D 001101									
	QUALITATIVE FOO	D CONS	DMELION				_				
	LOW					17	P	-	-	-	
						41	P	-	-	-	
						43 55	E	-	-	-	
						55 57	P	-	-	-	
						66	P	-	-	-	
							E P	-	-	-	
						99 120	Ę	-	-	-	
							Ę	-	-	-	
						121 127	P P	-	-	-	
						134	5	-	-	-	
						134		-	-	-	
						141	P	-	-	-	
						150	P	-	-	-	
						130	Ē	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL			KEYWORD			0.03 1		'C' - C	COMMENTS L UNSCHE	ISTED AT E	ND OF OBSERVATI OB DISPATCH	ONS FOR SEX/GROUP
NUMBER	CODE	DEATH	QUALIFIER	DAYS			DAY					
(CONTI	MIED E	BOW DEE.	 VIOUS PAGE)									
105547		27	QUALITATIVE FOC	D CONSUMPTIO	N							
			LOW				154	P	-	-	-	
							155	P	-	-	_	
							156	P P	-	-	-	
							160	P	-	-	-	
							161	P	-	-	-	
							162	P P	-	-	-	
							165	₽	-	-	-	
							167	P	-	-	-	
							168	P	-	-	-	
							169	P	-	-	-	
							170 171	P	-	-	-	
							174	P	-	-	-	
							175	P P	-	-	=	
							179	P			Ξ	
							184	P			Ξ	
							104	-				
105550	т	27	DISCHARGE									
			APPEARS TO BE	MENSTRUATIN	G		91	_	-	P	_	
							92	P	-	-	_	
			NORMAL									
			NO REMARKABLE	OBSERVATION	S		1	P P P	-	-	-	
							8	P	-	-	-	
							15 22	P	-	-	-	
							22	P	-	-	-	
							29	P	-	-	-	
							36	P	-	-	-	
							4.3	P	-	-	-	
							50	P	-	-	-	
							57	P	-	-	-	

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TIEGEMEN

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC												
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS												
ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP: F2	DOSE	: 0.03	MG/KG/DAY	'C' - AM OBS	COMMENTS LIS	TED AT END 30-90 OB	OF OBSERVATIONS	FOR SEX/GROUP		
NUMBER CODE DEATH	QUALIFIER	DAY	S 1-185		DAY	An Obb	ONSCILLE	30-30 05	DIDIRICH			
(CONTINUED FROM PRE	VIOUC DACE											
105550 T 27	NORMAL											
100000 1 0,	NO REMARKABLE	OBSERVATI	ONS		64	P	_	_	_			
					71	P P P P	-	-	_			
					78	P	-	-	-			
					85	P	-	-	-			
					99	P	-	-	-			
					106	P	_	-	-			
					113	P	_	_	_			
					120	P	_	_	_			
					127	P	_	_	_			
					134	P	_	_	_			
					141	P	_	_	_			
					148	P	_	_	_			
					155	P	_	_	_			
					162	P P	_	_	_			
					169	Ď	_	_	_			
					176	Ď	_	_	_			
					183	P						
					185	P		_	P			
					10.1	E			F			
	QUALITATIVE FOC	D CONSUMPT	TON									
	LOW				3	P	_	_	_			
	20				141	P	_	_	_			
					179	P P	_	_	_			
					1,5	-						

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			KEYWORD QUALIFIER	DAYS	1-185	0.15 MG/KG	DAY	AM OBS	MENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS F DISPATCH	OR SEX/GROUP
I05532	Т	27	SKIN & PELAGE									
			BROKEN SKIN									
			HEAD-CRANIAL				2	P P -	-	P P P P	-	
			PERI-ORBITAL-RIG	ΗT			3 31 32	P	-	P	-	
							31	-	-	P	-	
							32	P	-	P	-	
							33	-	-	P	-	
			MODELLE									
			NORMAL				-	-				
			NO REMARKABLE OBSE	RVATTO.	NS		1	P P P	-	-	-	
							8	P	-	-	-	
							15	P	-	-	-	
							22	P	-	-	-	
							36	P	-	-	-	
							43 50	P P P P	-	-	-	
							50	P	-	-	-	
							57	P	-	-	-	
							64	P	-	-	-	
							71	P	-	-	-	
							92	P	_	-	-	
							99	P	-	-	-	
							106	P	-	-	-	
							113	P	-	-	=	
							127	P	_	_	=	
							134	P	=	-	-	
							141	P	_	-	_	
							148	P	_	_	_	
							155	P	_	_	_	
							162	P P	_	_	_	
							169	P	_	_	_	
							176	P	_	_	=	
							183	P	_	_	_	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

	ACI	D POTASSIUM SALT (PF	OS;T-6295)	IN CYNOMOI	GUS MONKEY	S 	
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD	F3 DOSE: 0.15 MG	J/KG/DAY DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PRI 105532 T 27	EVIOUS PAGE) NORMAL NO REMARKABLE OBSERV	ATIONS	184	Р	-	-	P
	QUALITATIVE FOOD CONSUL	MPTION	26	P P P	-	-	-
			29 32 41	P P	-	-	-
			55 57	P P	-	-	-
			58 65	P P	-	-	-
			78 85	P P	-	-	-
			115 116 120	P P P	-	-	-
			126 141	P P	-	-	- -
			143 147	P P	-	-	- -
			150 155 162	P P P	-	-	-
			164 169	P P	-	-	- -
			170 174	P P	-	-	-
			175 176	P P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F3 DOSE: 0.15 MG/KG/DAY
KEYMORD
QUALIFIER DAYS 1-185 DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH ANIMAL DEATH WK OF NUMBER CODE DEATH 105538 T 27 DISCHARGE VOMITUS CONTAINING FOOD 43 NORMAL NO REMARKABLE OBSERVATIONS 1 8 15 229 557 77 85 929 1120 1134 1155 1169

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH 176 183 184 QUALITATIVE FOOD CONSUMPTION LOW 27 41 42 43 141 160 167 174 178 I05539 6 81 DISCHARGE APPEARS TO BE MENSTRUATING 71 Р EXCRETION FEW FECES 141 NORMAL NO REMARKABLE OBSERVATIONS 15 22 29 36 43 50

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

NTMZT.	DEATH	WK OF	CATEGORY	GROUP:	F3	DOSE: 0.15	MG/KG/DAY	'C' - CC	MMENTS LIS	TED AT END	OF OBSERVATIONS FOR SEX/GROUDISPATCH
UMBER	CODE	DEATH	QUALIFIER	I	DAYS 1	185	DAY	AM ODD	ONSCILLE	30-30 08	DIBERICH
			JIOUS PAGE)								
05539			NORMAL								
	-		NO REMARKABLE	OBSERVA	ATIONS		57	P		_	_
							64	P	_	_	_
							78	P	-	-	_
							92	P	-	-	_
							99	P	-	-	-
							106	P	_	-	-
							120	P	-	-	-
							134	P	-	-	-
							148	P	-	-	-
							155	P	-	-	-
							162	P	-	-	=
							169	P	-	-	=
							176	P	-	-	=
							183	P	-	=	-
			QUALITATIVE FOOL	CONSU	IPTTON.						
			LOW				17	P	_	_	-
							18	P	_	_	_
							24	P	_	_	_
							57	P	_	_	_
							60	P	-	-	-
							70	P	_	_	_
							85	P	_	_	_
							109	P	_	_	_
							113	P	_	_	-
							116	P	_	_	_
							127	P	_	_	_
							132	P	_	_	-
							133	P	_	-	_
							138	P		-	-
							139	P			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	DEATH		CATEGORY KEYWORD	GROUP:	F3	DOSE:	0.15 MG	/KG/DAY	'C' - CC AM OBS	MMENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROU
		DEATH	QUALIFIER		DAYS 1	-185		DAY					
			VIOUS PAGE)										
05539	NOED F		QUALITATIVE FO	D CONST	IMPTTON	1							
	-		LOW					150	P	_	_	_	
								155	-	_	_	_	
								158	P	-	-	_	
								159	P	-	-	_	
								162	P	-	-	-	
								171	P	-	-	-	
								174	P	-	-	-	
								179	P	-	-	-	
05545	T	27	DISCHARGE										
			APPEARS TO BE	E MENSTE	RUATING	;		136	P	-	P	-	
			EXCRETION NO FECES					51	P				
			NO FECES					21	P	-	-	=	
			NORMAL										
			NO REMARKABLE	OBSERV	ZATTONS			1	D	_	_	_	
			NO REMARKABLE	ODDBRO	TIT LOINE			8	P P P	_	_	_	
								15	P	_	_	_	
								22	P	_	_	_	
								29	P	-	-	_	
								36	P	_	_	-	
								50	P	-	-	_	
								57	P	-	-	=	
								64	P		-	-	
								71	P	-	-	-	
								85	P	-	-	-	
								92	P	-	-	-	
								99	P	-	-	-	
								106	P	-	-	-	
								127	P	-	-	_	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

			ACI	D POTAS	SSIUM SALT	(PFOS;T-6295)	IN CYNOMO	LGUS MONKEY	S	
ANIMAL DEAT		CATEGORY KEYWORD	GROUP:	FЗ	DOSE: 0.15	MG/KG/DAY	'C' - COI AM OBS	MMENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
NUMBER CODE	DEATH	QUALIFIER		DAYS 1	-185	DAY				
(CONTINUED	FROM PRE	VIOUS PAGE)								
I05545 T	27	NORMAL								
		NO REMARKABLE	OBSERV.	ATIONS		134	P	-	-	-
						141	P	-	-	-
						148	P	-	-	-
						155	P	-	-	-
						162	P	-	-	-
						176	P	-	-	-
						183	P	-	-	-
						184	P	-	-	P
		QUALITATIVE FOO	D CONSU	MPTION			_			
		LOW				25	P P	-	-	-
						3.0	P	-	-	-
						35 43 74	P P P P P	-	-	-
						43	P	-	-	-
						74	₽	-	-	-
						78	P	-	-	-
						86	P	-	-	-
						113	P	-	-	-
						116	P	-	-	-
						120	P	-	-	-
						141	P	-	-	-
						149	Ę	-	-	-
						150	P P	-	-	-
						155	P P	-	-	-
						161	2	-	-	-
						169	P.	-	-	-
						171	P	-	-	-
						174	P	-	-	-
						175	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC	
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS	

ANIMAL DEATH WK NUMBER CODE DE	OF F	TEGORY KEYWORD QUALIFIER		F3 I	0.15 MG	/KG/DAY DAY	'C' - C' AM OBS	OMMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM	PREVIOU	IS PAGE)			 						
	27 QUF	LITATIVE FOO	D CONSUM	IPTION							
	I	LOW				180	P	-	-	=	
						183	P	-	-	-	
I05548 T		CHARGE OMITUS									
		CONTAINING	FOOD			141	P	-	-	-	
	EXC	CRETION									
		FEW FECES				178	P	-	-	-	
	NOE	RMAL									
		O REMARKABLE	OBSERVA	TIONS		1	P	_	_	_	
						8	P	-	-	-	
						15	P	-	-	-	
						22	P	-	-	-	
						29	P	-	-	-	
						36	P	-	-	_	
						43	P	-	-	-	
						50	P	-	-	-	
						57	P	-	-	-	
						64	P	-	-	_	
						71	P	-	-	-	
						78	P	-	-	-	
						85	P	-	-	-	
						92	P	-	_	_	
						99	P	-	_	_	
						106	P	_	_	_	
						113	P	_	_	_	
						120	P	_	_	_	
						127	P	_	_	_	
						134	P	_	_	_	
						101	-				

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		26-WEEK	CAPSU	LE TOX	ICITY	STUDY WITH	PERFLUOROO	CTANE SULI	ONIC		PAGE: 67	
		ACI	D POTA	SSIUM	SALT	(PFOS;T-6295)	IN CYNOM	OLGUS MONI	EYS			
ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP:	F3	DOSE:	0.15	MG/KG/DAY	'C' - C AM OBS	OMMENTS LI	STED AT EN	ID OF OBSERVA	TIONS FOR SEX/	GROUP
NUMBER CODE DEATH	QUALIFIER		DAYS 1			DAY						
(CONTINUED FROM PRE												
	NORMAL											
100010 1 27	NO REMARKABLE	OBSERV	ATIONS	:		148	P	-	_	_		
						155	P	-	-	-		
						162	P	-	-	-		
						169	P	-	-	-		
						176	P	-	-	-		
						183 184	P P	-	-	- P		
						184	P	-	-	P		
	QUALITATIVE FOO	D CONST	MPTTON	ı								
	LOW					1.8	P	_	_	_		
						28	P	-	-	-		
						58	P	-	-	-		
						141	P	-	-	-		
						142	P	-	-	-		
						174	₽	-	-	-		
I05552 6 81	NORMAL											
103332 0 01	NO REMARKABLE	OBSERV	ZATTONS	:		1	P	_	_	_		
	iio italiiniidibaa	ODDER	TITE CITE			8	P	_	_	_		
						15	P	_	_	_		
						22	P	-	-	-		
						29	P	-	-	-		
						36	P	-	-	-		
						43	P	-	-	=		
						50	P	-	-	-		
						57 64	P P	-	-	-		
						64 71	P	-	-	-		
						78	P	-	_	-		
						85	P	_	_	_		
						92	P	_	_	_		
							-					

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Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS												
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F3 DAYS 1).15 MG	/KG/DAY DAY	'C' - C AM OBS	OMMENTS LIS UNSCHED		OF OBSERVATIONS DISPATCH	FOR SEX/GROUP		
(CONTINUED FROM PRE 105552 6 81	VIOUS PAGE) NORMAL											
	NO REMARKABLE	OBSERVATIONS			99	P	-	-	=			
					106	P	-	-	-			
					113	P	-	-	-			
					120	P	-	-	-			
					127	P	-	-	-			
					134	P	-	-	=			
					141	P	-	-	-			
					148	P	-	-	-			
					155	P	-	-	-			
					162	P	-	-	_			
					169	P P	-	-	-			
					176	P	-	-	=			
					183	P	-	-	-			
	QUALITATIVE FOO	D CONSUMPTION										
	LOW				2.0	P	_	_	_			
					141	P	-	_	_			
					156	P	-	_	-			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CODE	DEATH	KEYWORD	Г	DAYS 1	185	DAY	AM OBS	UNSCHED	30-90 OB		FOR SEX/GROUP
105533	Ū	79	DISCHARGE APPEARS TO BE MI	ENSTRI	JATING		39 40	P P		P -	<u>-</u>	
			SKIN & PELAGE ALOPECIA HEAD-CRANIAL				22 24	-	-	P P	Ī	
							27 28 29 30	P P P P	- - -	000000000 000	-	
							31 32 33 34	P P - P	- - -	P	- - -	
							35 36 37 38	P P - P	- - -	P P P	-	
							39 40 41 42	1 P P P P P	- - -	P -	- -	
							43 44 45	P -	-	P P P P P	- -	
							48 49 50 51	- - P P	-	P P P	-	
							52	P	-	P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

		ACID POT	ASSIUM SALT (PFOS;T-6295)	IN CYNOMO	LGUS MOI	NKEYS		
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEIWORD	GROUP: F4		MG/KG/DAY DAY	'C' - CC AM OBS	OMMENTS I	LISTED AT E	ND OF OBSERVATION	NS FOR SEX/GROUP
NUMBER CODE DEATH	QUALIFIER								
(CONTINUED FROM PRE 105533 U 79									
	HEAD-CRANI	A.T.		53	D	_	0.	_	
	HEAD-CKANI	BL.		54 55 56 57	0.0.0.0.0.0.0.0	_	D	_	
				55	D		Ď.	_	
				56	P	_	P	_	
				57	P P	_	P P	_	
				58	P	_	P	_	
				58 59	P	_	P	_	
				60	-	_	P	_	
				61	_	_	P	_	
				62	P	-	_	_	
	HEAD-MAXIL	LARY-LEFT		27	_	-	P	_	
				28	_	-	P	_	
				29	P	-	P	-	
				29 30	P P P	-	P	_	
				31	P	-	P	-	
				32	P	_	P	_	
				33	-	_	a a a a a a a a a	_	
				34	P P	_	P	=	
				35	P	-	P	-	
				36	P	-	P	-	
				37	-	-	P	=	
				38	P P P P	-	P	=	
				39	P	-	P	=	
				40	P	-	-	-	
				41	P	-	P	=	
				42	P	-	P	-	
				43	P	-	P	-	
				44	-	-	<u> </u>	-	
				45	-		P	-	
				48	-	-	P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		ACID POTASS	IUM SALT (PFOS	;T-6295)	IN CYNOMO	LGUS MONKE	YS		
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F4 D	OSE: 0.75 MG/K	G/DAY DAY	'C' - CO AM OBS	MMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUDISPATCH	JР
(CONTINUED FROM PRI 105533 U 79	EVIOUS PAGE) SKIN & PELAGE ALOPECIA		=======						
	HEAD-MAXIL	LARY-LEFT		49	_	_	P	_	
				5.0	P	_	P	-	
				51	P	_	P	-	
				52	P	_	P	-	
				51 52 53	P P P P	_	P	_	
				54	P	_	P	_	
				55	P	_	P	_	
				56	P	_	P	_	
				57	P	_	P	_	
				58	P	_	P	_	
				59	P	_	P	_	
				60	_	_	P	_	
				61	_	_	P	_	
				62	D	_	Ď	_	
				63	P P	_	D D	_	
	HEAD-MAXIL	LADV_DIGUT		27	-	_	D	_	
	HEAD-HARIE.	BART-RIGHT		28	_	_	D	_	
				29	P	_	D		
				30	P	_	P	_	
				31	P	_	D	_	
				32	P	=	D.	-	
				33	-	=	Ē.	_	
				34	D		Ď.		
				35	P P	-	Ē.	=	
				36	P	-	Ē.	-	
				37	-	-	r D	-	
				38	- P	-	P D	-	
				36	P	-	P D		

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Treachiere

								TANE SULFO			PAGE:	72
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER		DAYS	1-185	0.75	DAY	'C' - CC AM OBS	MMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	3 FOR	SEX/GROUP
(CONTINUED FROM PRE 105533 U 79						 						
	HEAD-MAXIL:	LARY-RIO	SHT			42	P	-	P	_		
						43	P	-	P	-		
						44	-	-	P P P	-		
						45	-	-	P	_		
						48	_	_	P	_		
						49	_	_	P	_		
						50	P	_	P P	_		
						51	P	_	P	_		
						52	P	_	P	_		
						53	P	_	P	_		
						54	P	_	P P P	_		
						55	D	_	Ď	_		
						56	P P	_	P P P	_		
						57	P		Ď			
						58	Ď	=	P	_		
						59	P		P			
						60	-		P			
						61			P			
						62	P	-	D.	-		
						63	D D	_	P	_		
						63	P	-	P	-		
	NORMAL											
	NO REMARKABLE	e oncen	ZZ TITOM	~		4	ъ.					
	NO REMARKABL	E OBSER	VALION	>		1	P P P	-	-	-		
							Ę	-	-	-		
						15 22	Ę	-	-	-		
								-	-	-		
						64	P	-	-	-		

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PAGE:
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F4 DOSE: 0.75 MG/KG/DAY 'C'-ANIMAL DEATH WK OF KEYWORD QUALIFIER DAYS 1-185 DAY

(CONTINUED FROM PREVIOUS PAGE)

105533 U 79 NORMAL NO REMARKABLE OBSERVATIONS 92 P 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH 92 99 106 113 120 127 134 141 148 155 162 169 176 183 QUALITATIVE FOOD CONSUMPTION LOW 141 Ρ DISCHARGE VOMITUS PARTIAL CAPSULE 27 I05534 T 6 10 72 59 98 APPEARS TO BE MENSTRUATING EXCRETION DISCOLORED FECES RED IN COLOR

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULFONIC
ACID POTASSIUM SALT (PROS.T-6295) IN CYNOMOLGUS MONKEYS

	1	ACID POTASSIUM SALT	r (PFOS;T-6295)	IN CYNOMO	LGUS MONKEY	S	
ANIMAL DEATH WK OF	CATEGORY GROU KEYWORD QUALIFIER	JP: F4 DOSE: 0.7	75 MG/KG/DAY DAY	'C' - COI AM OBS	MMENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
NUMBER CODE DEATH	QUALIFIER	DAIS I-165	DAI				
(CONTINUED FROM PRI 105534 T 27	EXCRETION DISCOLORED FECES						
	RED IN COLOR		150	P	-	-	-
	YELLOW IN COLOR		156	P P P P	-	-	-
	FEW FECES		102	P	-	-	-
			105	P	-	-	-
			107	P	-	-	-
			109		-	-	-
			113	P	-	-	-
			127	P	-	-	-
			163	P	-	-	-
	LIQUID FECES		92	P	-	-	-
			93	P	-	-	-
			136	P	-	-	=
			137	P	-	P	=
			138	P	-	-	-
			139	P	-	-	=
			141	P	-	P	=
			142	P	-	-	=
			143	P	-	-	=
			144	P	-	-	-
			156	P	-	-	-
			185	P	-	-	=
	MUCOID FECES		150	P	-	-	=
	NO FECES		49	P	-	-	=
	NON-FORMED FECES		110	P	-	-	=
			113	P	-	-	-
			127	P	-	-	-
			137	P	-	-	-
			140	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER DAYS 1	-185	DAY	AM OBS	UNSCHED	30-90 OB	DISPATCH	
(CONTINUED FROM PREVIOUS PAGE)							
105534 T 27 EXCRETION NON-FORMED FECES		146	D				
NON-FORMED FECES		146	P P	-	-	=	
		148	P	-	-	-	
		148	P P	-	-	-	
		150	P	_	_	_	
		150	F	_	_	_	
SKIN & PELAGE							
BROKEN SKIN							
PERI-ORBITAL-LEFT		70	-	-	P	_	
		71	P	-	P	_	
OTHER		9	PC	-	PC	-	
		10	PC	-	PC	-	
		12	PC	-	-	-	
		15	PC	-	PC	-	
NORMAL		_	_				
NO REMARKABLE OBSERVATIONS		1	P P	-	-	-	
		29		-	-	_	
		36	P	-	-	-	
		50	P	-	-	-	
		57	P	-	-	-	
		64 85	P	-	-	-	
		99	P	-	-	=	
		106	P P	-	-	=	
		155	P	-	-	-	
		162	<u> </u>	-	-	=	
		162	ومومومو	-	-	-	
		176	P	-	-	=	
		183	P	-	-	_	
		185	-		_	P	
		100	-	-	_	E	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											PAGE:	76
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER		DAYS 1	-185		DAY		OMMENTS L UNSCHE	ISTED AT END D 30-90 OB	OF OBSERVATION DISPATCH	NS FOR	SEX/GROUP
(CONTINUED FROM PRE 105534 T 27												
	OUALITATIVE FOO	D CONC	IMDULTON									
	LOW FOC	D CONS	DMELLON			2	D					
	LOW					3	P P P P		-			
						8	D		_			
						10	Þ	_	_	_		
						22	D D	_	_	_		
						24	P	_	_	_		
						38	P	_	_	_		
						4.3	P	_	_	_		
						49	P	_	_	_		
						60	P	_	_	_		
						63	P	_	_	_		
						66	P P	_	_	_		
						78	P	-	-	-		
						80	P	_	_	_		
						81	P P	_	_	_		
						92	P	_	_	_		
						93	P	_	_	-		
						98	P	-	_	-		
						100	P	-	-	-		
						102	P	_	_	_		
						105	P	-	-	-		
						109	P	-	-	-		
						113	P	-	-	_		
						116	P	-	_	-		
						120	P	_	-	_		
						122	P	-	-	_		
						125	P	-	-	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

				ACID POT		T (PFOS; T-6295)		OLGUS MON	KEYS		
ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP: F4		.75 MG/KG/DAY	'C' - C AM OBS	COMMENTS L UNSCHE	ISTED AT END D 30-90 OF	O OF OBSERVATIONS B DISPATCH	FOR SEX/GROUP
7											
			VIOUS PAGE)								
I05534	T	27	QUALITATIVE FOC	D CONSUMPTIO	N	129	P				
			LOW			133	P	-	-	=	
						134	P D	-	-	-	
						137	P P	_	_	_	
						137	P		_	_	
						141	P			Ξ	
						148	D D				
						149	P	- 2			
						150	P			Ξ	
						154	P		_		
						155	P	_	_	_	
						156	P	_	_	_	
						157	Þ	_	_	_	
						162	P	_	_	_	
						164	P	_	_	_	
						167	P	_	_	_	
						170	P	_	_	_	
						174	P	_	_	_	
						175	P	_	_	_	
						176	P	_	_	_	
						180	P	_	_	_	
						184	P	_	_	_	
							-				
I05536	Т	27	DISCHARGE VOMITUS CONTAINING	FOOD		141	P	_	_	_	
			PARTIAL CAP	SULE		3.0	-	-	- P	-	
			EXCRETION DISCOLORED FE RED IN COLO			69	-	_	P	-	

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PAGE:
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL DEATH WK OF NUMBER CODE DEATH CONTINUED FROM PREVIOUS PAGE)

(CONTINUED FROM PREVIOUS PAGE)

105536 T 27 EXCRETION FEW PECES LIQUID FRCES NON-FORMED FECES GROUP: F4 DOSE: 0.75 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH NORMAL NO REMARKABLE OBSERVATIONS

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DISCOLORED URINE GREEN IN COLOR

PAGE: '
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F4 DOSE: 0.75 MG/KG/DAY 1°C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105536 T 27 QUALITATIVE FOOD CONSUMPTION LOW 3 65 72 81 88 114 127 129 130 149 156 180 181 105540 T 27 DISCHARGE VOMITUS INTACT CAPSULE 99 EXCRETION
DISCOLORED FECES
RED IN COLOR 27 28

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYMOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH CONTINUED FROM PREVIOUS PAGE) ICONTINUED FROM PREVIOUS PAGE) ICONTINUED FROM PREVIOUS PAGE ICONTINUED FROM PREVIOU					AC	D POT	ASSIUM	SALT (PFOS	;T-6295)	IN CYNOMO	LGUS MON	KEYS		
NUMBER CODE DEATH QUALIFIER DAYS 1-185 DAY	ANIMAL	DEATH	WK OF	CATEGORY KEYWORD	GROUP	: F4	DOSE:	0.75 MG/K	G/DAY	'C' - CO AM OBS	MMENTS I	ISTED AT EN	D OF OBSERVATION B DISPATCH	S FOR SEX/GROUP
105540 T	NUMBER	CODE	DEATH	QUALIFIER		DAYS	1-185		DAY					
105540 T	(CONTI	MIED E	ROM PRE	VIOUS PAGE)										
GREEN IN COLOR FEW FECES 28 P	105540			EXCRETION										
FEW FECES 28 P									70					
MUCOID FECES 28 P P					LOR					P	-	-	-	
MUCOID FECES 28 - P				FEW FECES						P	-	-	-	
SKIN & PELAGE ALOPECIA DORSAL DORSAL-THORACIC 1				MIGOTE EBORG						P	-	_	-	
SKIN & PELAGE ALOPECIA DORSAL DORSAL-THORACIC 1				MUCCID FECES					20		-	P	-	
ALOPECIA DORSAL 1									29	P	-	-	-	
DORSAL 141 P				SKIN & PELAGE										
DORSAL-THORACIC 1				ALOPECIA										
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P				DORSAL					1	P	-	-	-	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									141	-	-	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P				DORSAL-THOR	ACIC				1	-	-	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									2	P	-	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									3	-	-	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									5	-	-	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									6	P	_	P	_	
9 P - P - 1 1 1 P - 1 P - 1 1 P P - 1 P P P P									7	P	_	P	_	
10 P - P - 111 P - 12 P - 12 P - 13 P - 15 P - 15 P - 16 P - 17 P									8	P	_	P	_	
10 P - P - 111 P - 12 P - 12 P - 13 P - 15 P - 15 P - 16 P - 17 P									9	P	_		_	
11 P - P - 12 P - P - 13 P - P - 14 P - P - 15 P - P - 16 P - P - 17 P - P - 17 P - P - 18 P - P - 19 P - 19 P - 20 P - P -										P	_		_	
15 P - P - 16 P - P - 17 P - P - 18 P - P - 19 P - 20 P - P -									11	P	_		_	
15 P - P - 16 P - P - 17 P - P - 18 P - P - 19 P - 20 P - P -									12		_	P	_	
15 P - P - 16 P - P - 17 P - P - 18 P - P - 19 P - 20 P - P -									13	P	_	P	_	
15 P - P - 16 P - P - 17 P - P - 18 P - P - 19 P - 20 P - P -									14	P	_	P	_	
16 P - P - 17 P - P - 18 P - P - 19 P - 20 P - P -									15	D D	_	Ď.	_	
											_	Ď		
											_	Ď	_	
											_	Ď	_	
										D	_	D D	_	
										D.	_	D D	=	
21 9 - 9 -											_		=	
									41	P	-	E'	-	

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Individual Clinical Observations Treatment

TIEGEMEN

					STUDY WITH F					PAGE:	81
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER		DOSE:	0.75	MG/KG/DAY DAY	'C' - AM OBS	COMMENTS LI UNSCHEI	ISTED AT END 30-90 OB	OF OBSERVATION DISPATCH	S FOR	SEX/GROUP
(CONTINUED FROM PRE 105540 T 27	VIOUS PAGE) SKIN & PELAGE ALOPECIA		 								
	DORSAL-THO:	RACIC			22	P	-	P	-		
					23	P	-	P	-		
					24	P P P	-	P P	-		
					25	P	-	P	-		
					26	P	_	P	_		
					27	P	_	P	_		
					28	P	_	P	_		
					29	P	_	P	_		
					30	P	_	P	_		
					31	P		P			
					32	P		P			
					33	P	_		_		
					34	P	-	Ę	=		
							-	E .	-		
					35	P	-	P	-		
					36	P	=	P	-		
					37	P	-	P	-		
					38	P	-	P	_		
					39	P	-	P	-		
					40	P	-	-	_		
					41	P	-	P	_		
					42	P	_	P	_		
					43	P	_	P	_		
					44	-	_	P	_		
					45	_	_	P	_		
					46	P	-	P	-		
					47	P	-	P	=		
					4.8	-	-	P	-		
					48	-	-	P	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

			ASSIUM SALT (PF					
ANIMAL DEATH WK OF NUMBER CODE DEATH	QUALIFIER	DAYS	1-185	DAY				OF OBSERVATIONS FOR SEX/GRODISPATCH
(CONTINUED FROM PRE								
I05540 T 27								
	DORSAL-THO	RACIC		142	P	_	P	_
	20110112 1110			143	P P P	_	P	-
				146	P	_	P P	_
				147	P	_	P	_
				148	P	-	P	_
				149	P P	_	P	_
				150	P	-	P	_
				151	P	-	P	-
				152	P	-	P	-
				153	P	-	P	_
				154	P	-	P	=
				155	P	-	P	-
				156	P	-	P	=
				157	P	-	₽	-
				158	P	-	P	=
				159	P	-	P	=
				160	P	_	P	=
				161	P	_	P	=
				162	P	-	P	-
				163	P	-	P	-
				164	P	-	P	=
				165	P P P	-	P	=
				166	P	-	P	=
				167	P	-	P	=
				168	P	_	P	-
				169	P	_	P	-
				170	P	_	P	-
				4.57.4	-		-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

			ASSIUM SALT (PFOS						
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	DAYS		DAY	AM OBS	OMMENTS UNSCH	LISTED AT END ED 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PRE 105540 T 27	VIOUS PAGE) SKIN & PELAGE								
	ALOPECIA								
	DORSAL-THO	RACIC		174	P	-	P	_	
				175	P P P	-	P P P P P P	_	
				176	P	-	P	_	
				177	P	-	P	_	
				178	P	-	P	_	
				179	P	_	P	_	
				180	P	_	P	_	
				181	P	_	P	_	
				182	Ď	_	P	_	
				183	P	_	P	_	
				184	P	_	P	_	
				185	P	_	±	P	
	DORSAL-THO	DACTO IPPT		57	Ē		P	F	
	DORBAL-THO	RACIC-LEFT		58	P	_	P	_	
				59	P	-	-	-	
				60	P	-	P P	-	
					2	-	P	-	
				61	P	-	P	-	
				62	P	-	P	-	
				63		-	P	-	
				64	P P P	-	P	-	
				65	P	-	₽	-	
				66	P	-	P	-	
				67	P	-	P	-	
				68	P	-	P	-	
				69	P	-	P	-	
				70	P	-	P	_	
				71	P	-	P	_	
				72	P	_	P	-	
				7.3	D)		D		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP: F4 DO	SE: 0.75 MG/KG/DA	Y 'C' - AM OI	- COMMENTS L BS UNSCHE	ISTED AT E	END OF OBSERV OB DISPATCH	ATIONS FOR SEX/GROUP
NUMBER CODE DEATH	QUALIFIER	DAYS 1-18	5 DA		DD ONDCIII	D 30-30	OD DIDIRICH	
(CONTINUED FROM PRE								
I05540 T 27	SKIN & PELAGE ALOPECIA							
	DORSAL-THO	DACIC-LEFT	76	P	_	P	_	
	BORDALI-THO	RACIC-BEF1	77	P		P		
			7.8	P	_	-	_	
			79	P	_	P	_	
			80	P	_	P	_	
			81	P	_	P	_	
			82	P	_	P	_	
			83	P	-	P	-	
			84	P	-	P	-	
			85	P	-	P	-	
			86	P	-	P	-	
			87	P	-	P	-	
			88	P	-	-	-	
			89	P	-	P	-	
			90	P	-	P	-	
			91	P	-	P	-	
			92	P	-	P	-	
			93	P	-	P	-	
			94	P	-	P	-	
			95	P	-	P	-	
			96	P	-	P	-	
			97	P	-	P	-	
			98	₽	-	P	=	
			99	P	-	P	-	
			10		-	P	-	
			10		-	P	-	
			10		-	P	-	
			10		-	P	-	
			10		-	P	-	
			10	5 P	-	P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: P4 DOSE: 0.75 MG/KG/DAY
ANIMAL DEATH WK OF
NUMBER CODE DEATH

(CONTINUED FROM PREVIOUS PAGE)
105540 T 27 SKIN & PELAGE
ALOPECIA
DORSAL-THORACIC-LEFT 106 P - P - P -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		26-WEEK CAP ACID PO	SULE TOXICI TASSIUM SAL	TY STUDY WITH F	ERFLUOROO:	CTANE SUL OLGUS MON	FONIC		
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER		DOSE: 0.	75 MG/KG/DAY DAY	'C' - C' AM OBS	OMMENTS L UNSCHE	ISTED AT EN	ND OF OBSERVATI DB DISPATCH	ONS FOR SEX/GROUP
(CONTINUED FROM PRE	VIOUS PAGE) SKIN & PELAGE ALOPECIA								==========
	DORSAL-THO	RACIC-LEFT		137	P	-	P	-	
				138	P P	-	P	-	
				139	P	-	P P	_	
				140	P	-	P	_	
	HEAD-ENTIR	E		1	P	-	P	-	
				2	P	-	P	-	
				3	-	-	P	-	
				5	-	-	P	-	
				6	P	-	P	-	
				7	P	-	P	_	
				8	P	-	P	-	
				9	P	-	P	-	
				10	P	-	P	-	
				11	P	-	P	-	
				12	P	-	P	-	
				13	P	-	P	_	
				14	P	-	P	-	
				15	P	-	P	-	
				16	P	-	P	-	
				17	P	-	P	-	
				18	P	-	P	-	
				19	P	-	P	-	
				20	P	-	P	-	
				21	P	-	P	-	
				22	P	-	₽	-	
				23	P	-	P	-	
				24	P	-	P	-	
				25	P	-	P	-	
				2.0	D)		D.		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POT	TASSIUM SALT	(PFOS;T-6295)	IN CYNC	MOLGUS MON	NKEYS		
CATEGORY GR ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER	DAYS	1-185	DAY	AM OBS	UNSCHI	LISTED AT END ED 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PREVIOUS PAGE) 105540 T 27 SKIN & PELAGE ALOPECIA								
HEAD-ENTIRE			28	P	-	P	-	
			29	P P P	-	P P P	_	
			30	P	-	P	-	
			31 32 33 34	P	-	P	-	
			32	P	-	P	-	
			33	P	-	P	-	
			34	P	-	P	-	
			35	P	-	P	-	
			36	P	-	P	-	
			37	P	-	P	-	
			38	P	-	P	-	
			39	P	-	P	-	
			40	P	-	-	-	
			41	P	-	P	_	
LIMB-HIND-LEFT			57	-	-	P P P	-	
			58	P	-	P	_	
			59	P P	-	P	_	
			60	P	-	P	_	
			61	P	-	P	_	
			62	P	-	P	_	
			63	D	-	P	_	
			64	P	-	P	_	
			65	P	_	P	_	
			66	P	_	P	_	
			67	P P	_	P	_	
			68	P	-	P	_	
			69	P	-	P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	DAYS	1-185		DAY	AM OBS	UNSCHED	30-90 OB	OF OBSERVATIONS FOR SEX/G DISPATCH	
(CONTINUED FROM PRE 105540 T 27										
		T 17 17 17 17 17 17 17 17 17 17 17 17 17			73			-		
	LIMB-HIND-	LEFT.				P	-	P	-	
					74	P P P P	-	P	-	
					76	₽	-	₽	-	
					77	₽	-	P	-	
					78	₽	-	-	-	
					79	₽	-	P	-	
					80	P	-	P	-	
					81	P	-	P	-	
					82	P	-	P	-	
					83	P	-	P	_	
					84	P	-	P	-	
					85	P	-	P	-	
					86	P	-	P	_	
					87	P	_	P	_	
					88	P	_	- 1	_	
					89	P P	_	P	_	
					90	P	_	P	_	
					91	P	_	P	_	
					92	P	_	P	_	
					93	P	_	P		
					94	P		P		
					95	P	-	P	=	
					96	P	-	P	=	
					96	P	-		-	
						Ę	-	P	-	
					98	P	-	Ę.	-	
					99	P	-	₽	-	
					100	P	-	P	=	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM	SALT (PFOS;T-6295)	IN CYNOMOLG	SUS MONKEYS	
CATEGORY ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER	GROUP: F4 DOSE:	: 0.75 MG/KG/DAY	'C' - COMM AM OBS	MENTS LISTED AT EN UNSCHED 30-90	ND OF OBSERVATIONS FOR SEX/GROUP OB DISPATCH
(CONTINUED FROM PREVIOUS PAGE) 105540 T 27 SKIN & PELAGE ALOPECIA LIMB-HIND-I	FERM	104			
	JEFT.		P		-
LIMBS-ALL		42	P	- <u>P</u>	-
		43	P	- P	-
		44	-	- P - P - P - P	-
		45	-	- P	-
		46	P	- P	-
		47	P	- P	-
		48	-	- P - P - P - P	-
		49	-	- P	-
		50	P P	- P	-
		51	P	- P	_
		52	P	- P	_
		53	P	- P	_
		53 54	P	- P - P	_
		55	P	_ P	_
		56	P		_
		57	D	I I	
LIMBS-FRONT	г	ĭ′	D	- P	
DINDS-PRON.		2	P	- P	
		2	F		
		3	-	- P - P - P	-
		5	_	- <u>F</u>	-
		<u> </u>	P P P	- <u>F</u>	-
		8	Ę	- <u>P</u>	-
			P		-
		9	P	- P	-
		10	P	- P	-
		11	P	- P	-
		12	P	- P - P - P - P	-
		13	P		-
		14	P	- P	=

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS							
ANIMAL DEATH WK	CATEGORY OF KEYWORD	GROUP: F4	DOSE: 0.75	MG/KG/DAY	'C' - CO AM OBS	OMMENTS L	ISTED AT E	ND OF OBSERVATI	ONS FOR SEX/GROUP
NUMBER CODE DEA		DAYS	1-185	DAY	111 020	01,50112	50 50	00 0101111011	
(CONTINUED FROM	DEDUTOUS DACE								
	7 SKIN & PELAGE								
100010 1 1	ALOPECIA								
	LIMBS-FRONT			15	P	-	P	-	
				16	P	-	P P P P	-	
				17	P	-	P	-	
				18	P	-	P	-	
				19	P	-	P	-	
				20	₽	-	P	-	
				21	P	-	P	-	
				22	P	-	P	-	
				23	P	-	P	-	
				24	P	-	P	-	
				25	P	-	P	-	
				26	P	-	P	-	
				27	P	-	P	-	
				28	P	-	P	-	
				29	P P P	-	P	-	
				3.0	P	_	P	_	
				31	P	-	P	_	
				32	P	_	P	_	
				33	P	-	P	-	
				34	P	-	P	-	
				35	P	-	P	-	
				36	P	-	P	-	
				37	P	-	P	-	
				38	P	_	P	_	
				39	P	-	P	_	
				40	P	_	-	_	
				41	P	_	P P	_	
	TAIL			145	_	_	P	_	
				1.47	D		Th.		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS.T-6295) IN CYNOMOLGUS MONKRYS

ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL DEAT	H MK OF	CATEGORY	GROUP: F4	DOSE:	0.75 MG/KG/I	DAY	'C' - COI	MMENTS LIS	TED AT END	O OF OBSERVATIONS FOR SEX/GROUDED DISPATCH	/GROUP
NUMBER CODE	DEATH	QUALIFIER	DAYS	1-185	1	DAY					
						165	P	-	P	-	
						166 167 168 169 170	P P P P P	-	0.0000000000000000000000000000000000000	-	
						171	P	_	P	-	
						172 173	P P	-	P	-	
						173 174	P		P D	_ <u>_</u>	
						175	P	-	p p	=	
						176	P	_	P	_	
						177	P	-	P	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
		CATEGORY	GROUP: F4 DOSE: 0.75 MG/KG/DAY			101 - 00	OMMENTS I	LISTED AT E	END OF OBSERVATIONS FOR SEX/GROU	
	DEATH WK (CODE DEAT		DAYS	1-185	DAY	AM OBS	UNSCHI	SD 30-90	OB DISPATCH	
COMPLE	TIED EDOM I	PREVIOUS PAGE)								
05540	T 2									
		ALOPECIA								
		TAIL			178	P	-	P	_	
					179	P P P P	-	0.0.0.0.0.0	_	
					180	P	-	P	_	
					181	P	-	P	_	
					182	P	-	P	-	
					183	P	-	P	_	
					184	P	-	P	_	
					185	P	-	-	P	
		QUALITATIVE FO	OD CONCUMPUTO	NI.						
		LOW LOW	JOD CONSUMPTIO	IN	17	P				
		LOW			17	P P	-	-	-	
					20 25 27	P P P	-	-	=	
					25	E	-	-	=	
					69	P	-	-	-	
					71	Ę	-	-	-	
					73	5	-	-	-	
					73 74	P D	-	-	-	
					78	P	-	-	-	
					80		-	-	-	
					80	P P P	-	-	-	
					85 87	Ę	-	-	-	
					120	Ę	-	-	-	
						P	-	-	-	
					132	P	-	-	-	
					137	P	-	-	-	
					141	P	-	-	-	
					155	P	-	-	-	
					179	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF	CATEGORY GROUP: F4 DOSE: 0 KEYWORD		'C' - COMM AM OBS	MENTS LISTE UNSCHED	ED AT END	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
NUMBER CODE DEATH	QUALIFIER DAYS 1-185	DAY				
I05542 U 79	DISCHARGE VOMITUS					
	INTACT CAPSULE	136	P	_	P	-
	PARTIAL CAPSULE	65	-	-	P	-
		78	-	-	P	-
		126	-	-	P	-
		131	-	-	P	-
	APPEARS TO BE MENSTRUATING	71	P	-	P	-
		115	P	-	-	-
		161	P	-	-	-
	EXCRETION	136 65 78 126 131 71 115				
	FEW FECES	155	P			
	PEW PECES	161	P			
		162	P	_	_	_
		102	-			
	SKIN & PELAGE					
	PALE SKIN					
	HEAD-ENTIRE	182	-	-	P	-
		183	P	-	-	-
		184	P	-	-	-
	NORMAL					
	NO REMARKABLE OBSERVATIONS	1	D			
	MO KEMAKABEE OBSEKVATIONS		D D	=	_	-
		15	D D	_	_	
		22	P P P P P P P P P P	_	_	_
		29	Þ	_	_	_
		50	p	_	_	_
		57	P	_	_	_
		64	P	_	_	_
		85	P	_	_	_
			-			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS:T-6295) IN CYNOMOLGUS MONKRYS

	DEATH WK C	CATEGORY F KEYWORD	GROUP:	F4	DOSE: 0.75	MG/KG/DAY	'C' - CO AM OBS	OMMENTS LIS UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GRODISPATCH
UMBER				DAYS 1		DAY				
ONTIN		REVIOUS PAGE)								
	U 79									
		NO REMARKABL	E OBSERV	ATTONS		99	P	_	_	=
						106	P	_	-	_
						113	P P P	-	-	_
						120	P	-	-	-
						127	P	-	-	-
						134	P	_	-	-
						141	P	-	-	-
						148	P	-	-	-
						169	P	-	-	-
						176	P	-	-	-
		QUALITATIVE FO	OD CONSU	MPTION			_			
		LOW				14	P	-	-	-
						36	P P P	-	-	-
						43	P	-	-	-
						49 57	P	-	-	-
						5 / 5 9	P	-	-	-
						60	P.	-	-	-
						65	P P	-	-	-
						78	P	-	_	-
						92	P	-	-	-
						98		=	_	_
						125	Ď.			
						134	Ď.	_	_	_
						139	P P P	_	_	_
						141	P	_	_	_
						142	P	_	_	_
						143	P	-	_	-
						154	P	_	_	_
						155	P	_	_	_

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	26-WEEK CAPSULE TOXICITY (P	AGE: 95
NUMBER CODE DEATH QUALIFIER	GROUP: F4 DOSE: 0.75 I	DAY	'C' - COM	MENTS LISTI UNSCHED	ED AT END	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PREVIOUS PAGE) 105542 U 79 QUALITATIVE FO LOW		161	P P P	- -	- -	- -	
I05551 T 27 DISCHARGE APPEARS TO E	E MENSTRUATING	43 44 45	- -				
EXCRETION FEW PECES		138 139 140 141 166 167 168	P		 - - - - - - - - - - - - - - - - - -	-	
FRW FECES SMALL FREES SKIN & PELAGE ALOPECIA LIMBS-ALL		161 49 1	P P	-	P P	_	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

Z5-WEER	CAPSULE TOXICITY STUDY WITH I	PERFECURSOCIANE SUBFONIC	
ACID	POTASSIUM SALT (PFOS;T-6295)) IN CYNOMOLGUS MONKEYS	

	WORD	F4 DOSE:	0.75 MG/KG/DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTINUED FROM PREVIOUS 105551 T 27 SKIN	PAGE) & PELAGE PECIA							
			_	_		_		
ч	IMBS-ALL		2	P	-	P D	-	
			3	-	-	P P	-	
			4	-	-		-	
			5	-	-	P	-	
			6	P	-	P	-	
			7	P	-	P	-	
			8	P	-	P	-	
			9	P	-	P	-	
			10	P	-	P	-	
			11	P	-	P	-	
			12	P	-	P	-	
			13	P	-	P	-	
			14	P	-	P	=	
			15	P	-	P	-	
			16	P	-	P		
			17	P	_	P	_	
			18	P	_	P	_	
			19	P	_	P	_	
			20	P	_	P	_	
			21	P	_	P	_	
			22	P	_	P	=	
			23	P	_	P	=	
			24	P	_	P	=	
			25	P	_	P	_	
			26	P	_	p p	_	
			27	P	_	P	_	
			28	P	_	D	_	
			29	P	_	D	_	
			30	D	_	D	_	
			31	P	-	P	=	
			31	P	-	r	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PROS.T-6295) IN CYNOMOLGUS MONKEYS

	ACID POTASSIUM	1 SALT (PFOS;T-6295)	IN CYNOMOLGUS MC	NKEYS	
ANIMAL DEATH WK OF KEYWORD			'C' - COMMENTS AM OBS UNSCH	LISTED AT END	O OF OBSERVATIONS FOR SEX/GROUP B DISPATCH
		DAY			
NUMBER CODE DEATH QUALIFIE		DAY 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	P		
		51 52 53 54 55	P - P - P -	P P P	- - -
		54	P -	P	=
		55 56	P - P -	P P	-
		57	P -	Þ	-
		58	P -	P	_
		59	P -	P	_
		60	P -	P	_
		61	P -	P	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

		ACID PO	PASSIUM SA	LT (PFOS;T-6:	295) IN CYN	IOMOLGUS MONK	eys 		
ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F4	DOSE: 0	.75 MG/KG/DA	AM OE			D OF OBSERVATION B DISPATCH	S FOR SEX/GROUP
(CONTINUED FROM PRE 105551 T 27	VIOUS PAGE) SKIN & PELAGE ALOPECIA LIMBS-ALL			62	P	-	P	-	

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Individual Clinical Observations Treatment

				STUDY WITH				:	PAGE: 99
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	DAYS	1-185	MG/KG/DAY DAY	AM OBS	COMMENTS L UNSCHE	ISTED AT END D 30-90 OB	OF OBSERVATION: DISPATCH	S FOR SEX/GROUP
(CONTINUED FROM PRE 105551 T 27	VIOUS PAGE) SKIN & PELAGE	 		 					
	ALOPECIA								
	LIMBS-ALL			92	P	-	P	-	
				93	P P P P P	-	P	-	
				94	P	-	P P P P	-	
				95	P	-	P	-	
				96	P	-	P	_	
				97	P	-	P	-	
				98	P	-	P	_	
				99	P	-	P	_	
				100	P	_	P	_	
				101	_	_	P	_	
				102	P	_	P	_	
				103	P	_	P	_	
				104	P	_	P	_	
				105	P	_	P P	_	
				106	P	_	P	_	
				107	P	_	P	_	
				108	P	_	P	Ξ	
				109	P	_	P	Ξ	
				110	P		P		
				111	P	_		_	
					5	-	P P P	-	
				112	P P	-	E E	-	
				113	Ę	-	Ę	-	
				114	P	-	P	-	
				115	P	-	P	-	
				116	Ξ	-	P	-	
				117	P	-	P	-	
				118	P	-	P	-	
				119	P	-	P	_	

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Individual Clinical Observations Treatment

			CICITY STUDY I					PAGE: 100
CATEGOR: ANIMAL DEATH WK OF KEYWO! NUMBER CODE DEATH OUA	Y GROUP RD LIFIER	: F4 DOSE	: 0.75 MG/KG/I	AY 'A'	C'-COMME MOBS U	NTS LISTED AT	END OF OBSERVAT: OB DISPATCH	IONS FOR SEX/GROUP
NONDER CODE DEATH QUA								
(CONTINUED FROM PREVIOUS PAGE 105551 T 27 SKIN & LALOPEG	GE) PELAGE							
LIM	BS-ALL			.22 P		P	-	
				.23 P	-	P	-	
				.24 P	-	P	-	
				.25 P		P	-	
				.26 P		. P	-	
				.27 P		. ₽	-	
				28 P	-	P	-	
				.29 -	-	P	-	
				.30 -	-	P	-	
			:	.31 -	-	P	-	
				32 P	-	P	-	
				.33 P	-	P	-	
				.34 P	-	P P	-	
				35 P	-	. Р	_	
				.36 P	_	P	_	
				.37 P		. P	_	
				38 P		. Р	_	
				39 P	_	P	_	
				40 P		. P	_	
				41 -	_	. P	_	
				42 P		. p	_	
				43 P	_	P P	_	
				44 -	_	P	_	
				45 -		. P	_	
				46 P		. 5	_	
				47 P	_	P P	_	
				48 P		. P	_	
				49 P		P		
				.50 P		P	=	
				.50 P		. P	=	
			-	. L	-	r	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

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Treatment									
	26-WEEK CAPSULE ' ACID POTASSI			UOROOCTANE SULFC		PA(GE: 102		
ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER	GROUP: F4 DO:			' - COMMENTS LIS OBS UNSCHED		OF OBSERVATIONS : DISPATCH	FOR SEX/GROUP		
(CONTINUED FROM PREVIOUS PAGE) 105551 T 27 SKIN & PELAGE ALOPECIA		=======							
LIMBS-ALL			182 P	-	P	-			
			183 P 184 P	-	P	-			
				-	P	=			
			185 P	-	-	P			
	OD CONSUMPTION								
LOW			72 P	-	-	-			
			85 P	-	-	-			
			102 P	-	-	-			
			146 P	-	-	-			
			162 P	-	-	-			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLEUS MONERYS

	ACID POTASSIUM S	ALI (PPOS;1-6295) IN CI.	CIMANOM GUDAUMON.	
_				

ANIMAL GROUP STUDY CATEGORY KEWORD QUALIFIER FREE-TEXT COMMENT

105534 PA 9 2 SKIN & PELAGE OTHER

BRUISED SKIN PERI-ORBITAL LEFT EYE.

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Individual Clinical Observations Recovery (Days 186 through 365)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBERS COEM BOOK SET ON THE NUMBERS COEM SET ON THE NUMB

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: M1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AN OBS UNSCHED 30-90 OB DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105520 0 79 QUALITATIVE FOOD CONSUMPTION LOW 273 105526 O 79 NORMAL NO REMARKABLE OBSERVATIONS 190 197 204 211 218 225 232 246 253 2267 274 281 281 295 302 302 316 323 330 337 344 351 358 365

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Individual Clinical Observations Recovery (Days 186 through 365)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: M3	186-365	0.15 MG/KG/E	AY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
105505	6	81	EXCRETION NON-FORMED F	ECES				P	-	-	-	
			NORMAL NO REMARKABL	E OBSERVATIO	īs	1	190 197	P P P	-	-	-	
						2 2	211 218	P P	-	-	-	
						2	25 232 239 246	P P P P	-	-		
						2 2 2	253 260 267	P P P	- -	- -	-	
						2	274 281 288 295	P P P P	-	- - -	-	
						3 3 3	302 309 316	P P P	- - -	- -	- -	
						3	323 330 337 344	P P P	- - -	- - -	-	
						3	351 358 365	P P P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: M3 DOSE: 0.15 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105505 6 81 QUALITATIVE FOOD CONSUMPTION LOW 240 Ρ 105523 6 81 NORMAL NO REMARKABLE OBSERVATIONS 190 197 204 211 218 225 232 246 253 2267 274 281 281 295 302 302 316 323 330 337 344 351 358 365

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Individual Clinical Observations Recovery (Days 186 through 365)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF KEYMORD ANIMAL DEATH WK OF CODE DEATH QUALIFIER DAYS 186-365 DAY

(CONTINUED FROM PREVIOUS PAGE)

105523 6 81

QUALITATIVE FOOD CONSUMPTION LOW

247 P - -

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Individual Clinical Observations Recovery (Days 186 through 365)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP: M4	DOSE:	0.75 MG/KG	B/DAY DAY	'C' - CO AM OBS	MMENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
I05511	U	79	NORMAL									
			NO REMARKABLE	OBSERVATION	INS		190	P P	-	-		
							197	P	-	-	-	
							204	P	-	-	-	
							211	P	-	-	-	
							218	P P P P	-	-	-	
							225	P	-	-	-	
							232 239	P	-	-	-	
							239	P	-	-	-	
							246	P	-	-	-	
							253	P	-	-	-	
							260	P	-	-	-	
							267	P	-	-	-	
							274	P	-	-	-	
							281 288	P	-	-	-	
							288	P	-	-	-	
							295 302	P	-	-	-	
							302	P	_	_	_	
							309	P	_	_	_	
							316	P	_	_	_	
							323	P	_	-	-	
							330	P P P	-	_	_	
							337	P	_	_	_	
							344	P	_	_	_	
							351	P	_	_	_	
							358	P	_	_	_	
							365	P	_	_	_	
			QUALITATIVE FOO	D CONSUMPT:	ON							
			LOW				255	P	_	_	-	

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Individual Clinical Observations Recovery (Days 186 through 365)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLGUS MONKRYS

	ACID POTAS:	SIUM SALT (PFOS;T-6295) 1	N CYNOM	OLGUS MONKEYS			
CATEGORY	GROUP: M4 1	DOSE: 0.75 I	MG/KG/DAY	101 - 00	OMMENTS LISTED	AT END OF	OBSERVATIONS	FOR SEX/GROUP

ANIMAI NUMBEF	DEATH CODE	WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:		DOSE:	MG/K	G/DAY DAY	AM O	- COMM BS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SE	K/GROUP
105522	U	79	NORMAL												
			NO REMARKABLE	OBSERV	ATION	S		190	P		-	-	-		
								197	P		-	-	-		
								204	P		-	-	_		
								211	P		-	-	-		
								218	P		-	-	-		
								225	P		-	-	_		
								232	P		-	-	-		
								239	P		-	-	-		
								246	P		-	-	-		
								253	P		-	-	-		
								260	P		-	-	-		
								267	P		-	-	-		
								274	P		-	-	=		
								281	P		-	-	=		
								288	P		-	-	-		
								295	P		-	-	=		
								302	P		-	-	=		
								309	P		-	-	-		
								316	P		-	-	-		
								323	P		-	-	-		
								330	P		-	-	-		
								337	P		-	-	-		
								344	P		-	-	-		
								351	P		-	-	-		
								358	P		-	-	-		
								365	P		-	-	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CODE	DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F1 DAYS	DOSE:	0 MG/KG/DAY D	ΑΥ	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
I05529	P	79	EXCRETION				:77	D.				
			LIQUID FECES				78	P P	_	_	=	
							06	P	-	_	-	
							.08	P		_	_	
						-		-				
			SKIN & PELAGE									
			ALOPECIA			-		-				
			FEET				.86 .87	P P	-	_	-	
							.88	P		-	-	
							.89	P	-	_	-	
							.90	P	_	_	_	
							91	P	_	_	_	
							92	P	_	_	_	
						1	.93	P	-	-	_	
							.94	P	-	-	=	
							.95	P	-	-	_	
							.97	P	-	-	-	
							0.0	P	-	-	-	
							:01	P	-	-	-	
							:03	P	-	-	-	
							:04	P	_	_	-	
							10	P P	_	_	=	
							11	P		_	<u> </u>	
							13	P	_	_	_	
							16	P	-	_	_	
							17	P	_	_	_	
							18	P	_	_	_	
						2	19	P	-	-	_	
						2	20	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSTUM SALT (PPOS:T-6295) IN CYNOMOLGUS MONKRYS

		ACID PO	rassium s	ALT (PFOS;T-6295) IN CYNOM	OLGUS MON	IKEYS		
ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	DAYS	186-365	DAY	AM OBS	UNSCHI	JISTED AT E ED 30-90	ND OF OBSERVATION OB DISPATCH	IS FOR SEX/GROUP
(CONTINUED FROM PRE									
105529 P 79	SKIN & PELAGE ALOPECIA								
	FEET			221	P				
	PEEI				P	-	-	-	
				222	P	-	-	-	
				223	P P P	-	-	-	
				225	P	-	-	-	
				226	₽	-	-	-	
				229	₽	-	-	-	
				230	P	-	-	-	
				231	P	-	-	-	
				232	P	-	-	-	
				233	P	-	-	-	
				234	P	-	-	-	
				235	P	-	-	-	
				236	P	-	-	-	
				237	P	-	-	-	
				238	P	-	-	=	
				239	P	-	-	-	
				240	P	-	-	-	
				241	P	_	_	-	
				244	P	-	-	_	
				245	P	-	-	_	
				246	P	_	_	_	
				247	P	_	_	_	
				248	P	_	_	_	
				251	P	_	_	_	
				252	P	_	_	_	
				253	P	_	_	_	
				254	D	_	_	_	

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Individual Clinical Observations Recovery (Days 186 through 365)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: P1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP
ANIMAL DEATH WK OF
NUMBER CODE DEATH CUBER DEATH CODE DEATH CONTINUED FROM PREVIOUS PAGE)

(CONTINUED FROM PREVIOUS PAGE)

105529 P 79 SKIN & PELAGE
ALOPECIA

EPT 259 P - - - - -259 260 261 263 264 2668 227 227 277 277 2278 2274 2278 2288 2298 2298 2298 3302 3305 3306 3306 3306 FEET

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

NIMAL DEATH WK OF JMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F1	DOSE:	0 MG/KG/DAY DAY	'C' - CC AM OBS	MMENTS L UNSCHE	ISTED AT END D 30-90 OE	O OF OBSERVATIONS FOR SEX/GR B DISPATCH
CONTINUED FROM PRI	EVIOUS PAGE)							
5529 P 79	SKIN & PELAGE							
	ALOPECIA							
	FEET			309	P	_	-	-
				310	P	-	-	-
				311	P	-	-	-
				314	P	-	-	-
	TAIL			186	P	_	-	-
				187	P	-	-	_
				188	P	-	-	_
				189	P	-	-	_
				190	P	-	-	-
				191	P	-	-	_
				192	P	-	-	-
				193	P	-	-	-
				194	P	-	-	-
				195	P	-	-	-
				197	P	_	-	_
				200	P	_	_	_
				201	P	_	_	_
				203	P	_	_	_
				204	P	_	_	_
				206	P	_	_	_
				210	P	_	_	_
				211	P	_	_	_
				213	P	_	_	_
				216	P	_	_	_
				217	P	_	_	_
				218	P	_	_	_
				219	P	_	_	_
				220	P	_	_	_
				221	P	_	_	_
				222	P			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFCS:T-6295) IN CYNOMOLGUS MONKEYS

CATEGORY GROUP: F1 DOSE: 0 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUPLES OF THE COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUPLES OF THE COMMENTS LISTED AT END OF DISPATCH AND ORS UNSCHED 30-90 OR DISPATCH		ACID POTASSIUM SALT (PFO	DS;T-6295) IN CYNOMOLGUS MONKEYS
	CHILCORI	GROUP: F1 DOSE: 0 MG/KG/	

ANIMAL DEATH WK OF NUMBER CODE DEATH	KEYWORD QUALIFIER	DAYS 186-365	DAY	AM OBS	UNSCHED	30-90 OB	DISPATCH
(CONTINUED FROM PREV 105529 P 79	SKIN & PELAGE						
	ALOPECIA						
	TAIL		223	P P P P	-	-	=
			225	P	-	-	-
			226	P	-	-	-
			229	P	-	-	-
			230	P	-	-	-
			231	P	-	-	-
			232	P	-	-	-
			233	P	-	-	-
			234	P	-	-	-
			235	P	-	-	_
			236	P	_	_	_
			237	P	_	_	_
			238	P	_	_	_
			239	P	_	_	_
			240	P P P	_	_	_
			241	P	_	_	-
			244	P	_	_	_
			245	P	_	_	_
			246	P	_	_	_
			247	P	_	_	_
			241	_			
	NORMAL						
	NO REMARKABLE OBS	PRINTIONS	316	D			
	NO REMARKABLE OBS	PUALIONS	323	P P P			
			330	5	_	-	-
			337	Ę	-	-	-
				P	-	-	-
			344		-	-	-
			351	P	-	-	-
			358	P	-	-	-
			365	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLGUS MONKRYS

				ACI	D POT	'ASSIUM SAI	T (PFOS;T-6	295)	IN CYNOMO	LGUS MON	KEYS		
ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP:	F1 DAYS	DOSE: 0	MG/KG/DAY	Y	'C' - CO AM OBS	MMENTS L UNSCHE	ISTED AT EN D 30-90 C	D OF OBSERVATION B DISPATCH	ONS FOR SEX/GROUP
(CONTI) 105529		ROM PRE	VIOUS PAGE)										
100000	-												
			QUALITATIVE FOO	D CONSU	MPTIO	N							
			LOW				19		P	-	-	-	
							21		P P P P P P	-	-	-	
							24	7	P	-	-	-	
							24		P	-	-	-	
							26	0	P	-	-	_	
							27	2	P	-	-	_	
							27		P	-	-	_	
							29	4	P	-	-	-	
	_												
I05549	P	79	DISCHARGE					_	_				
			APPEARS TO BE	MENSTR	UATIN	IG .	26	1	P	-	-	-	
			NORMAL										
			NO REMARKABLE	ODCEDI	ATTOM	re .	19	۸	D				
			NO REMARKABLE	ODDERV	MITTON	10	19		D D		_	Ξ	
							20		D	_	_	Ξ	
							21		D	_	_	Ξ	
							21		D			Ξ	
							22	5	D			Ξ	
							23	5	D	_	_	_	
							23	ā	Ď	_	_	_	
							24	<u> </u>	P	_	_	_	
							25	3	D D	_	_	_	
							26	ň	D	_	_	_	
							26	7	ە قە قە قە قە قە قە قە قە	_	_	_	
							27	Á	D	_	_	_	
							27		D D	_	_		

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ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS 302 309 316 323 330 337 344 351 358 365 QUALITATIVE FOOD CONSUMPTION LOW

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: F3 KEYWORD QUALIFIER DAYS 1	DOSE: 0.1	15 MG/KG/DAY DAY	'C' - COM AM OBS	MENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
105539 6 81	DISCHARGE	_		_				
	APPEARS TO BE MENSTRUATING	3	216	Ь	-	-	-	
			217	P	-	-	-	
			246	P P P	-	-	-	
			275	P	-	-	-	
	EXCRETION							
	FEW FECES		191	D		_		
	FEW FECED		195	P P	2	_	2	
			193	E	_	_	_	
	NORMAL							
	NO REMARKABLE OBSERVATIONS	3	190	P	_	_	_	
			197	P	_	_	_	
			204	P	-	_	_	
			211	0.0.0.0.0.0.0	-	-	_	
			218	P	-	-	_	
			225	P	-	-	-	
			232	P	_	-	-	
			239	P	_	_	=	
			253	P	-	-	-	
			260	P	-	-	-	
			267	P	-	-	-	
			274	P	-	-	-	
			281	P P P	-	-	-	
			288	P	-	-	-	
			295	P	-	-	-	
			302	P	-	-	-	
			309	P	-	-	-	
			316	P	-	-	-	
			323	P	-	-	-	
			330	P	-	-	-	
			337	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH

CONTINUED FROM SEMARKABLE OBSERVATIONS OBSERVATIONS OBSERVATIONS FOR SEX/GROUP AND OBS

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS 288 295 302 309 316 323 337 344 351 358 365 QUALITATIVE FOOD CONSUMPTION LOW 220 343 344 346

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WINUMBER CODE DE		CATEGORY GROUP: F4 DOSE KEYWORD QUALIFIER DAYS 186-36	0.75 MG/KG/DAY	'C' - CC AM OBS	MMENTS LIST UNSCHED	ED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
I05533 U	79	EXCRETION NON-FORMED FECES	245	P	-	-	-
		NORMAL NO REMARKABLE OBSERVATIONS	190 197	P P	-	-	Ī
			204 211	P D	-	-	-
			218 225	P P P P	-	-	-
			232 239	P P	-	-	-
			246 253	P P	-	- -	-
			260 267	P P	-	-	- -
			274 281	P P	_	_	-
			288 295	P P	-	-	Ī
			302 309	P P	-	-	-
			316 323	P P	-	=	-
			330 337	P P	-	_	<u>-</u>
			344 351 358	P P P	-	-	<u>-</u>
			365 365	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F4 DOSE: 0.75 MG/KG/DAY 1°C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCHED 30-90 OB DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105533 U 79 QUALITATIVE FOOD CONSUMPTION LOW 105542 U 79 DISCHARGE APPEARS TO BE MENSTRUATING NORMAL NO REMARKABLE OBSERVATIONS 190 197 204 211 218 225 232 246 253 267 274 295 309 3109 3130 337

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ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F4 DAYS	DOSE:	0.75 MG/K	G/DAY DAY	'C' - CO AM OBS	MMENTS LIST UNSCHED	TED AT END 30-90 OB	OF OBSERVATIONS FOR SEX/ DISPATCH	/GROUP
(CONTINUED FROM PRE	VIOUS PAGE)		======							
105542 U 79	NORMAL									
	NO REMARKABLE	E OBSERVATIO	NS		344	P	-	-	-	
					351	P	-	-	-	
					358	P	-	-	-	
					365	P	-	-	-	
	OUALITATIVE FO	DD CONSUMPTI	ON							
	LOW				269	P	-	-	-	
					273	P	-	-	-	
					275	P	-	-	-	
					281	P	-	-	-	
					302	P	-	-	-	
					343	P	-	-	-	
					344	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		WK OF DEATH	CATEGORY GROUP: M1 DOSE: KEYWORD QUALIFIER DAYS 368-558	0 MG/KG/DAY	'C' - COM AM OBS	MMENTS LIST UNSCH	ED AT END EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
NONBER			QOADIFIER DAIS 300-330						
105520	0	79	EXCRETION						
			NON-FORMED FECES	533	P	-	-	-	
				534	P	-	-	-	
			NORMAL NO REMARKABLE OBSERVATIONS	252					
			NO REMARKABLE OBSERVATIONS	372 379	P P	-	-	-	
				386	P		-	_	
				393	P		_	_	
				400	P	_	_	_	
				407	P	_	-	_	
				414	P	-	-	_	
				421	P	-	-	=	
				428	P	-	-	-	
				435	P	-	-	-	
				442	P	-	-	-	
				449	P	-	-	=	
				456	P	-	-	-	
				463 470	P P	-	-	-	
				470 477	P	-	_	-	
				484	P	_	_	_	
				491	P		_	Ξ.	
				498	P	_	_	_	
				505	P	_	_	_	
				512	P	_	_		
				519	P	_	_	-	
				526	P	-	-	_	
				540	P	-	-	·-	
				547	P	-	-	_	

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Individual Clinical Observations Recovery (Days 366 through 561)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPCS:T-6295) IN CYNOMOLGUS MONKEYS

NIMAL	DEATH	WK OF	CATEGORY KEYWORD	GROUP: M1	DOSE: 0 MG/KG/DA	ĽΥ	'C' - COM AM OBS	MENTS LIST UNSCH	ED AT END EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROU
UMBER	CODE	DEATH	QUALIFIER		368-558	DAY					
CONTIN	UED FI		VIOUS PAGE)								
			QUALITATIVE FOO	OD CONSUMPTION	1	541	P	-	-	-	
05526	0	79	DISCHARGE VOMITUS								
			CONTAINING	FOOD		535	P P	-	-	-	
						541	Р	-	-	-	
			NORMAL								
			NO REMARKABLE	E OBSERVATIONS	3	372	P	-	-	-	
						379	P	-	-	-	
						386	P P	-	-	-	
						393	₽	-	-	=	
						400	P	-	-	-	
						407 414	P P	-	-	-	
						421	P	-	-	-	
						421	P	-	-		
						435	P	-	-	Ξ	
						442	P	_	_	_	
						449	P	_	_	=	
						456	P	_	_	_	
						463	P P	_	_	_	
						470	P	_	-	_	
						477	P	_	-	_	
						484	P	-	-	·-	
						491	P	-	-	-	
						498	P	-	-	-	
						505	P	-	-	-	
						512	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUCROCCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF	CATEGORY KEYWORD	GROUP: M1		0 MG/KG/DAY		'C' - COM AM OBS	MENTS LIST UNSCH	ED AT END EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
NUMBER CODE DEATH	QUALIFIER	DAYS	368-558		DAY					
(CONTINUED FROM PRE 105526 O 79	VIOUS PAGE)									
	NO REMARKABLE	OBSERVATION	IS		519	P	-	-	-	
					526	P	-	-	_	
					533	P	-	-	-	
					540	P	-	-	-	
					547	P	-	-	-	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: M3 DOSE: KEYWORD QUALIFIER DAYS 368-558	0.15 MG/KG/DAY DAY	'C' - COM AM OBS	MMENTS LIST UNSCH	ED AT END EXTRA	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
105505 6 81	APPEARANCE					
	SWOLLEN					
	HEAD-MAXILLARY-RIGHT	390	P	-	-	-
		391	P	-	-	-
		393	P P P	-	-	-
		394	P	-	-	-
		395	P	-	-	-
		397	P	-	-	-
		400	P	-	-	-
	DISCHARGE					
	VOMITUS		_			
	CONTAINING FOOD	535	P	-	-	-
	EXCRETION FEW FECES	555	P			
	FEW FECES	555	P	-	-	-
	NORMAL					
	NO REMARKABLE OBSERVATIONS	372	P	_	_	
	NO REMARKABLE OBSERVATIONS	372	P	_	_	-
		386	P	_	_	_
		407	P		_	
		414	P		_	
		421	P	_	_	
		428	P	_	_	_
		435	P P	_	_	_
		442	P	_	_	_
		449	P	_	_	_
		456	P	_	_	_
		463	P	_	_	_
		470	P	_	_	_
		477	P	_	_	_
		277	-			

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEA NUMBER COD	E DEA		KEYWORD QUALIFIER	GROUP: M3	368-558	G/KG/DAY DAY	'C' - (AM OBS	COMMENTS LIS UNSCH	STED AT END EXTRA	OF OBSERVATIONS DISPATCH	; FOR SI	EX/GROUP
		PRE	VIOUS PAGE)			 						
I05505 6	8	1	NORMAL									
			NO REMARKABLE	OBSERVATION	NS	484	P	-	-	-		
						491	P	-	-	-		
						498 505	P P	-	-	-		
						512	P	_	_	_		
						519	Ď	_	_	_		
						526	P P P	_	_	_		
						533	P	_	_	_		
						540	P	-	-	-		
						547	P	-	-	-		
						554	P	-	-	-		
			QUALITATIVE FOO	D CONSUMPTIO	ON	375	P	_	-	-		
						376	P P	-	-	-		
						555	P	-	-	-		
105523 6	8	1	DISCHARGE VOMITUS CONTAINING	FOOD		535	P	-	-	-		
			EXCRETION NO FECES			555	P P	-	-	-		
			NON BORNER ER	cnc		556 557	P	-	-	-		
			NON-FORMED FE	CES		557	P	-	-	-		
			NORMAL NO REMARKABLE	OBSERVATIO	NS	372 386 393 400	P P P	-	- - -	-		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

QUALITATIVE FOOD CONSUMPTION LOW

ANIMAL DEATH WK OF NUMBER CODE DEATH COUNTINUED FROM PREVIOUS PACE)

| CONTINUED FROM PREVIOUS PACE|
| 105523 6 81 NORMAL | NO REMARKABLE | OBSERVATIONS | OBSERV

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL			CATEGORY KEYWORD	GROUP:			5 MG/	KG/DAY	AM OBS		ISTED AT END EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
NUMBER		DEATH	QUALIFIER	1	DAYS :	368-558		DAY					
I05511	U	79	NORMAL										
103311	U	, ,	NO REMARKABLE	OBSERVA	ATTON	3		372	P	_	_	=	
						_		379	P	_	_	_	
								386	P	_	_	_	
								393	P P	_	_	_	
								400	P	-	_	_	
								407	P	_	_	_	
								414	P	-	-	_	
								421	P	-	-	_	
								428	P	-	-	-	
								435	P	-	-	-	
								442	P	-	-	_	
								449	P	-	-	-	
								456	P	-	-	-	
								463	P	-	-	-	
								470	P	-	-	-	
								477	P	-	-	-	
								484	P	-	-	-	
								491	P	-	-	-	
								498	P	-	-	_	
								505	P	-	-	-	
								512	P	-	-	-	
								519	P	-	-	-	
								526	P	-	-	-	
								533	P	-	-	-	
								540	P	-	-	-	
								547	P	-	=	=	
								549	P	-	-	P	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER		DOSE:	/DAY DAY	'C' - C AM OBS	COMMENTS LIS UNSCH	TED AT END EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
105522	U	79	EXCRETION								
105522		, ,	NON-FORMED FI	ECES		402	P	_	_	_	
						403	P	-	-	_	
			NORMAL				_				
			NO REMARKABLI	E OBSERVATION	IS	372	P P P P	-	-	-	
						379	P	-	-	-	
						386	₽	-	-	-	
						393	P	-	-	-	
						400		-	-	-	
						407	P	-	-	-	
						414	P	-	-	-	
						421	P	-	-	-	
						428	P	-	-	-	
						435	P	-	-	-	
						442	P	-	-	-	
						449	P	=	-	=.	
						456	P	_	_	_	
						463	P	_	_	_	
						470	P	_	_	_	
						477	P	_	_	_	
						484	P	_	_	_	
						491	P	_	_	_	
						498	P	_	_	_	
						505	P	_	_	_	
						512	P	_	_	_	
						519	p D	_	_	_	
						526	P P P P P P	_	_	_	
						533	P	_	_	_	
						540	P	_	_	_	
						547	P	_	_	_	
						549	P	_	_	P	
						J= 2	E	-	-	E	

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

CATEGORY GROUP: M4 DOSE: 0.75 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCH EXTRA DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

(CONTINUED FROM PREVIOUS PAGE)

QUALITATIVE FOOD CONSUMPTION LOW 394 P -

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ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

I05529 P 79 EXCRETION LIQUID FECES 489 P	ROUP
LIQUID FECES 489 P	
491 P	
492 P 493 P	
493 P	
494 P	
NON-FORMED FECES 496 P	
SKIN & PELAGE	
ALOPECIA	
LIMB-HIND-RIGHT 368 P	
369 P	
372 P	
376 P	
377 P	
378 P	
549 P	
NORMAL	
NORMAL NO REMARKABLE OBSERVATIONS 379 P	
379	
393 P	
400 P	
407 P	
414 P	
421 P	
$4\overline{2}8$ P	
435 P	
442 P	
449 P	
456 P	
463 P	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: F1 DOSE: 0 MG/ KEYMORD QUALIFIER DAYS 368-558	KG/DAY DAY	'C' - CO AM OBS	MMENTS LIST UNSCH	TED AT END EXTRA	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PRE	EVIOUS PAGE)					
I05529 P 79	NORMAL					
	NO REMARKABLE OBSERVATIONS	470	P	-	-	=
		477	P	-	-	-
		484	P	-	-	-
		498	P	-	-	-
		505	₽	-	-	-
		512	₽	-	-	-
		519 526	P P	-	-	-
		533	P	-	-	-
		540	P	- 2		
		547	P	_	_	_
		017	-			
	QUALITATIVE FOOD CONSUMPTION					
	LOW	372	P	-	-	-
		376	P	-	-	-
		452	P	-	-	=
I05549 P 79	DISCHARGE					
	VOMITUS		_			
	CONTAINING FOOD	535	P	-	-	-
	APPEARS TO BE MENSTRUATING	372	P P	-	-	-
		400 456	P	-	-	=
		484	P	_	-	=
		541	P	_	_	
		341	-			
	NORMAL					
	NO REMARKABLE OBSERVATIONS	379	P	_	_	-
		386	P	-	-	-
		393	P	-	-	=
		407	P	-	-	-

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

QUALITATIVE FOOD CONSUMPTION LOW

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP		DOSE:	0 MG/KG/DAY	DAY	'C' - CC AM OBS	OMMENTS I UNSCH	ISTED AT END EXTRA	OF OBSERVATION DISPATCH	S FOR SEX/GROUP
(CONTINUED FROM PRE	NITOIR BACE)										
105549 P 79	NORMAL										
103343 1 73	NO REMARKABLE	OBSER	MOTTON	IS		414	P	_	_	_	
	110 11211111111111111111111111111111111	ODDER	*********			421	P	_	_	-	
						428	P	_	_	_	
						435	P	-	-	_	
						442	P	-	-	_	
						449	P	-	-		
						463	P	-	-	_	
						470	P	-	-	-	
						477	P	-	-	_	
						491	P	-	-	_	
						498	P	-	-	-	
						505	P	-	-	-	
						512	P	-	-	-	
						519	P	-	-	-	
						526	P	-	-	-	
						533	P	-	-	=	
						540	P	-	-	-	
						547	P	-	-	-	

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		WK OF DEATH	KEYWORD QUALIFIER		368-558	DAY	AM OBS	UNSCH	EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
105539	6	81	DISCHARGE UNKNO								
			RED IN COL			555	P				
			RED IN COL	OK.		556	P				
						550	F				
			EXCRETION								
			FEW FECES			404	P	-	_	_	
						558	P P	-	-	_	
			NO FECES			555	P	-	-	-	
						556	P	-	-	-	
						557	P	-	-	-	
			NORMAL								
			NO REMARKABL	E OBSERVATIO	NS	372	P	-	-	=	
						379	P	-	-	-	
						386	P	-	-	-	
						393	P P P P	-	-	-	
						400 407	P	-	_	-	
						414	P	-	-	-	
						421	P	-	-	-	
						428	P		_		
						435	P			_ <u>_</u>	
						442	P	_	_	_	
						449	P	_	_	_	
						456	P	_	_	_	
						463	P	_	_	_	
						470	P	-	-	_	
						477	P P	-	_	_	
						484	P	-	-	_	
						491	P	-	-	=	
						498	P	-	-	_	

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Individual Clinical Observations Recovery (Days 366 through 561)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

NO FECES

ANIMAL	DEATH	WK OF	CATEGORY KEYWORD	GROUP: F3	DOSE:	0.15 MG/KG/DAY	'C' - AM OB	COMMENTS L	ISTED AT END EXTRA	OF OBSERVATIONS	FOR SEX/GROUP
NUMBER	CODE	DEATH	QUALIFIER	DAYS	368-558	DAY					
(CONTII 105539		ROM PRE 81	VIOUS PAGE) NORMAL								
100000		0.1	NO REMARKABLE	OBSERVATION	vs.	505	P	_	_	_	
						512	P P P P P	_	_	_	
						519	P	_	_	_	
						526	P	_	_	_	
						533	P	-	-	_	
						540	P	_	_	_	
						547	P	-	-	_	
						554	P	-	-	-	
			QUALITATIVE FOO	D CONSUMPTION	ON						
			LOW			375	P P P	-	-	-	
						376	P	-	-	-	
						399	₽	-	-	-	
						404	₽	-	-	-	
						407	P	-	-	-	
						553	-	P	-	-	
						556	P P	-	-	-	
						557	P	-	-	-	
						558	P	-	-	-	
			NONE			555	P	-	-	-	
I05552	6	81	DISCHARGE								
105552	9	0.1	VOMITUS								
			CONTAINING	FOOD		535	P	_	_	_	
			COMMINING	LOOD		555	τ.				
			EXCRETION								
			FEW FECES			555	P	_	-	_	
						557	P	-	-	_	
						558	D	_	_	_	

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WK OF DEATH	CATEGORY KEYWORD QUALIFIER			DOSE:	MG/KG/DAY	'C' - CC AM OBS	MMENTS UNSCI	LISTED AT END H EXTRA	OF OBSERVATIONS DISPATCH	FOR SEX/GROUP
(CONTI) 105552	ROM PRE 81	VIOUS PAGE)				 	 				
		NORMAL									
		NO REMARKABLE	OBSERV	ATTON	g	372	D	_		_	
		NO KENAKIGIDEE	ODDBIN	7211011	_	379	P	_	_	_	
						386	P P P	_	_	_	
						393	P	_	_	_	
						400	P	_	_	_	
						407	P	_	_	_	
						414	P	-	_	_	
						421	P	-	-	-	
						428	P	-	-	_	
						435	P	-	-	_	
						442	P	-	-	-	
						449	P	-	-	=	
						456	P	-	-	-	
						463	P	-	=	=	
						470	P	-	-	-	
						477	P	-	-	-	
						484	P	-	-	-	
						491	P	-	-	-	
						498	P	-	-	-	
						505	P	-	-	-	
						512	P	-	-	-	
						519	P	-	-	-	
						526	P	-	-	-	
						533	P	-	-	-	
						540	P	-	-	-	
						547	P	_	_	_	

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Individual Clinical Observations Recovery (Days 366 through 561)

	Recov	PAGE: 16				
	FAGE: 10					
ANIMAL DEATH WK OF KEYWORD NUMBER CODE DEATH QUALIFIER		0.15 MG/KG/I		' - COMMENTS L OBS UNSCH	ISTED AT END EXTRA	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PREVIOUS PAGE) 105552 6 81						
OUALITATIVE FO	OOD CONSUMPTION					
LOW			372 P	-	-	=
			557 P	-	-	-
NONE			558 P 555 P	-	-	-
NONE			556 P	Ξ	-	-

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

| ANIMAL | DEATH | NK OF | DEATH | NK OF | DEATH | NUMBER | CODE | DEATH | DAYS | 368-558 | DAYS | 368-558 | DAYS | DAYS

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Individual Clinical Observations Recovery (Days 366 through 561)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F4 DOSE: 0.75 MG/KG/DAY 'C' - COMMENTS LISTED AT END OF OBSERVATIONS FOR SEX/GROUP AM OBS UNSCH EXTRA DISPATCH

(CONTINUED FROM PREVIOUS PAGE)

105533 U 79 QUALITATIVE FOOD CONSUMPTION LOW 394 79 DISCHARGE APPEARS TO BE MENSTRUATING I05542 U 496 DISCHARGE UNKNOWN SOURCE FOUND IN FAN RED IN COLOR NORMAL NO REMARKABLE OBSERVATIONS 379630741185296307441445630744184496307441898

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Individual Clinical Observations Recovery (Days 366 through 561)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F4 DAYS 3		0.75 MG/KG	/DAY DAY	'C' - COM AM OBS	MENTS LIST UNSCH	ED AT END EXTRA	OF OBSERVATIONS FOR SEX/GROUP DISPATCH
(CONTINUED FROM PRE 105542 U 79	VIOUS PAGE) NORMAL								
	NO REMARKABLE	OBSERVATIONS			505	P	-	-	-
					512	P	-	-	-
					519	P	-	-	-
					526	P	-	-	_
					533	P	_	_	_
					540	P	_	_	_
					547	P	_	_	_
					549	P	_	_	p
						-			-
	QUALITATIVE FOC	D CONSUMPTION	1						
	LOW	D COMBONITION			375	P	_	_	
	LOW				394	P	_	_	
					395	P	-	-	-

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Individual Ophthalmic Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

CATEGORY GROUP: M1 DOSE: 0 MG/KG/DAY
ANIMAL DEATH WK OF KEYWORD WEEKS -4 AND 26 - OBSERVED DURING THE WEEKS LISTED BELOW;
NUMBER CODE DEATH QUALIFIER 'C' - COMMENTS LISTED AT END OF OBSERVATIONS 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05508 T -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05517 T -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05519 T -4, 26 79 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05520 O -4, 26 79 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05526 O -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05527 T

-4, 26

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Individual Ophthalmic Observations Treatment

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ANIMAL NUMBER		WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	M2	DOSE:	0.03 MG WEEKS -		- OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS
I05514	Т	27	NO VISIBLE LESION NO VISIBLE LESI EYES					-4, 26	
105515	T	27	NO VISIBLE LESION NO VISIBLE LES EYES					-4, 26	
105516	Т	27	NO VISIBLE LESION NO VISIBLE LES EYES					-4, 26	
I05521	Т	27	NO VISIBLE LESION NO VISIBLE LESE EYES					-4. 26	

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Individual Ophthalmic Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES

I05528 T

CATEGORY GROUP: M3 DOSE: 0.15 MG/KG/DAY
ANIMAL DEATH WK OF KEYWORD WEEKS -4 AND 26 - OBSERVED DURING THE WEEKS LISTED BELOW;
NUMBER CODE DEATH QUALIFIER 'C' - COMMENTS LISTED AT END OF OBSERVATIONS 81 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES 105505 6 -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05510 T -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05518 T -4, 26 81 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05523 6 -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05524 T -4, 26

-4, 26

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Individual Ophthalmic Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFCS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP: M4	DOSE:	0.75 MG/KG/ WEEKS -4 AN	DAY D 26 - OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS	
I05506	М	26	NO VISIBLE LESIONO VISIBLE LES			-4,	26	
105507	Т	27	NO VISIBLE LESIO NO VISIBLE LES EYES			-4,	26	
105509	D	23	NO VISIBLE LESIO NO VISIBLE LES EYES			-4		
I05511	U	79	NO VISIBLE LESIONO VISIBLE LES EYES			-4,	26	
I05512	т	27	NO VISIBLE LESIONO VISIBLE LES			-4,	26	
105522	U	79	NO VISIBLE LESIONO VISIBLE LES EYES			-4,	26	

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Individual Ophthalmic Observations Treatment

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY GROUP: F1 KEYWORD QUALIFIER	. DOSE: 0 MG/KG/DAY WEEKS -4 AND 26 - OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS
105529	P	79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYE-LEFT EYES	- 4 26
			MISCELLANEOUS OPHTHALMICS INCREASED MYELINATION OF EYE-RIGHT	OPTIC NERVE
I05530	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	-4, 26
105531	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	-4, 26
105535	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	-4, 26
I05544	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	-4, 26
I05549	P	79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	-4, 26

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Individual Ophthalmic Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	F2 I		MG/KG/DAY -4 AND 26	- OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS	
105537	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES				-4, 26		
I05541	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES				-4, 26		
105547	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES				-4, 26		
I05550	Т	27	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES				-4. 26		

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Individual Ophthalmic Observations Treatment

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

CATEGORY GROUP: F3 DOSE: 0.15 MG/KG/DAY
ANIMAL DEATH WK OF KEYWORD WEEKS -4 AND 26 - OBSERVED DURING THE WEEKS LISTED BELOW;
NUMBER CODE DEATH QUALIFIER 'C' - COMMENTS LISTED AT END OF OBSERVATIONS 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05532 T -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05538 T -4, 26 81 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES 105539 6 -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05545 T -4, 26 27 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05548 T -4, 26 81 NO VISIBLE LESIONS NO VISIBLE LESIONS EYES I05552 6 -4, 26

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER			CATEGORY KEYWORD QUALIFIER	GROUP:	F4	DOSE:	0.75 MG/KG/ WEEKS -4 AN	D 26 - OBS	SERVED DURING - COMMENTS	THE WEEKS I	LISTED BELO	W; VATIONS	
105533	U	79	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					
105534	Т	27	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					
I05536	Т	27	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					
I05540	Т	27	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					
I05542	Ū	79	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					
105551	Т	27	NO VISIBLE LESIO NO VISIBLE LES EYES				-4,	26					

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Individual Ophthalmic Observations Recovery

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH WK OF NUMBER CODE DEATH	CATEGORY GROUP: M1 KEYWORD QUALIFIER	DOSE: 0 MG/KG/DAY WEEK 52 - OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS
I05520 O 79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	52
I05526 O 79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES	52

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Individual Ophthalmic Observations Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL DEATH	WK OF DEATH	CATEGORY G KEYWORD QUALIFIER	FROUP: M3	DOSE: 0.15	5 MG/KG/DAY WEEK 52	- OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS						
105505 6	81	NO VISIBLE LESIONS NO VISIBLE LESION EYES	ıs		52							
I05523 6	81	NO VISIBLE LESIONS NO VISIBLE LESION EYES	IS		52							

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Individual Ophthalmic Observations Recovery

Recovery									PAGE: 3		
	26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS										
	ANIMAL NUMBER		WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: M4	DOSE:	0.75	MG/KG/DAY WEEK 52	2 - OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS		
	105511	U	79	NO VISIBLE LESION NO VISIBLE LES				52			
	I05522	υ	79	NO VISIBLE LESIONO VISIBLE LES EYES				52			

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Individual Ophthalmic Observations Recovery

MISCELLANEOUS OPHTHALMICS OTHER EYE-RIGHT

NO VISIBLE LESIONS NO VISIBLE LESIONS EYES

I05549 P 79

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS CATEGORY GROUP: F1 DOSE: 0 MG/KG/DAY
ANIMAL DEATH WK OF KEYWORD WEEK 52 - OBSERVED DURING THE WEEKS LISTED BELOW;
NUMBER CODE DEATH QUALIFIER 'C' - COMMENTS LISTED AT END OF OBSERVATIONS NO VISIBLE LESIONS NO VISIBLE LESIONS EYE-LEFT I05529 P 79 52

52C

52

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Individual Ophthalmic Observations Recovery

PAGE: 5 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PROS:T-6295) IN CYNOMOLGUS MONKRYS

		POIMSSIUM SALII			
	CATEGORY				
VITITS	KEVMORD				

STUDY KEYWORD
ANIMAL GROUP DAY WK QUALIFIER FREE-TEXT COMMENT 105529 F1 363 52 MISCELLANEOUS OPHTHALMICS INCREASED MYELINATION OF OPTIC NERVE HEAD THAT MAY BE ASSOCIATED WITH OPTIC NEURITIS. MACULA NORMAL.

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Individual Ophthalmic Observations Recovery

Recovery									-					
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS											PAGE:			
	ANIMAL NUMBER		WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP:	F3	DOSE:	0.15	MG/KG/DAY WEEK 52		OURING THE WEEKS MENTS LISTED AT 1		ions	
	105539	6	81	NO VISIBLE LESION NO VISIBLE LESI EYES					52					
	I05552	6	81	NO VISIBLE LESION NO VISIBLE LESI EYES					52					

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Individual Ophthalmic Observations Recovery

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;7-6295) IN CYNOMOLGUS MONKEYS

ANIMAL DEATH	WK OF DEATH	CATEGORY KEYWORD QUALIFIER	GROUP: F4	DOSE: 0.75 MG/KG/DAY WEEK 52	- OBSERVED DURING THE WEEKS LISTED BELOW; 'C' - COMMENTS LISTED AT END OF OBSERVATIONS
I05533 U	79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES		52	
I05542 U	79	NO VISIBLE LESIONS NO VISIBLE LESIONS EYES		52	

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APPENDIX 3

Individual Body Weight Data (kg)

Appendix 3 Individual Body Weight Data (kg) Treatment Phase

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

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ANIMAL	WEEK ^a	week	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK
NUMBER	-1	-1	1	2	3	4	5	6	7	8
GROUP:	MALE 1 - 0 1	MG/KG/DAY								
105508	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
105517	3.4	3.4	3.4	3.3	3.2	3.2	3.3	3.3	3.3	3.3
105519	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.0	3.0	3.1
105520	2.9	2.9	2.9	2.9	3.0	3.1	3.0	3.0	2.9	3.0
105526	3.0	3.0	3.0	3.1	3.2	3.3	3.3	3.3	3.3	3.3
105527	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
GROUP:	MALE 2 - 0.	03 MG/KG/DAY								
I05514	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.3
I05515	3.3	3.3	3.3	3.2	3.3	3.4	3.4	3.5	3.4	3.4
I05516	2.7	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9
I05521	4.4	4.3	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.4
GROUP:	MALE 3 - 0.	15 MG/KG/DAY								
105505	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.2
105510	2.9	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.1	3.1
105518	3.0	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2
105523	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8
105524	2.9	2.9	2.9	3.0	3.1	3.1	3.1	3.1	3.1	3.0
105528	3.6	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.7
GROUP:	MALE 4 - 0.	75 MG/KG/DAY								
105506	3.3	3.4	3.4	3.4	3.5	3.5	3.6	3.7	3.7	3.7
105507	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.6	4.6
105509	3.1	3.2	3.2	3.1	3.2	3.2	3.3	3.3	3.2	3.2
105511	2.8	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8
105512	2.8	2.9	2.9	2.8	2.9	3.0	3.0	3.0	3.1	3.0
105522	3.4	3.4	3.4	3.4	3.5	3.6	3.6	3.6	3.6	3.6

a Day -7. b Day -1.

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Appendix 3 Individual Body Weight Data (kg) Treatment Phase

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

	ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS											
ANIMAL NUMBER	WEEK ^a -1	WEEK -1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8		
GROUP:	FEMALE 1 -	0 MG/KG/DAY										
105529 105530 105531 105535 105544 105549	2.5 2.9 2.6 3.4 2.6 2.9	2.5 2.9 2.6 3.3 2.7 2.9	2.5 2.9 2.6 3.3 2.7 2.9	2.7 2.8 2.6 3.3 2.6 2.9	2.6	2.4 2.9 2.7 3.4 2.7 3.0	2.4 2.7 2.6 3.4 2.7 3.0	2.6	2.4 2.8 2.7 3.5 2.6 3.0	2.4 2.8 2.6 3.5 2.6 3.0		
GROUP:	FEMALE 2 -	0.03 MG/KG/D	AY									
I05537 I05541 I05547 I05550	3.8 2.5 2.9 2.9	3.8 2.5 2.9 2.9	3.9 2.5 2.9 2.9	3.9 2.5 3.0 2.9	3.9 2.5 3.0 2.9	4.0 2.5 3.0 2.8	3.9 2.5 3.0 2.8	3.9 2.6 3.0 2.8	4.0 2.6 3.0 2.9	4.0 2.6 3.0 2.9		
GROUP:	FEMALE 3 -	0.15 MG/KG/D	AY									
105532 105538 105539 105545 105548 105552	2.7 3.2 3.6 2.6 2.8 2.8	2.7 3.2 3.7 2.6 2.9 2.8	2.7 3.2 3.7 2.6 2.9 2.8	2.7 3.1 3.8 2.7 3.0 2.7	2.7 3.1 3.8 2.7 2.9 2.7	2.7 3.0 3.8 2.7 3.0 2.7	2.7 3.0 3.8 2.6 3.0 2.7	2.7 3.0 3.9 2.6 3.0 2.7	2.8 3.0 3.9 2.6 3.0 2.7	2.8 3.0 3.9 2.6 3.0 2.7		
GROUP:	FEMALE 4 -	0.75 MG/KG/D	AY									
105533 105534 105536 105540 105542 105551	2.6 2.8 3.9 2.9 2.8 2.3	2.6 2.8 3.9 3.0 2.9 2.4	2.6 2.8 3.9 3.0 2.8 2.4	2.6 2.8 3.8 3.1 2.8 2.4	2.6 2.8 3.8 3.1 2.8 2.4	2.6 2.8 3.9 2.8 2.8 2.4	2.5 2.8 3.9 2.6 2.8 2.4	2.6 2.8 3.9 2.6 2.8 2.3	2.6 2.8 3.8 2.8 2.8 2.4	2.5 2.8 3.8 2.9 2.8 2.4		

a Day -7. b Day -1.

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Individual Body Weight Data (kg) Treatment Phase

PAGE: 3
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

PAGE: 3

ANIMAL NUMBER	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18
GROUP:	MALE 1 - 0 I	MG/KG/DAY								
I05519 I05520	3.2 3.4 3.1 3.0 3.4 4.2	3.1 3.0 3.4	3.2 3.3 3.1 3.1 3.5 4.3	3.3 3.1 3.0 3.5 4.3	3.0 3.6	3.3 3.2 3.1 3.5 4.3	3.3 3.3 3.2 3.0 3.6 4.3	3.6	3.4 3.3 3.3 3.0 3.7 4.4	3.4 3.3 3.2 3.0 3.7 4.4
GROUP:	MALE 2 - 0.	03 MG/KG/DAY								
105514 105515 105516 105521	3.0	3.3 3.5 3.0 4.4	3.4 3.6 3.0 4.6	3.4 3.7 3.0 4.6		3.4 3.6 3.2 4.5	3.5 3.6 3.2 4.6	3.5 3.7 3.2 4.6	3.6 3.8 3.3 4.6	3.5 3.7 3.2 4.5
GROUP:	MALE 3 - 0.	15 MG/KG/DAY								
105505 105510 105518 105523 105524 105528	3.3 3.1 3.3 2.8 3.2 3.7	3.2 3.1 3.2 2.7 3.0 3.7	3.3 3.2 3.2 2.8 3.1 3.8	3.3 3.2 3.3 2.8 3.1 3.7	3.3 3.3 3.3 2.9 3.1 3.7	3.2 3.1 3.2 2.9 3.1 3.8	3.3 3.2 3.2 2.9 3.1 3.8	3.1	3.3 3.3 3.0 3.0 3.7	3.3 3.3 3.3 2.9 3.2 3.6
GROUP:	MALE 4 - 0.	75 MG/KG/DAY								
105506 105507 105509 105511 105512 105522	3.8 4.7 3.2 2.9 3.1 3.6		3.9 4.7 3.2 2.9 3.1 3.7	3.8 4.7 3.2 2.9 3.1 3.6	3.1	3.8 4.6 3.1 2.9 2.9 3.7	3.9 4.6 3.1 2.9 2.9 3.7	2.7	4.0 4.6 3.1 2.7 2.8 3.7	3.9 4.5 3.0 2.8 2.8 3.7

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Individual Body Weight Data (kg) Treatment Phase

PAGE: 4
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

PAGE: 4

ANIMAL NUMBER	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18
GROUP:	FEMALE 1 - 0	MG/KG/DAY								
105529 105530 105531 105535 105544 105549	2.5 2.9 2.7 3.6 2.6 3.0	2.7	2.5 3.0 2.7 3.5 2.7 2.9	2.6 3.1 2.7 3.6 2.7 3.0	2.8	2.6 3.0 2.7 3.6 2.7 3.0	2.4 3.0 2.7 3.5 2.7 3.0	2.8	2.5 3.0 2.8 3.6 2.8 3.1	2.5 3.0 2.8 3.6 2.7 3.0
GROUP:	FEMALE 2 - 0	.03 MG/KG/DA	AY							
105537 105541 105547 105550	4.1 2.6 3.0 2.9	4.0 2.6 3.0 2.8	4.0 2.7 3.0 2.8	4.0 2.7 3.1 2.8	4.1 2.7 3.1 2.9	4.1 2.7 3.1 2.9	4.1 2.7 3.0 2.9		4.2 2.6 3.0 2.9	4.2 2.7 3.0 2.9
GROUP:	FEMALE 3 - 0	.15 MG/KG/D	AY							
105532 105538 105539 105545 105548 105552	2.8 3.0 3.9 2.6 3.0 2.8	2.8 3.0 3.9 2.7 3.0 2.8	2.8 3.2 3.9 2.7 3.0 2.7	2.8 3.2 3.9 2.6 3.1 2.7	2.8 3.3 3.9 2.6 3.1 2.8	2.8 3.2 4.0 2.7 3.1 2.8	2.8 3.3 4.0 2.7 3.1 2.8	2.8 3.3 3.9 2.7 3.0 2.8	2.9 3.4 3.9 2.7 3.1 2.8	2.8 3.4 3.9 2.6 3.0 2.8
GROUP:	FEMALE 4 - 0	.75 MG/KG/D	AY							
105533 105534 105536 105540 105542 105551	2.6 2.9 3.9 3.1 2.8 2.3	2.7	2.6 2.8 3.8 2.8 2.7 2.3	2.7 2.8 3.8 2.8 2.7 2.3	2.7 2.8 3.7 2.8 2.7 2.3	2.6 2.8 3.6 2.7 2.7 2.3	2.6 2.8 3.5 2.9 2.6 2.4	2.8 3.4 3.0 2.6	2.7 2.9 3.7 3.1 2.8 2.4	2.6 2.9 3.6 3.1 2.7 2.3

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Individual Body Weight Data (kg)
Treatment Phase

PAGE: 5
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

PAGE: 5

ANIMAL NUMBER	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23	WEEK 24	WEEK 25	WEEK 26	WEEK 27	
GROUP:	MALE 1 - 0 1	MG/KG/DAY								
I05517 I05519 I05520	3.4 3.4 3.3 3.1 3.7 4.5	3.4 3.2 3.0	3.3 3.2 3.1	3.3 3.2 3.1	3.4 3.3 3.3 3.1 3.7 4.7	3.4 3.3 3.0	3.4 3.4 3.2	3.3 3.4 3.2	3.3 3.4 3.1 3.8	
GROUP:	MALE 2 - 0.	03 MG/KG/DAY								
105514 105515 105516 105521	3.6 3.8 3.2 4.6	3.6 3.8 3.2 4.6	3.6 3.6 3.2 4.7	3.6 3.7 3.3 4.6	3.7 3.7 3.3 4.6	3.7 3.7 3.3 4.7	3.8 3.8 3.4 4.7	3.8 3.8 3.4 4.7	3.8 3.7 3.4 4.7	
GROUP:	MALE 3 - 0.	15 MG/KG/DAY								
TOEE10	3.3 3.3 3.0 3.3 3.6	3.3 3.3 3.0 3.3 3.7	2 2	3.3 3.3 3.3 2.9 3.3 3.7	2 2	3.3 3.4 3.3 2.9 3.3 3.7	2 E	3.3 3.4 3.4 3.0 3.4 3.6	3.2 3.4 3.3 2.9 3.3 3.7	
GROUP:	MALE 4 - 0.	75 MG/KG/DAY								
I05507 I05509	4.0 4.5 3.0	4.4	4.3	3.0	4.2	4.0 4.1	4.2	4.2	4.2	
I05511 I05512 I05522	2.9 2.6 3.7	2.8 2.5 3.6	2.6 2.6 3.6	2.7 2.8 3.6	2.7 2.7 3.6	2.8 2.6 3.6	2.7 2.7 3.7	2.6 2.7 3.7		

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Individual Body Weight Data (kg) Treatment Phase

PAGE: 6
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

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ANIMAL NUMBER	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23	WEEK 24	WEEK 25	WEEK 26	WEEK 27	
NONDER		20								
GROUP:	FEMALE 1 - 0	MG/KG/DAY								
		· ·								
I05529 I05530	2.5 3.0	2.5	2.5 2.9	2.5	2.5 3.0		2.5	2.5 3.0		
	2.8	2.8	2.7		2.7					
I05535	3.5	3.5	3.5	3.6	3.4	3.5	3.6	3.6	3.5	
I05544	2.8 3.1	2.8	2.8	2.8	2.8	2.8	2.9 3.0	2.9	2.9	
105549	3.1	3.1	3.0	3.1	3.0	3.0	3.0	3.1	3.0	
GROUP:	FEMALE 2 - 0	.03 MG/KG/D	AY							
105537	4.2	4.2	4.2	4.2	4.2	4.3	4.4	4.4	4.3	
I05541	2.7	2.7	2.6	2.7	2.8	2.7	2.8	2.8	2.8	
105547	4.2 2.7 3.1 3.0	3.0	3.0	2.9	2.8	2.7	2.8	2.7	2.8	
105550	3.0	3.0	2.9	3.0	2.9	3.0	3.1	3.0	3.0	
GROUP:	FEMALE 3 - 0	.15 MG/KG/D	AY							
I05532	2.8	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.7	
I05538	2.8	3.4	3.3	3.5	3.5	3.4	3.5	3.4	3.5	
105539	4.0	4.0	3.8	3.8	3.8	3.9	3.9	3.9	3.9 2.7	
T05548	3.1	3.1	3.0	2.7	3.1	3 1	2.7	2.7 3.1	3.1	
105552	2.7 3.1 2.8	2.8	2.7	2.8	2.8	2.7 3.1 2.8	2.9	2.8	2.7	
	FEMALE 4 - 0									
TOEESS	2.6	2 6	2 6	2 6	2.6	2.7	2.7	2.7	2.5	
I05534	2.9	2.8	2.7		2.8			2.7		
I05536	3.5	3.5	3.3	3.3	3.4	3.3	3.3	3.4	3.4	
	3.1		3.0	2.9	2.9	3.0	3.0	3.0		
I05542	2.7	2.7	2.6	2.7	2.6		2.7	2.6		
I05551	2.4	∠.4	2.4	∠.4	2.4	∠.4	2.4	2.4	2.4	

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Appendix 3

Individual Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

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NIMAL JMBER	WEEK 28	WEEK 29	WEEK 30	WEEK 31	WEEK 32	WEEK 33	WEEK 34	WEEK 35	WEEK 36	WEEK 37
GROUP:	MALE 1 - 0 N	IG/KG/DAY								
)5520)5526	3.2 3.8	3.3 3.9	3.3 3.9	3.4 4.0	3.5 4.1	3.5 4.1	3.5 4.1	3.5 4.0	3.5 4.1	3.6 4.2
GROUP:	MALE 3 - 0.1	.5 MG/KG/DAY								
)5505)5523	3.2 2.9	3.3 2.9	3.2 2.8	3.3 2.8	3.4 2.9	3.4 3.0	3.3 3.0	3.3 2.9	3.4 3.1	3.4 3.0
GROUP:	MALE 4 - 0.7	5 MG/KG/DAY								
)5511)5522	2.7	2.8 3.7	2.9 3.7	3.0 4.0	3.0 4.2	3.1 4.2	3.1 4.5	3.0 4.4	3.1 4.6	3.1 4.6
GROUP:	FEMALE 1 - 0	MG/KG/DAY								
)5529)5549	2.4 2.9	2.4 3.0	2.4	2.4 3.0	2.5	2.5 3.1	2.5 3.0	2.5	2.5	2.5 3.1
GROUP:	FEMALE 3 - 0	.15 MG/KG/D	AY							
)5539)5552	3.8 2.8	3.9 2.9	3.8 2.8	3.9 2.8	4.0 2.9	4.0 2.9	4.0 2.8	4.1 2.8	4.2 2.9	4.1 3.0
GROUP:	FEMALE 4 - 0	.75 MG/KG/D	AY							
)5533)5542	2.5 2.7	2.6	2.6 2.8	2.6 2.9	2.7 3.2	2.8	2.8 3.2	2.8 3.1	2.8	2.8

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Appendix 3 Individual Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

PAGE: 2

ANIMAL NUMBER 	WEEK 38 MALE 1 - 0 N 3.6	WEEK 39	WEEK 40	WEEK 41	WEEK 42	WEEK	WEEK	WEEK	WEEK	WEEK
		40 /10 /D33			42	43	44	45	46	47
	3.6									
I05520 I05526	4.2	3.6 4.1	3.6 4.1	3.7 4.3	3.8 4.2	3.8 4.2	4.0	4.1	4.2 4.5	4.1 4.3
GROUP:	MALE 3 - 0.1	15 MG/KG/DAY								
I05505 I05523	3.3	3.3 2.9	3.3	3.4 3.1	3.3	3.3	3.4 3.1	3.5 3.1	3.5 3.1	3.4 3.0
GROUP:	MALE 4 - 0.7									
I05511 I05522	3.1 4.5	3.0 4.4	2.9	3.1 4.5	3.0 4.5	3.1 4.5	3.2 4.5	3.2 4.5	3.3 4.6	3.2 4.4
GROUP:	FEMALE 1 - 0	MG/KG/DAY								
I05529 I05549	2.5	2.4	2.3	2.5 3.1	2.4	2.4 3.0	2.5 3.0	2.5 3.1	2.5 3.1	2.4
GROUP:	FEMALE 3 - 0	0.15 MG/KG/DA	źλ							
I05539 I05552	4.1	4.1 2.9	4.0	4.2 3.0	4.1	4.1 3.0	4.3	4.2 3.1	4.2	4.2
GROUP:	FEMALE 4 - 0	0.75 MG/KG/DA	ĄΥ							
I05533 I05542	2.7 3.3	2.7	2.8 3.1	2.8	2.7 3.2	2.7	2.8	2.8	2.8 3.4	2.7 3.4

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Appendix 3 Individual Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WEEK 48	WEEK 49	WEEK 50	WEEK 51	WEEK 52	WEEK 53	WEEK 54	WEEK 55	WEEK 56	WEEK 57		
GROUP: 105520 105526	MALE 1 - 0 M 4.1 4.3	4.1 4.4	4.1 4.4	4.1 4.4	4.2 4.5	4.2 4.5	4.2 4.6	4.3 4.7	4.2 4.7	4.1 4.6		
GROUP:	MALE 3 - 0.1	L5 MG/KG/DAY	:									
I05505 I05523	3.4 3.0	3.4 3.1	3.4 3.0	3.4 3.1	3.4 3.1	3.4 3.0	3.4 3.1	3.4 3.1	3.4 3.2	3.4 3.1		
GROUP:	MALE 4 - 0.	75 MG/KG/DAY	:									
I05511 I05522	3.3 4.4	3.5 4.6	3.5 4.5	3.6 4.5	3.7 4.5	3.7 4.4	3.8 4.5	3.8 4.4	3.9 4.4	3.8 4.2		
GROUP:	FEMALE 1 - 0	MG/KG/DAY:										
I05529 I05549	2.3	2.5 3.0	2.4	2.4 3.0	2.5 2.9	2.4 2.8	2.4 2.8	2.4 2.9	2.4 2.9	2.3 2.8		
GROUP:	FEMALE 3 - 0	1.15 MG/KG/D	AY:									
I05539 I05552	4.3 2.9	4.3 3.0	4.2	4.3 3.0	4.3 3.0	4.3 2.9	4.2 2.9	4.2	4.2 2.9	4.2 2.9		
GROUP:	FEMALE 4 -	.75 MG/KG/D	AY:									
I05533 I05542	2.7 3.4	2.9 3.4	2.8 3.3	2.8	2.8 3.4	2.7 3.4	2.7 3.4	2.6 3.5	2.7 3.5	2.6 3.4		

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Appendix 3

Individual Body Weight Data (kg) Recovery

	PAGE: 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS												
ANIMAL NUMBER	WEEK 58	WEEK 59	WEEK 60	WEEK 61	WEEK 62	WEEK 63	WEEK 64	WEEK 65	WEEK 66	WEEK 67			
GROUP:	MALE 1 - 0	MG/KG/DAY											
I05520 I05526	4.2 4.7	4.1 4.7	4.2	4.2 4.9	4.1 4.8	4.1 4.9	4.0 4.9	4.0 4.8	4.0	4.1 4.9			
GROUP:	MALE 3 - 0.	15 MG/KG/DAY	:										
I05505 I05523	3.4 3.2	3.4 3.2	3.5 3.3	3.5 3.3	3.6 3.3	3.5 3.3	3.5 3.3	3.4 3.3	3.4 3.2	3.5 3.3			
GROUP:	MALE 4 - 0.	75 MG/KG/DAY	:										
I05511 I05522		3.8 4.4	4.0 4.6	4.0 4.6	4.0 4.7	$\substack{4.1\\4.7}$	4.3	4.2 4.5	4.1 4.5	4.2 4.5			
GROUP:	FEMALE 1 -	0 MG/KG/DAY:											
I05529 I05549	2.5 2.9	2.4 2.9	2.5 3.0	2.5 2.9	2.4 3.0	2.5 3.0	2.4 2.9	2.4 2.9	2.4 2.8	2.4 2.9			
GROUP:	FEMALE 3 -	0.15 MG/KG/D	AY:										
I05539 I05552	4.1 3.0	4.0 3.0	4.2	4.1 3.0	4.1 3.0	4.1 3.1	4.1 3.0	4.0 2.9	4.0 2.9	4.1 3.1			
GROUP:	FEMALE 4 -	0.75 MG/KG/D	AY:										
I05533 I05542	2.6 3.4	2.6 3.4	2.8 3.5	2.8 3.5	2.8 3.6	2.8 3.6	2.7 3.6	2.7 3.5	2.7 3.5	2.8 3.6			

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Appendix 3 Individual Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WEEK 68	WEEK 69	WEEK 70	WEEK 71	WEEK 72	WEEK 73	WEEK 74	WEEK 75	WEEK 76	WEEK 77		
GROUP:	MALE 1 - 0 N											
I05520 I05526	4.2 5.0	4.3 5.1	4.2 5.0	4.2 5.1	4.3 5.3	4.2 5.2	4.2 5.4	4.2 5.3	4.2 5.4	4.1 5.3		
GROUP:	MALE 3 - 0.	15 MG/KG/DAY	:									
I05505 I05523	3.6 3.3	3.6 3.4	3.5 3.4	3.5 3.4	3.6 3.5	3.5 3.4	3.6 3.5	3.6 3.5	3.6 3.5	3.5 3.4		
GROUP:	MALE 4 - 0.	75 MG/KG/DAY	:									
I05511 I05522	4.3 4.6	4.3 4.7	4.3 4.6	4.2 4.6	4.3 4.6	4.2 4.5	4.3 4.6	4.3 4.6	4.3 4.6	4.3 4.5		
GROUP:	FEMALE 1 - 0	MG/KG/DAY:										
I05529 I05549	2.4	2.5 2.9	2.4 2.9	2.4 2.9	2.4 2.9	2.4	2.4 3.0	2.5 2.9	2.5 2.9	2.4		
GROUP:	FEMALE 3 - 0	0.15 MG/KG/D	AY:									
I05539 I05552	4.1 3.0	4.2 3.0	4.1 3.0	4.2 3.0	4.2 3.1	4.2 3.0	4.2 3.1	4.2 3.1	4.2 3.2	4.2 3.1		
GROUP:	FEMALE 4 -	0.75 MG/KG/D	AY:									
I05533 I05542	2.7	2.7	2.7 3.7	2.7 3.7	2.7	2.6 3.7	2.7	2.7	2.8	2.7		

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Appendix 3

Individual Body Weight Data (kg) Recovery

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS GROUP: MALE 1 - 0 MG/KG/DAY 105520 4.0 4.0 105526 5.3 5.3 GROUP: MALE 3 - 0.15 MG/KG/DAY 3.5 3.2 GROUP: MALE 4 - 0.75 MG/KG/DAY GROUP: FEMALE 1 - 0 MG/KG/DAY GROUP: FEMALE 3 - 0.15 MG/KG/DAY GROUP: FEMALE 4 - 0.75 MG/KG/DAY I05533 I05542

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Sponsor:

3M St. Paul, Minnesota

FINAL REPORT

Study Title:

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

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Testing Facility:

Covance Laboratories Inc. 3301 Kinsman Boulevard Madison, Wisconsin 53704-2595

Laboratory Study Identification:

Covance 6329-223

Sponsor Study Identification:

3M Study No. T-6295.7

Volume II of II

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Individual Clinical Hematology Data

Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS HGB HCT MCV MCH MCHC PLT R

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	tg/day				
105508	6.48	12.3	40.3	62.2		30.5		. 3	19
I05517		12.8	42.4	67.8	20.5	30.2	380	. 5	31
I05519	6.97	12.5	42.9	61.5	17.9	29.0	577		3.5
I05520	6.27	11.8	39.4	62.9	18.8	29.9	681	. 0	0
I05526	6.48	$12.0 \\ 12.1$	41.1	63.5	18.6	29.3		.2	13
105527	6.27	12.1	40.9	62.9 63.5 65.3	19.3	29.6	652	.3	19
			41.2	63.9	19.0	29.8	530	. 3	
S.D.	.275	.36	1.30	2.32		. 56	125.0	.19	
N	6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	l: 0.03	Dosage	Unit: mg/	g/day				
105514	7.28	12.5	45.5	62.5	17.2 18.9	27.5		.5	36
I05515	6.22	11.8	39.8	64.0 61.3	18.9	29.6	675	.6	37
I05516	6.67	12.5	40.9	61.3	18.7		341		7
I05521	7.79	12.9	45.3	58.1	16.6	28.5	813	.2	16
MEAN		12.4		61.5	17.8	29.0	574	. 4	24
S.D.	.688	.46	2.95	2.51	1.13	1.34	210.3	.24	14.9
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	g/day				
105505		12.6		65.2		30.0			90
I05510		11.9		60.3			546		
I05518		13.0		60.9			375		52
I05523	6.73	12.8	43.1	64.1	19.0	29.7	569	. 0	0
I05524	6.76	13.0	44.6	66.1	19.3	29.2	635	. 0	0
I05528	6.67	12.6	43.1	64.6	18.9	29.3	366	. 3	20
MEAN	6.76	12.6	42.9	63.5	18.7	29.5	493	.5	32
S.D.	.315	.41	1.88	2.38	.76	.41	109.0	.53	34.5
M	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
105506	7.63	13.4	45.8	60.0	17.6	29.3	519	. 6	46
I05507	6.94	12.0	41.5	59.7	17.3	28.9	58	. 3	21
I05509	6.89	11.9	42.3	61.4	17.3	28.1	409	. 4	28
I05511	5.90	11.4	40.3	68.4	19.4	28.4	528	1.4	83
I05512	7.20	13.1	44.5	61.8	18.1	29.3	342	.2	14
I05522	6.73	13.1	44.1	65.5	19.5	29.7	636	.1	7
MEAN	6.88	12.5	43.1	62.8	18.2	29.0	415	.5	33
S.D.	.575	.82	2.06	3.44	1.01	.61	202.6	.47	27.8
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /m	EOSIN cL X10 ³ /mc	BASO N	I-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Level	l: 0	Dosage (Unit: mg/k	g/day							
I05508 I05517 I05519 I05520 I05526 I05527	6.6 9.2 6.7 9.0 11.3 8.9	2.1 3.3 3.1 5.1 5.4 4.4	4.0 4.7 3.1 3.0 5.3 3.7	.4 1.0 .4 .8 .5	.0 .1 .2 .0 .1	.0 .1 .0 .1 .0	32 36 46 56 48 49	61 52 46 34 47 41	6 11 5 9 5 8	0 1 2 0 1	0 1 0 1 0	
MEAN S.D. N	8.6 1.76 6	3.9 1.28 6	4.0 .90 6	.6 .24 6	.1 .08 6	.0 .05 6	44 8.9 6	47 9.2 6	7 2.4 6	. 1 . 6	0 .5 6	
Group: 2	Dose Level	1: 0.03	Dosage (Unit: mg/k	g/day							
I05514 I05515 I05516 I05521	11.7 11.5 9.5 11.1	7.2 3.2 4.0 6.3	4.0 6.2 4.4 4.0	.4 1.5 .9 .6	.2 .5 .1	.0 .0 .0	62 28 42 56	34 54 47 36	3 13 10 6	2 4 1 2	0 0 0	
MEAN S.D. N	11.0 1.00 4	5.2 1.88 4	4.6 1.05 4	.8 .48 4	.2 .17 4	.0 .00 4	47 15.2 4	43 9.4 4	8 4.4 4	2 1.3	0 4	
Group: 3	Dose Level	1: 0.15	Dosage (Unit: mg/k	g/day							
I05505 I05510 I05518 I05523 I05524 I05528	12.5 11.1 10.7 15.0 9.4 12.7	9.4 5.8 4.8 9.8 4.2 5.3	2.4 4.2 4.6 3.7 4.0 5.9	.6 1.0 1.3 .8 1.1	.1 .1 .0 .6 .0	.0 .0 .0 .0 .1	75 52 45 66 45 42	19 38 43 25 42 46	5 9 12 5 12 6	1 0 4 0 5	0 0 0 0 1 0	
MEAN S.D. N	11.9 1.95	6.6 2.42	$\frac{4.1}{1.14}$.9 .25	.2 .31	.0 .04	54 13.4	36 10.9	8 3.3			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage (Jnit: mg/kg	/day						
105506 105507 105509 105511 105512 105522	9.3 13.7 7.5 8.0 7.1 11.0	3.0 4.9 3.3 3.9 1.6 5.5	5.0 6.3 2.8 3.3 4.3 4.1	1.1 2.1 .7 .6 1.2 1.1	.2 .1 .7 .1 .0	.1 .2 .0 .0	32 36 44 49 22 50	54 46 37 41 60 37	12 15 9 8 16 10	2 1 9 1 0 2	1 2 0 0 1 1
MEAN S.D.	9.4 2.53	3.7 1.40	4.3 1.25	1.1	.2	.1	39 10.9	46 9.5	12 3.3	2 3.3	1 .8

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	НҮРО	TOXNEUT
	Dose Leve	1: 0	Dosage	e Unit: mg,	/kg/day
I05508 I05517 I05519 I05520 I05526 I05527		- - - - -	- - - -	-	
Group: 2	Dose Leve	1: 0.03	Dosage	e Unit: mg,	/kg/day
I05514 I05515 I05516 I05521	- :	- - -	-	-	-
Group: 3	Dose Leve	1: 0.15	Dosage	e Unit: mg,	/kg/day
105505 105510 105518 105523 105524 105528	- - - -	- - - -	- - - -	- - - -	- - - -
Group: 4	Dose Leve	1: 0.75	Dosage	e Unit: mg,	/kg/day
105506 105507 105509 105511 105512	- · · · · · · · · · · · · · · · · · · ·	- - - -	- - - -	- - - -	- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

	RBC X10°/mcL	G/DL	જ	MCV FL	MCH PG	MCHC	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	tg/day				
105529 105530 105531 105535 105544 105549	6.78 5.72 6.66 4.98	11.5 13.3 10.5 12.2 11.6 12.6	45.0 34.7 40.8 36.2	62.2 66.4 60.6 61.3 72.7 65.0	19.6 18.3 18.3 23.2	31.0 29.5 30.2 29.9 31.9 30.1	552 584 577 471	.3 .1 .5 1.3	20 6 33 65
	6.09 .681 6	12.0 .97 6	3.93	64.7 4.51 6	1.81	30.4 .87 6	79.5	.46	24.2
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	g/day				
I05541 I05547	5.78 6.30	10.6 12.0 10.7 12.8	40.0 37.4		20.8 17.0	28.8 30.2 28.6 29.1	426 558	.9 .4	52 25
MEAN S.D. N	6.31 .522 4	11.5 1.06 4	39.5 3.26 4	62.7 4.49 4	18.3 1.73 4	29.2 .71 4	$\begin{smallmatrix}482\\72.4\\4\end{smallmatrix}$.4 .31 4	27 17.1 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05545 I05548	6.72 6.76	12.7 11.3 11.7 12.3 11.8 12.0	40.7 38.0	62.2 62.1 62.9 60.6 56.2 64.2	18.3 17.4	29.3 29.6 29.9 30.1 31.0 29.1	325 615	. 1 . 4	
MEAN S.D. N	6.54 .320	12.0 .49	40.1 1.97	61.4 2.79	18.3 .50	29.8 .68	481 100.9	.4	29 16.2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533	6.46	12.1	41.2	63.8	18.7	29.3	337	. 2	13
I05534	6.72	13.1	44.2	65.8	19.5	29.6	438	. 4	27
I05536	6.67	12.1	41.7	62.6	18.2	29.1	606	.1	7
I05540	6.21	11.8	39.6	63.8	19.0	29.8	433	. 0	0
I05542	6.57	12.0	42.4	64.5	18.2	28.3	492	. 4	26
105551	6.35	11.7	40.0	63.0	18.5	29.4	304	. 4	25
MEAN	6.50	12.1	41.5	63.9	18.7	29.2	435	.2	16
S.D.	.195	.50	1.68	1.14	.50	. 52	108.9	.18	11.4
M	6	c	ے	-	_	_	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN E L X10 ³ /mcl	BASO 1 L X10 ³ /	N-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Unit: mg/kg	g/day						
I05529 I05530 I05531 I05535 I05544 I05549	7.4 11.7 8.4 12.6 13.0 8.0	3.4 6.0 5.0 5.3 3.1	3.3 4.9 2.6 6.0 5.8 4.3	.6 .7 .7 .8 1.2	.2 .1 .1 .6 .7	.0 .0 .1 .1 .0	45 51 59 39 40 38	45 42 31 48 44 54	8 6 8 7 9 6	2 1 1 5 6 2	0 0 1 1 0
MEAN S.D. N	10.2 2.52 6	4.6 1.14 6	4.5 1.36 6	.8 .24 6	.3 .28 6	.0 .05 6	45 8.3 6	44 7.6 6	7 1.2 6	3 2.1 6	0 .5 6
Group: 2	Dose Leve	1: 0.03	Dosage 1	Unit: mg/kg	J/day						
I05537 I05541 I05547 I05550	12.2 8.1 6.8 7.6	8.6 3.0 3.6 4.6	2.7 4.1 2.5 2.4	.6 .9 .6	.2 .1 .1	.0 .1 .0 .0	70 36 53 60	22 50 36 32	5 11 9 6	2 1 2 1	0 1 0 0
MEAN S.D. N	8.7 2.41 4	5.0 2.52 4	2.9 .79 4	.6 .17 4	.1 .05 4	.0 .05 4	55 14.3 4	35 11.6 4	8 2.8 4	2.6 4.6	0 4.5
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	ı/day						
105532 105538 105539 105545 105548 105552	7.6 12.0 7.1 14.4 11.3 8.0	2.6 7.4 2.6 9.4 5.4 3.3	3.6 3.7 3.5 4.2 4.4 3.4	1.2 .7 .9 .7 .8	.2 .2 .2 .0 .7	.0 .0 .0 .0 .0	35 62 36 65 48 41	48 31 49 29 39 42	15 6 12 5 7 9	2 2 2 0 6 8	0 0 0 0 0
MEAN S.D. N	10.1 2.94 6	5.1 2.81 6	3.8 .40 6	.8 .20 6	.3 .27 6	.0 .04 6	48 13.0 6	40 8.4 6	9 3.8 6	3 3.0 6	0 .4

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ⁵ /mcL	MONO X103/mcI				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage U	Jnit: mg/kg	 /day						
I05533	10.0	4.1	5.1	. 7	. 0	.0	41	51	7	0	٥
105534	13.3	6.9	5.2	• 4	. 4	.0	52	39	ś	ž	0
I05536	9.6	4.4	3.5	1.3	.3	.1	46	36	14	3	ĭ
I05540	8.9	5.4	2.4	. 9	.1	.0	61	27	10	ī	0
I05542	8.3	5.9	2.0	. 4	.0	.0	71	24	4	0	0
I05551	3.8	2.0	1.2	.5	.0	.0	53	32	14	1	0
MEAN	9.0	4.8	3.2	.8	.1	. 0	54	35	9	1	0
S.D.	3.08	1.70	1.66	.32	.18	.04	10.7	9.7	4.2	1.4	. 4
INT.	6	6	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	PC	OIK	НУРО	TOXNEUT
Group: 1	Dose Leve	:1: 0		Dosage	Unit: mg	/kg/day
I05529 I05530 I05531 I05535 I05544 I05549	- - - -	- - - -	-	- - - -		- - - -
Group: 2	Dose Leve	1: 0.03		Dosage	Unit: mg	/kg/day
I05537 I05541 I05547 I05550	=	- - -	-	- - -		-
Group: 3	Dose Leve	1: 0.15		Dosage	Unit: mg	/kg/day
I05532 I05538 I05539 I05545 I05548 I05552	- - - -	- - - - -	-	- - - - -		- - - - -
Group: 4	Dose Leve	1: 0.75		Dosage	Unit: mg	/kg/day
105533 105534 105536 105540 105542 105551	- - - -	- - - -	- - - -	- - - - -		- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

	RBC X10°/mcL			MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	tg/day				
I05519 I05520 I05526	6.83 6.50 6.20		40.9 39.5 38.6	63.4 67.5 59.8 60.7 62.3 64.0	17.8 18.6 18.7	30.7 30.0	369 443 474 644 375 614	.2 .3 .1 .1	13 20 6 6
MEAN S.D. N	6.45 .221 6	12.4 .55 6	40.6 1.44 6	63.0 2.74 6	19.1 .97 6	30.4 .58 6	486 117.8 6	.2 .16 6	14 10.4 6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	g/day				
I05516 I05521	6.51 6.35 7.26	13.0 12.5 12.2 12.2	39.0 40.3	65.5 65.2 61.4 55.6	19.2 16.8	31.2 30.1	665	.3	19 0
MEAN S.D. N	6.86 .501 4	12.5 .38 4	42.4 3.93 4	61.9 4.61 4	18.2 1.17 4	29.5 1.69 4	532 146.1 4	.4 .35 4	29 23.8 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day				
I05510 I05518 I05523 I05524	6.99 7.20 6.78 6.31	12.8 12.3 12.7 12.6 12.3 12.1	41.5 42.1 41.3 41.4	65.1 59.3 58.5 60.9 65.6 62.7	17.6 17.7 18.5 19.5	31.1 29.7 30.2 30.5 29.7 30.4	483 498 544 519	.6 .4 .2	28 43 27 13
MEAN S.D. N	6.66 .385 6	12.5 .27 6	41.2 .76 6	62.0 2.96 6	18.8 1.06 6	30.3 .53 6	476 59.6 6	.4 .14 6	25 10.5 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL	
Group: 4	Dose Level	.: 0.75	Dosage	Unit: mg/k	g/day					
105506	7.03	12.3	41.0	58.3	17.4	29.9	459	. 3	21	
105507	6.57	11.4	39.6	60.2	17.3	28.7	69 PA	. 3	20	
I05509	6.84	12.1	41.9	61.3	17.6	28.8	399	. 3	21	
I05511	5.80	10.9	37.1	63.9	18.8	29.5	490	. 4	23	
I05512	6.60	12.1	40.3	61.0	18.3	30.1	362	.5	33	
I05522	6.32	12.3	41.5	65.6	19.4	29.6	519	.5	32	
MEAN	6.53	11.8	40.2	61.7	18.1	29.4	383	. 4	25	
S.D.	.431	.57	1.74	2.63	.85	. 57	164.3	.10	5.9	
N	6	6	6	6	6	6	6	6	6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN :	BASO N L X10 ³ /1	-SEG%	LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Level	l: 0	Dosage U	nit: mg/kg	g/day							
I05508 I05517 I05519 I05520 I05526 I05527	5.2 7.8 7.1 6.8 7.5	1.8 2.5 3.5 3.5 4.7 7.5	2.9 4.2 3.4 2.9 2.2 2.8	.4 .9 .2 .4 .3	.0 .0 .1 .0 .2	.0 .2 .0 .0	34 32 49 52 63 67	57 53 48 43 30 25	9 12 3 5 4 8	1 0 1 0 3 0	0 2 0 0 0	
MEAN S.D. N	7.6 1.98 6	3.9 2.01 6	3.1 .67 6	.5 .31 6	.0 .08 6	.0 .08 6	50 14.4 6	43 12.8 6	7 3.4 6	1 1.2	0 .8 6	
Group: 2	Dose Level	1: 0.03	Dosage U	Jnit: mg/kg	g/day							
I05514 I05515 I05516 I05521	11.9 8.0 12.1 11.0	5.9 3.1 8.2 8.1	5.3 4.1 3.1 2.4	.5 .6 .7 .3	.2	.0 .0 .0	50 39 67 74	44 51 25 22	4 7 5 3	2 2 2 1	0 0 0 0	
MEAN S.D. N	10.8 1.89 4	6.3 2.40 4		.5 .17 4	.2 .05 4	.0 .00 4	58 15.9 4	36 14.2 4	5 1.7 4	2 4.5	0 4.0	
Group: 3	Dose Level	1: 0.15	Dosage U	Jnit: mg/kg	g/day							
I05505 I05510 I05518 I05523 I05524 I05528	11.7 8.8 9.4 11.1 6.9 12.4	9.3 5.1 3.9 7.0 3.5 7.2	2.0 2.9 4.6 3.6 2.6 3.6	.2 .7 .8 .4 .8	.3 .0 .0 .1 .0	.0 .0 .0 .0 .1	79 58 42 63 50 58	17 32 49 32 37 30	2 8 8 4 12 5	2 1 0 1 0 6	0 0 0 0 1	
MEAN S.D. N	10.0 2.06	6.0 2.23	3.2 .91	.6 .24	.2 .32	.0 .05	58 12.5	33 10.4	6 3.6	2 2.3	0 .4	

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Individual Clinical Hematology Data

Males Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO 1 X10 ³ /mcI				YMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage U	nit: mg/kg	/day						
I05506	7.1	3.4	2.9	.7	.1	.0	48	41	9	1	1
I05507	17.9	13.3	3.8	.7	. 1	.1	74	21	4	0	1
I05509	11.6	8.0	2.8	. 4	. 3	. 0	69	24	4	.3	0
I05511	8.5	5.5	2.4	. 5	.1	.1	65	28	6	1	1
I05512	6.6	3.5	2.4	.7	.0	.0	53	36	10	0	1
I05522	10.2	6.2	3.0	. 9	.0	.1	61	30	9	0	1
MEAN	10.3	6.6	2.9	. 6	.1	. 0	62	30	7	1	1
S.D.	4.16	3.69	.52	.18	.11	.05	9.8	7.5	2.7	1.2	. 4
TAT	_	_	c	ے	c	_	c	_	_	_	_

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Males Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	НҮРО	TOXNEUT
Group: 1	Dose Level:	0	Dosage	Unit: mg/	/kg/day
105508 105517 105519 105520 105526 105527		- - - - -		- - - -	- - - - -
Group: 2	Dose Level:	0.03	Dosage	Unit: mg/	'kg/day
I05514 I05515 I05516 I05521		- - -		- - -	- - -
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	'kg/day
105505 105510 105518 105523 105524 105528		- - - - -		- - - - -	- - - - -
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	'kg/day
105506 105507 105509 105511 105512 105522		- - - -		- - - -	- - - - -

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Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

		HGB G/DL		MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
105531 105535 105544	6.37 6.52 5.78	11.6 11.8 11.6	39.1 37.9	62.8 64.7 60.8 60.0 65.6 64.8	18.0 20.0	30.5 30.2 29.8 30.0 30.5 30.0	538 499	.1 .4	7 23
MEAN S.D. N	6.41 .351 6	12.2 .69 6	40.5 2.42 6	63.1 2.31 6	19.0 .83 6	30.2 .29 6	538 84.2 6	.3 .16 6	22 10.8 6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/k	g/day				
I05547		10.9 11.7 11.6 13.2	38.1 40.5 39.0 44.7	57.8 70.9 57.4 61.3	16.6 20.6 17.0 18.1	28.7 29.0 29.7 29.6	448 391 417 411	.3 .7 .1	20 40 7 7
MEAN S.D. N	6.60 .664 4	11.8 .97 4	40.6 2.92 4	61.8 6.28 4	18.1 1.80 4	29.2 .48 4	417 23.6 4	.3 .28 4	18 15.6 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05538 I05539 I05545 I05548	6.40 6.35 6.85 7.09	11.3 12.0 12.4 11.9	38.4 40.6 41.2 39.8	61.3 60.1 63.8 60.1 56.1 62.7	17.7 18.9 18.1 16.8	30.1 29.5 29.5 30.1 29.8 29.5	398 406 300 553	.4 .4 .1 .3 .3	26 6 21 21
MEAN S.D. N	6.55 .343 6	11.8 .41 6	39.7 1.06 6	60.7 2.68 6	18.1 .75 6	29.7 .29 6	431 85.3 6	.3 .12 6	8.0

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Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533	6.04	11.6	38.0	62.8	19.1	30.5	345	. 3	18
I05534	5.91	11.3	38.4	65.0	19.2	29.5	532	. 7	41
I05536	6.43	11.7	41.3	64.2	18.3	28.4	531	. 2	13
I05540	6.09	11.4	37.1	60.9	18.7	30.8	501	.1	6
I05542	6.66	12.2	41.8	62.8	18.3	29.2	555	.2	13
105551	6.12	11.1	37.9	62.0	18.2	29.3	351	.5	31
MEAN	6.21	11.6	39.1	63.0	18.6	29.6	469	.3	20
S.D.	.280	.38	1.96	1.48	.44	.89	95.4	.23	13.1
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /m	EOSIN cL X10 ³ /mc	BASO N	I-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Leve	1: 0	Dosage (Unit: mg/k	g/day							
I05529 I05530 I05531 I05535 I05544 I05549	9.6 12.1 14.6 21.4 8.6 10.1	6.2 8.3 11.7 12.2 2.3 5.9	2.8 2.8 1.9 5.9 5.2 2.8	.5 1.0 .9 2.4 .7	.1 .0 .1 .7 .3	.0 .0 .1 .2 .0	65 68 80 57 26 58	30 23 13 28 61 28	5 8 6 11 8 10	1 0 1 3 4 4	0 0 0 1 1	
MEAN S.D. N	12.7 4.75 6	7.8 3.77 6	3.6 1.59 6	1.1 .67 6	.3 .26 6	.0 .08 6	59 18.2 6	30 16.2 6	8 2.3 6	2 1.7 6	0 .5 6	
Group: 2	Dose Leve	1: 0.03	Dosage (Unit: mg/k	g/day							
I05537 I05541 I05547 I05550	7.7 11.5 7.3 11.7	3.5 6.5 5.0 7.9	2.8 3.7 1.7 2.8	.8 1.1 .5 .8	.5 .2 .1 .2	.1 .0 .0	46 56 68 68	36 32 24 24	10 10 7 6	6 2 1 2	2 0 0 0	
MEAN S.D. N	9.6 2.37 4	5.7 1.90 4	2.8 .82 4	.8 .24 4	.2 .17 4	.0 .05 4	60 10.6 4	29 6.0 4	8 2.1 4	3 2.2 4	0 1.0 4	
Group: 3	Dose Leve	1: 0.15	Dosage (Unit: mg/k	g/day							
105532 105538 105539 105545 105548 105552	8.0 9.4 4.4 10.0 11.7 11.2	5.4 5.1 1.2 5.2 7.7 8.2	2.0 3.4 2.8 3.9 3.0 2.2	.4 .6 .4 .7 .5	.1 .3 .1 .1 .4 .5	.0 .0 .0 .0	68 54 26 52 66 73	25 36 63 39 26 19	5 8 7 4 4	2 3 2 1 4 4	0 0 0 0 0	
MEAN S.D. N	9.1 2.66	5.5 2.48	2.9 .72	.5 .13	.2 .18	.0 .00	56 17.0	35 15.7		3 1.2		

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Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH I	MONO I X10 ³ /mcL				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage Ui	nit: mg/kg	/day						
105533 105534 105536 105540 105542 105551	8.8 8.8 7.6 9.7 13.7 5.0	3.9 4.6 4.8 5.0 11.5 2.2	4.4 3.0 2.0 3.9 1.8 2.3	.4 .9 .6 .6 .4	.0 .2 .1 .1 .0	.0	45 52 63 51 84 44	50 34 27 40 13 47	5 11 8 7 3 7	0 3 2 1 0 2	0 1 0 0 0
MEAN S.D. N	8.9 2.85	5.3 3.19	2.9 1.06	.6 .20	.1 .08	.0	56 15.1	35 13.7	7 2.7	1 1.2	2 .4

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Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO PO	LY I	POIK HYPO	TOXNEUT
Group: 1	Dose Level: 0		Dosage Unit	mg/kg/day
I05529 I05530 I05531 I05535 I05544 I05549		- - - -	- - - -	- - - - -
Group: 2	Dose Level: 0	.03	Dosage Unit	mg/kg/day
I05537 I05541 I05547 I05550		- - -	- - - -	=
Group: 3	Dose Level: 0	.15	Dosage Unit	mg/kg/day
I05532 I05538 I05539 I05545 I05548 I05552		- - - - -	- - - - -	- - - - -
Group: 4	Dose Level: 0	.75	Dosage Unit	mg/kg/day
I05533 I05534 I05536 I05540 I05542 I05551		- - - -	- - - - -	- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC	RETIC X10 ³ /mcL
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	rg/day				
		13.2		62.8		31.5		.1	7
I05517		12.9		68.0			423		31
I05519	6.93	12.2		59.9	17.6	29.4	524	. 3	21
I05520	6.53	12.4	39.9	61.1	18.9	31.0	699	. 0	0
I05526	6.10	11.7	38.1	62.4	19.1	30.7	377	.1	6
I05527	6.43	12.5	42.3	65.8	19.4	30.7 29.5	644	.7	45
MEAN	6.49	12.5	41.1	63.3	19.2	30.4	522	.3	18
S.D.	.292	.53	1.78	3.03	.95	.84	126.9	.27	17.3
N	.292 6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	L: 0.03	Dosage	Unit: mg/	kg/day				
I05514 I05515 I05516	6.86	12.2 12.6 12.0	41.7	60.9 63.9	17.7	29.1	438 647	.1	7
I05515	6.61	12.6	42.3	63.9 61.1	19.1	29.9	647	1.0	66
I05516	6.44	12.0	39.4	61.1	18.7	30.6	376	. 4	26
I05521	7.44	12.7	42.2	56.8	17.1	30.0	376 684	.0	0
MEAN	6.84	12.4	41.4	60.7	18.2	29.9	536	. 4	25
S.D.	.437	.33	1.36	2.92	.91	.62	152.1	.45	29.6
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	kg/day				
		13.0				31.3		.5	32
I05510	6.82	12.4	40.1	58.8	18.2	30.9	499	.5	34
I05518	7.10	12.7	41.5	58.5	17.8	30 5	578	5	4.3
I05523	6.51	12.7	40.9	62.8	19.5	31.0	625	. 1	7
105524	6.54	12.6	42.1	64.3	19.3	30.0	520	. 0	0
I05528	6.19	12.7 12.7 12.6 11.5	38.2	62.8 64.3 61.8	18.6	31.0 30.0 30.2	349	. 2	12
MEAN	6.60	12.5							
S.D.	.315	.52	1.42	2.56	.87	.50	97.3	.25	17.3
N	6	6	6	6	6	6	6	6	6

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Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
105506	7.46	13.1	43.4	58.2	17.6	30.2	534	. 3	22
105507	6.81	12.1	40.5	59.4	17.7	29.8	36	. 1	7
I05509	6.69	11.9	40.0	59.8	17.7	29.6	480	. 5	33
I05511	5.86	11.1	37.6	64.1	18.9	29.5	629	. 4	23
I05512	6.90	12.8	41.6	60.3	18.5	30.7	359	.0	0
I05522	6.65	12.8	43.8	65.9	19.3	29.3	586	. 4	27
MEAN	6.73	12.3	41.2	61.3	18.3	29.8	437	. 3	19
S.D.	.516	.75	2.31	3.02	.72	. 52	217.8	.19	12.6
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN I L X10 ³ /mc	BASO 1 L X10 ³ /	N-SEG% 'mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Unit: mg/kg	g/day						
I05508 I05517 I05519 I05520 I05526 I05527	7.4 8.0 6.7 8.0 6.0 7.8	3.7 2.1 3.1 3.8 3.2 2.4	3.3 4.7 3.2 3.4 2.2 4.2	.4 1.0 .4 .6 .5	.0 .1 .0 .1 .1	.0 .1 .0 .1 .0	49 27 46 48 52 31	45 59 48 43 36 54	5 12 5 7 9 12	1 1 1 2 3	0 2 0 1 0
MEAN S.D. N	7.3 .81 6	3.0 .68 6	3.5 .87 6	.6 .26 6	.1 .08 6	.0 .05 6	42 10.5 6	48 8.2 6	8 3.2 6	2 .8 6	0 .8 6
Group: 2	Dose Leve	1: 0.03	Dosage 1	Unit: mg/kg	J/day						
I05514 I05515 I05516 I05521	8.1 10.3 12.1 11.6	5.0 4.6 7.3 7.5	4.3	.5 1.2 1.1 .5	.2	.0 .0 .0	62 44 61 65	29 4 2 29 29	6 12 9 4	2 2 1 2	0 0 0
MEAN S.D. N	10.5 1.79 4	6.1 1.51 4	3.4 .82 4	.8 .38 4	.2 .05 4	.0 .00 4	58 9.5 4	32 6.5 4	8 3.5 4	2 4.5	0 4.0
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	/day						
I05505 I05510 I05518 I05523 I05524 I05528	10.8 13.3 9.9 12.7 7.7 16.4	8.0 8.7 3.2 7.7 3.2 11.1	2.3 3.7 5.8 4.5 3.4 3.6	.2 .7 .8 .4 1.0	.3 .1 .1 .1 .1	.0 .0 .0 .0 .1	73 65 32 60 41 68	21 28 59 36 44 22	2 6 8 3 13 8	3 1 1 1 2	0 0 0 0 1
MEAN S.D.	11.8 3.02	7.0 3.16	3.9 1.18	.7 .40	.2 .13	.0	56 16.3	35 14.6	7 4.0	2 .8	0 .4

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Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcI				YMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage U	nit: mg/kg	/day						
I05506 I05507 I05509	6.5 14.6 10.6	2.5 9.6 6.4	3.5 3.6 2.8	.4 1.0 .7	.1 .2 .6	.0 .2 .1	38 66 60	54 24 27	6 7 7	1 2 6	0 1 1
I05511 I05512 I05522	7.7 7.7 10.7	4.2 3.6 5.5	3.0 3.5 4.3	.4 .6 .7	.1 .0 .2	. 0 . 0 . 0	54 46 51	39 45 40	5 8 6	1 0 2	0 0 0
MEAN S.D.	9.6 2.97	5.3 2.52	3.4 .52	.6 .23	.2	.0	52 10.0	38 11.2	6 1.0	2 2.1	0 .5

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	НҮРО	TOXNEUT
Group: 1	Dose Leve	el: 0	Do	sage Unit: 1	ng/kg/day
105508	-	_	-	_	_
I05517	-	-	-	-	-
I05519	-	-	-	-	-
I05520	-	-	-	-	-
I05526	-	-	-	-	-
105527	-	-	-	-	-
Group: 2	Dose Leve	el: 0.03	Do	sage Unit: 1	ng/kg/day
105514	_	_	_	_	_
I05515	-	-	-	-	-
I05516	-	-	-	-	-
105521	-	-	-	-	-
Group: 3	Dose Leve	el: 0.15	Do	sage Unit: τ	ng/kg/day
105505	_	_	_	_	_
I05510	-	-	-	-	-
I05518	-	-	-	-	-
I05523	-	-	-	-	=
I05524	_	_	_	_	_
I05528	-	-	-	-	-
Group: 4	Dose Leve	el: 0.75	Do	sage Unit: ι	ng/kg/day
105506	_	_	_	-	_
105507	-	_	_	_	_
I05509	_	_	_	-	_
I05511	_	_	_	_	_
I05512	_	_	_	-	_
I05522	_	_	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	RBC X10 ⁶ /mcL		HCT %	FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/k	g/day				
I05530 I05531 I05535 I05544	5.93 6.56 7.02 4.91	12.1 12.7 11.5	39.7 40.5 42.4 35.4	66.8 61.6 60.4 72.1	20.3 18.5 18.2 23.4	31.3 30.4 30.0 30.0 32.4 29.8	515 644 600 506	.6 .1 .3 .7	36 7 21 34
MEAN S.D. N	6.23 .766 6	12.3 .66 6	40.2 3.27 6	64.9 4.33 6	19.9 1.87 6	30.6 1.01 6	572 74.6 6	.4 .22 6	27 11.2 6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/k	g/day				
I05537 I05541 I05547 I05550	6.82	10.9 12.2 11.9 12.9	37.8 40.5 39.2 43.4	58.8 71.3 57.4 62.0	16.9 21.4 17.4 18.4	28.8 30.1 30.3 29.7	357 507 548 437	.3 .7 .8 .0	19 40 55 0
MEAN S.D. N	6.48 .593 4	12.0 .83 4	40.2 2.39 4	6.25	2.02	29.7 .67 4	83.8	.37	28 24.1 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05538 I05539	9.13 6.64 6.45 6.74 6.80 6.21	17.2 11.8 12.5 12.2 11.7	55.9 40.0 40.4 40.3 38.4 38.9	61.2 60.3 62.6 59.8 56.4 62.6	17.8	30.8 29.5 30.9 30.2 30.4 29.7	456	- 6	0 4 7
S.D.	7.00 1.068 6	2.17	6.70	2.31	.76	.57	133.5	.28	18.2

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Individual Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
105533	6.04	11.7	39.0	64.6	19.3	29.9	355	. 4	24
I05534	5.74	11.4	37.9	66.0	19.8	30.0	620	. 5	29
I05536	6.72	12.2	42.6	63.5	18.2	28.7	622	. 1	7
I05540	6.13	11.9	39.5	64.5	19.4	30.1	432	. 6	37
I05542	6.75	12.1	42.6	63.0	18.0	28.5	665	.0	0
I05551	6.32	11.7	39.5	62.5	18.6	29.7	333	.1	6
MEAN	6.28	11.8	40.2	64.0	18.9	29.5	504	.3	17
S.D.	.397	.29	1.96	1.27	.72	.70	148.3	.25	14.9
N	6	6	6	6	6	6	6	6	6

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Appendix 4 Individual Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN L X10 ³ /mc	BASO N	I-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage (Jnit: mg/kg	g/day						
105529 105530 105531 105535 105544 105549	5.8 13.0 14.1 10.9 10.5 12.4	2.9 7.8 9.9 3.5 2.9 7.9	2.2 4.5 3.0 5.4 7.0 3.7	.5 .5 .9 1.4 .0	.1 .2 .5 .5	.0 .0 .1 .2 .0	50 60 70 32 27 64	38 35 22 49 67 30	9 4 6 13 0 3	1 1 5 5	1 0 1 1 0
MEAN S.D. N	11.1 2.93 6	5.8 3.08 6	4.3 1.73 6	.6 .48 6	.3 .18 6	.0 .08 6	50 17.6 6	40 15.9 6	6 4.6 6	2 2.0 6	0 .5 6
Group: 2	Dose Leve	1: 0.03	Dosage (Jnit: mg/kg	g/day						
I05537 I05541 I05547 I05550	10.6 8.3 7.2 8.8	5.7 2.4 3.7 5.6	3.4 5.0 2.7 2.4	.8 .6 .5	.5 .2 .2	.1 .1 .0	54 29 52 63	33 61 38 27	8 8 7 8	5 2 2 1	1 1 0 0
MEAN S.D. N	8.7 1.42 4	4.4 1.59 4	$\begin{smallmatrix}3.4\\1.16\\4\end{smallmatrix}$.6 .13 4	.2 .17 4	.0 .06 4	50 14.5 4	40 14.9 4	8 .5 4	$\begin{smallmatrix}2\\1\\1.7\end{smallmatrix}$	0 4.6
Group: 3	Dose Leve	1: 0.15	Dosage (Jnit: mg/kg	ı/day						
105532 105538 105539 105545 105548 105552	8.9 10.6 6.1 9.7 7.1 10.1	5.7 5.7 2.2 4.0 2.3 6.0	2.3 4.1 3.1 5.0 3.7 3.2	.7 .4 .5 .5 .7	.1 .4 .2 .2 .3 .5	.0 .0 .1 .0 .1	64 54 37 41 32 60	26 39 51 51 52 32	8 4 9 5 10 3	1 4 3 2 5 5	0 0 1 0 1
MEAN S.D. N	8.8 1.78 6	4.3 1.75 6	3.6 .93 6	.5 .16 6	.3 .15 6	.0 .05 6	48 13.1 6	42 11.2 6	6 2.9 6	3 1.6 6	0 .5

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Individual Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mc				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	L: 0.75	Dosage	Unit: mg/kg	g/day						
I05533	8.4	3.2	4.8	. 4	. 0	.0	38	57	4	0	0
I05534	18.0	12.8	3.6	1.4	. 2	.1	71	20	8	1	Ď
I05536	6.7	3.9	1.8	7	.2	.1	58	27	11	3	i
I05540	8.1	4.5	2.9	.6	.1	.0	55	36	7	1	0
I05542	10.0	6.9	2.6	. 4	.1	.0	69	27	4	1	0
I05551	4.8	2.1	2.3	.3	.1	.0	44	48	6	1	0
MEAN	9.3	5.6	3.0	.6	.1	. 0	56	36	7	1	0
S.D.	4.59	3.89	1.07	.40	.08	.05	13.2	14.2	2.7	1.0	. 4
N	6	6	6	6	6	6	6	6	6	6	6

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Appendix 4 Individual Clinical Hematology Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	НҮРО	TOXNEUT
Group: 1	Dose Leve	1: 0	Dosage	: Unit: m	g/kg/day
I05529 I05530 I05531 I05535 I05544 I05549	- - - - -	- - - - -	- - - - -	- - - - -	-
Group: 2	Dose Leve	1: 0.03	Dosage	Unit: m	g/kg/day
I05537 I05541 I05547 I05550	- - -	- - -	- - -	- - -	-
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: m	g/kg/day
I05532 I05538 I05539 I05545 I05548 I05552	-	- - - -	- - - -	- - - - -	- - - - -
Group: 4	Dose Leve	1: 0.75	Dosage	Unit: m	g/kg/day
105533 105534 105536 105540 105542 105551	- - -	- - - -	- - - -	- - - -	-

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Appendix 4 Individual Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
	Dose Level								
105508		12.8		62.0	20.0	32.2	387	. 3	19
		12.8		66.6		31.1	406	. 7	43
I05519	6.92	12.2	40.7	58.8	17.6	29.9	475	. 1	7
I05520	6.45	12.1	39.2	60.8	18.8	30.8	671	.1	6
I05526	6.01	11.5	37.4	62.3	19.2	30.8	384	.2	12
I05527	6.59	12.8	43.8	66.4	19.4	30.8 29.3	614	.6	40
MEAN	6.43	12.4	40.3	62.8	19.3	30.7	490	.3	21
S.D.	.314	.53	2.17	3.11	1.06	1.00	124.3	.26	16.4
N	.314 6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/k	g/day				
I05514 I05515 I05516	6.96	12.3	42.2	60.6 63.9 62.8	17.7	29.2	389 630	.3	21
I05515	6.71	12.8	42.9	63.9	19.1	29.8	630	1.0	67
I05516	6.43	12.2	40.4	62.8	19.0	30.2	290	1.3	84
I05521	7.88	13.4	44.7	56.8	17.0	30.0	741	.2	16
MEAN	7.00	12.7	42.5	61.0	18.2	29.8	512	.7	4.7
S.D.	.628	.55	1.78	3.13	1.02	.43	208.8	. 54	33.7
N	.628 4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
	6.07	12.1	39.4	64.8	19.9	30.7	505	1.6	97
I05510	6.64	12.2	39.6	59.6	18.3	30.7	487	. 4	27
I05518	6.95	12.5	40.9	58.8	18.0	30.5	501	.2	14
I05523	6.33	12.5	40.0	63.2	19.7	31.2	585	. 4	25
105524	6.48	12.4	41.9	64.6	19.2	29.7	555	.2	13
I05528	6.51	12.5 12.5 12.5 12.4 12.3	40.3	63.2 64.6 61.8	18.8	31.2 29.7 30.5	346	. 3	20
MEAN	6.50	12.3	40.4	62.1	19.0	30.6	496	. 5	3.3
S.D.	.295	.16	.93	2.53	.76	.49	82.6	.54	32.0
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL	
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day					
105506	7.22	13.0	42.6	59.0	18.0	30.5	522	. 3	22	
105507	6.81	11.9	41.5	61.0	17.4	28.6	50	. 4	27	
I05509	6.37	11.3	38.3	60.2	17.7	29.4	475	. 6	3.8	
105511	5.94	11.2	38.0	64.0	18.8	29.4	552	. 4	24	
I05512	7.13	12.9	43.0	60.2	18.1	30.0	396	.1	7	
I05522	6.48	12.7	42.3	65.3	19.5	29.9	592	.6	39	
MEAN	6.66	12.2	41.0	61.6	18.2	29.6	431	. 4	26	
S.D.	.488	.81	2.23	2.47	.77	.65	198.6	.19	11.8	
N	6	6	6	6	6	6	6	6	6	

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Individual Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /m	EOSIN CL X103/mc	BASO N	I-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Leve	1: 0	Dosage (Unit: mg/k	g/day							
I05508 I05517 I05519 I05520 I05526 I05527	6.1 7.8 5.8 5.1 5.1 10.2	2.3 2.9 2.5 1.7 1.7 3.3	3.2 4.2 3.0 2.9 2.8 6.0	.3 .6 .2 .4 .4	.2 .1 .0 .1 .1	.0 .1 .0 .0 .0	38 37 44 34 34 33	52 54 52 57 56 59	5 8 3 8 8	4 1 1 1 3 2	1 0 1 0 0	
MEAN S.D. N	6.7 1.99 6	2.4 .64 6	3.7 1.24 6	.4 .16 6	.1 .08 6	.0 .04 6	37 4.1 6	55 2.8 6	6 2.1 6	2 1.3	0 .5 6	
Group: 2	Dose Leve	1: 0.03	Dosage (Unit: mg/k	g/day							
105514 105515 105516 105521		3.5 2.4 6.4 5.3		.6 .6 .6	.2	.0 .0 .0	50 31 60 61	38 58 32 31	8 8 6 7	4 2 1 1	0 0 0	
MEAN S.D. N	8.5 1.60 4	$\begin{array}{c} 4.4 \\ 1.79 \\ 4 \end{array}$	3.3 .88 4	.6 .00 4	.2 .10 4	.0 .00 4	50 13.9 4	40 12.6 4	7 1.0 4	$\begin{smallmatrix}2\\1\\4\end{smallmatrix}.4$	0 4.0	
Group: 3	Dose Leve	1: 0.15	Dosage (Jnit: mg/k	g/day							
105505 105510 105518 105523 105524 105528	8.9 10.7 15.8 8.6 6.4 11.4	6.2 6.4 7.9 4.3 2.8 6.8	2.2 3.2 6.8 3.7 2.8 3.4	.3 .9 1.0 .4 .7	.1 .1 .1 .1 .0	.0 .1 .0 .1	70 60 50 50 44 59	25 30 43 43 44 30	4 9 6 5 11 6	1 1 1 0 5	0 1 0 1 0	
MEAN S.D. N	10.3 3.21	5.7 1.85	3.7 1.61	.6 .27	.2 .18	.0 .05	56 9.3	36 8.4	7 2.6			

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Individual Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10 ³ /mcL	MONO 1 X10 ³ /mcI				YMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage U	nit: mg/kg	/day						
105506 105507 105509 105511 105512 105522	7.9 10.3 9.1 11.5 5.3 12.3	3.6 5.0 5.3 7.5 2.0	3.5 3.9 2.8 3.4 2.7 4.6	.6 1.1 .5 .4 .5	.1 .2 .4 .2 .0	.0 .1 .0 .0	46 48 58 65 38	45 38 31 30 50 37	7 10 6 4 10 2	1 2 5 1 1 3	1 0 0 1
MEAN S.D.	9.4 2.56	5.1 2.06	3.5 .71	.6 .28	.2	.0	52 9.8	38 7.8	6 3.2	2 1.6	0 .5

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Individual Clinical Hematology Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	НҮРО	TOXNEUT
Group: 1	Dose Leve	1: 0	Dosage	e Unit: mg	/kg/day
105508 105517 105519 105520 105526 105527	- · · · · · · · · · · · · · · · · · · ·	- - - -	- - - -	- - - -	-
Group: 2	Dose Leve	1: 0.03	Dosage	e Unit: mg	/kg/day
I05514 I05515 I05516 I05521	- :	- - -	- - -	- - -	- - -
Group: 3	Dose Leve	l: 0.15	Dosage	e Unit: mg	/kg/day
105505 105510 105518 105523 105524 105528		- - - - -	- - - - -	- - - -	- - - -
Group: 4	Dose Leve	1: 0.75	Dosage	e Unit: mg	/kg/day
105506 105507 105509 105511 105512 105522	- · · · · · · · · · · · · · · · · · · ·	- - - -	- - - -	- - - -	-

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Individual Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
105529 105530 105531 105535 105544 105549	6.50 6.44 6.71 5.26	13.0 12.0 12.1 11.3	43.2 39.2 40.1 37.0	62.5 66.5 60.9 59.9 70.4 64.7	20.0 18.6 18.0 21.5	31.0 30.1 30.5 30.1 30.5 30.4	682 556 629 515 446 544	.2 .3 .4 .4 .3	12 20 26 27 16 20
MEAN S.D. N	6.31 .565 6	12.3 .77 6	40.3 2.79 6	64.1 3.90 6	19.5 1.21 6	30.4	562 83.6 6	.3	20 5.7
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/k	g/day				
I05547	5.52 6.49	10.6 12.8 11.3 12.2	40.8 37.5	59.7 73.9 57.8 63.0	23.1 17.5	30.2	492 462 493 422	.5 .6	28 39
MEAN S.D. N	6.20 .472 4	11.7 .97 4	39.2 2.18 4	63.6 7.19 4	19.0 2.78 4	29.9 1.21 4	467 33.4 4	.5 .13 4	30 7.9 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
	6.59 6.14	11.5 11.7	37.6 37.8		17.5 19.0	29.5 30.8 31.1 30.7 30.9	585 461	.3	7 18 21 20 6
MEAN S.D.	6.50 .298	12.0	39.4 1.44	60.7 2.35	18.6 .78	30.6 .57	442 78.9	.2	14 6.6

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Individual Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533	6.39	11.9	40.1	62.7	18.7	29.8	328	. 1	6
I05534	6.06	11.8	39.8	65.7	19.5	29.7	520	. 4	24
I05536	6.35	11.7	40.4	63.6	18.4	28.9	568	.1	6
I05540	6.47	12.5	42.2	65.2	19.3	29.5	597	.3	19
I05542	6.57	11.9	41.6	63.3	18.2	28.7	635	. 0	0
I05551	6.07	11.4	37.8	62.3	18.7	30.1	378	.3	18
MEAN	6.32	11.9	40.3	63.8	18.8	29.4	504	.2	12
S.D.	.210	.36	1.54	1.37	.51	. 54	124.1	.15	9.4
N	6	6	6	6	6	6	6	6	6

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Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO I	EOSIN I	BASO N L X10 ³ /r		LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Level	L: 0	Dosage (Jnit: mg/kg	/day							
105529 105530 105531 105535 105544 105549	6.4 11.1 9.1 11.7 9.1 8.7	3.2 6.2 4.7 3.0 2.8 4.4	2.6 4.1 3.5 7.1 5.1 3.5	.566 .66	.1 .2 .3 .7 .7	.0 .0 .0 .1 .0	50 56 51 26 30 50	41 37 38 61 56 40	8 5 7 7 6 7	1 2 3 6 7 2	1 0 0 1 0	
MEAN S.D. N	9.4 1.89 6	4.0 1.31 6	4.3 1.59 6	.6 .10 6	.4 .27 6	.0 .04 6	44 12.5 6	46 10.3 6	7 1.0 6	4 2.4 6	0 .5 6	
Group: 2	Dose Level	L: 0.03	Dosage (Jnit: mg/kg	/day							
I05537 I05541 I05547 I05550	8.3 10.4 4.1 12.0	3.5 4.4 1.7 8.2	3.0 4.9 2.0 2.9	1.3 .8 .3 .8	.3 .2 .1	.2 .0 .0	42 42 41 68	37 47 48 24	15 8 8 6	3 2 3 1	2 0 0 0	
MEAN S.D. N	8.7 3.42 4	$\begin{array}{c} 4.4 \\ 2.74 \\ 4 \end{array}$	3.2 1.22 4	.8 .41 4	.2 .10 4	.0 .10 4	48 13.2 4	39 11.2 4	9 3.9 4	2 1.0 4	0 1.0 4	
Group: 3	Dose Level	L: 0.15	Dosage U	Jnit: mg/kg	/day							
I05532 I05538 I05539 I05545 I05548 I05552	6.5 9.5 8.5 8.8 10.2 8.9	3.6 5.2 3.3 4.4 5.2 4.9	2.4 3.2 4.4 3.5 3.9 3.1	.3 .8 .5 .7 .7	.1 .2 .2 .1 .3 .4	.0	56 55 39 50 51 55	37 34 52 40 38 35	5 6 8 7 6	2 2 2 1 3 4	0 0 1 0 0	
MEAN S.D. N	8.7 1.25 6	4.4 .82 6	3.4 .69 6	.6 .18 6	.2 .12 6	.0 .00 6	51 6.4 6	39 6.6 6	7 1.5 6	2 1.0 6	0 .4	

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Individual Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI		BASO N L X10 ³ /t		YMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage U	nit: mg/kg	/day						
I05533	8.2	3.1	4.3	.7	.1	.1	38	53	8	1	1
105534	8.5	4.1	3.1	1.0	. 2	.1	4.8	37	12	3	1
I05536	5.7	2.8	2.2	.6	. 2	.0	50	3.8	10	3	0
I05540	10.7	6.5	3.8	. 4	.1	. 0	60	35	4	1	0
I05542	9.5	7.0	2.2	.3	.0	. 0	74	23	3	0	0
I05551	6.2	4.1	1.7	. 4	.1	.0	66	27	6	1	0
MEAN	8.1	4.6	2.9	. 6	.1	.0	56	36	7	2	0
S.D.	1.91	1.75	1.02	.26	.08	.05	13.1	10.4	3.5	1.2	. 5
7.T	_	-	_	-	_	-	_	_	_	-	_

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Individual Clinical Hematology Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	'kg/day
I05529 I05530 I05531 I05535 I05544 I05549		- - - -	- - - -	- - - -	- - - - -
Group: 2	Dose Level	L: 0.03	Dosage	: Unit: mg/	'kg/day
I05537 I05541 I05547 I05550		- - -	- - -	- - -	- - -
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	'kg/day
105532 105538 105539 105545 105548 105552	- - - - -	- - - -	- - - -	- - - - -	- - - -
Group: 4	Dose Level	l: 0.75	Dosage	: Unit: mg/	'kg/day
105533 105534 105536 105540 105542 105551		- - - -	- - - -	- - - - -	- - - -

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Appendix 4 Individual Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	tg/day				
		12.3		61.0			351		
I05517		13.1		66.3			379		
I05519		12.8		58.0			447		
I05520	6.44	12.1	38.7	60.1	18.8	31.2	643	.0	0
I05526	6.28	11.7	38.6	61.3	18.7	30.5	354	.1	6
I05527	6.95	12.9	42.8	61.6	18.5	30.1	613	.7	49
MEAN	6.68	12.5	40.9	61.4	18.7	30.6	464	. 2	17
S.D.	.421	.54	2.28	2.74	.88	.62	131.6	.26	18.7
N	.421 6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	L: 0.03	Dosage	Unit: mg/	g/day				
105514	6.80 7.26 6.55	12.0	40.8	59.9	17.7	29.5	389	.2	14
I05515	7.26	13.0	44.0	60.7	17.9	29.5	618	.2	15
I05516	6.55	12.4	39.6	60.5	18.9	31.2	296	. 4	26
I05521	7.71	12.9	42.4	55.0	16.7	29.5 29.5 31.2 30.4	630	.0	0
MEAN	7.08 .513	12.6	41.7	59.0	17.8	30.2	483	. 2	14
S.D.	.513	.46	1.91	2.70	.90	.82	167.0	.16	10.7
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	g/day				
105505	6.35	12.6	40.5	63.7	19.9	31.2	406	. 5	32
I05510	7.19	12.6	41.3	57.5		30.5	496	.2	14
I05518	7.53	13.2	43.4	57.6	17.6	30.5	546	4	3.0
I05523	6.39	12.2	39.8	62.3	19.2	30.8	783	. 4	26
105524	6.74	12.8	42.8	63.5	19.1	30.0	515	.6	40
I05528	6.50	12.2 12.8 12.2	40.2	62.3 63.5 61.9	18.8	30.8 30.0 30.4	366	. 6	39
MEAN	6.78	12.6	41.3	61.1	18.7	30.6	519	. 4	3.0
S.D.	.479	.38	1.47	2.82	.95	.40	146.4	.15	9.6
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
105506	7.78	13.4	45.8	59.0	17.3	29.3	486	. 4	31
105507	6.93	11.7	39.3	56.7	16.8	29.7	21	.1	7
I05509	6.08	10.3	36.1	59.4	16.9	28.5	373	. 7	43
I05511	6.10	11.1	37.7	61.8	18.2	29.5	553	1.1	67
I05512	6.61	12.0	40.4	61.2	18.2	29.7	405	1.2	79
I05522	6.38	12.1	40.5	63.6	19.0	29.9	552	.1	6
MEAN	6.65	11.8	40.0	60.3	17.7	29.4	398	. 6	39
S.D.	.641	1.04	3.32	2.43	.87	.50	199.1	.48	30.3
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN L X103/mc	BASO 1 L X10 ³ /	N-SEG% /mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Unit: mg/kg	g/day						
I05508 I05517 I05519 I05520 I05526 I05527	5.3 6.7 6.7 7.8 5.2 12.3	1.8 1.7 2.9 2.3 1.6 5.9	2.9 4.5 3.5 4.3 2.9 5.1	.3 .4 .2 .7 .6	.4 .0 .1 .3 .1	.0 .0 .0 .2 .0	34 25 43 30 32 48	54 68 52 55 56 42	5 6 3 9 11 8	7 0 1 4 1	0 0 0 2 0
MEAN S.D. N	7.3 2.62 6	2.7 1.64 6	3.9 .91 6	.5 .29 6	.2 .15 6	.0 .08 6	35 8.6 6	54 8.3 6	7 2.9 6	2 2.7 6	0 .8 6
Group: 2	Dose Leve	1: 0.03	Dosage 1	Unit: mg/kg	g/day						
I05514 I05515 I05516 I05521		6.2 3.1 6.4 6.8		.4 .6 .9 .5		.0 .0 .0	62 35 56 70	30 55 34 24	4 7 8 5	3 3 2 1	0 0 0
MEAN S.D. N	9.9 1.04 4	5.6 1.70 4		.6 .22 4	.2 .08 4	.0 .00 4	56 15.0 4	36 13.5 4	6 1.8 4	2 1.0 4	0 4.0
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	g/day						
105505 105510 105518 105523 105524 105528	11.8 9.3 9.7 13.8 6.7 9.2	8.6 5.9 8.3 1.8	2.5 3.1 5.9 4.4 4.1 3.9	.5 .8 .6 .7 .8	.3 .1 .1 .4 .1	.0 .0 .1 .0 .1	73 59 30 60 28 42	21 33 61 32 61 43	4 7 9 4 10 8	2 1 1 3 1 6	0 0 1 0 1
MEAN S.D.	10.1 2.44	5.2 2.81	4.0 1.17	.7 .12	.3 .21	.0 .05	49 18.2	42 16.4			0.5

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Individual Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO I				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	4 Dose Level: 0.75		Dosage Unit: mg/kg/day								
I05506	6.7	2.5	3.6	.5	.1	.0	3.8	54	7	1	0
I05507	8.9	3.9	4.4	.5	.1	. 0	4.4	50	5	1	ō
I05509	13.2	10.0	1.8	1.4	. 0	.0	76	13	11	0	0
I05511	5.9	2.2	3.2	.3	.2	. 0	37	55	6	3	0
I05512	7.6	2.2	4.0	1.2	.1	. 0	29	53	15	2	0
I05522	11.6	5.2	4.9	.9	.5	.1	45	42	8	4	1
MEAN	9.0	4.3	3.6	.8	.2	.0	4.5	44	9	2	0
S.D.	2.87	3.02	1.08	.44	.18	.04	16.3	16.1	3.7	1.5	. 4
N	6	6	6	6	6	6	6	6	6	6	

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Individual Clinical Hematology Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO	POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Leve	1: 0	Dosag	ge Unit: mg	j/kg/day
I05508 I05517 I05519 I05520 I05526 I05527	- - - -	- - - - -	-	-	-
Group: 2	Dose Leve	1: 0.03	Dosag	ge Unit: mg	j/kg/day
I05514 I05515 I05516 I05521	-	- - -	-	- - -	-
Group: 3	Dose Leve	1: 0.15	Dosag	ge Unit: mg	J/kg/day
I05505 I05510 I05518 I05523 I05524 I05528	-	- - - - -	-	-	- - - -
Group: 4	Dose Leve	1: 0.75	Dosag	ge Unit: mg	J/kg/day
I05506 I05507 I05509 I05511 I05512	- - - -	- - - -	- - - -	- - - -	-

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Individual Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	RBC X10°/mcL		જ	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	rg/day				
105529	5.82	11.3	36.1	61.9	19.3	31.2	609	. 2	
I05530	6.31	12.5		65.1		30.4			32
		12.6		59.1		31.0	586	. 1	
I05535		12.9		58.7			469		0
I05544	6.25	11.6	38.7	62.0	18.6	30.0	498	.7	44
I05549	7.02			63.3		30.5	416	.7	49
MEAN	6.60	12.4	40.6	61.7	18.8	30.6	520	. 4	24
S.D.	.559	.85	2.96	2.45	.77	.46	73.1	.31	20.5
N	.559 6	6	- 6	6	6	6	6	6	6
Group: 2	Dose Level	L: 0.03	Dosage	Unit: mg/	g/day				
105537	6.74	10.9	38.5	57.0 70.3 56.0	16.2	28.4	322	. 4	27
I05541	5.74	12.2	40.3	70.3	21.2	30.2	322 385	1.5	86
105547	6.96	11.7	39.0	56.0	16.8	30.0	450	.1	7
I05550		13.1	43.9	61.0	18.2	29.8	391	. 5	36
MEAN	6.66	12.0	40.4	61.1	18.1	29.6	387	. 6	39
S.D.	.641	.92	2.44	6.52	2.23	.82	52.3	.61	33.6
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	kg/day				
105532		12.5	40.8	60.0	18.4	30.7	424	.7	48
I05538	6.37	11.7	38.5	60.5	18.4	30.4	425	. 4	25
T05539	6.59	12.3	40.6	61.6 59.3 55.9	18.7	30.3	506	. 3	20
I05545	7.00	12.7 11.6	41.5	59.3	18.1	30.6	326	. 0	0
I05548	6.84	11.6	38.3	55.9	17.0	30.3	545	. 2	14
I05552	7.00 6.84 6.39	11.9	39.4	61.6	18.7	30.3 30.6 30.3 30.3	532	.2	13
MEAN	6.66	12.1	39.9	59.8	18 2	30 4	460	3	20
S.D.	.257	.45	1.31	2.12	.64	.18	83.7	.24	16.1
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533	6.67	12.2	41.2	61.7	18.4	29.8	320	. 3	20
I05534	6.20	12.1	41.4	66.7	19.5	29.3	582	. 3	19
I05536	6.07	11.0	36.8	60.7	18.2	30.0	563	. 1	6
I05540	5.97	11.5	37.3	62.4	19.2	30.8	491	. 0	0
I05542	6.56	11.6	40.0	60.9	17.6	28.9	671	.1	7
I05551	6.51	11.9	40.3	61.9	18.3	29.6	322	.2	13
MEAN	6.33	11.7	39.5	62.4	18.5	29.7	492	.2	11
S.D.	.288	.44	1.98	2.21	.70	.65	144.0	.12	7.9
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN :	BASO 1 L X10 ³ /	N-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Unit: mg/kg	g/day						
I05529 I05530 I05531 I05535 I05544 I05549	8.4 8.3 14.5 8.3 8.7 10.0	5.1 1.8 9.9 2.4 2.9 5.3	2.6 5.9 3.8 4.4 3.9 3.8	.6 .5 .7 1.0 1.3	.1 .1 .5 .4	.0 .0 .0 .1 .1	60 22 68 28 34 53	31 70 26 52 45 38	7 6 5 12 15 7	1 2 1 6 5	0 0 0 1 1
MEAN S.D. N	9.7 2.44 6	4.6 2.98 6	4.1 1.08 6	.8 .30 6	.2 .18 6	.0 .05 6	44 18.7 6	44 15.9 6	9 3.9 6	3 2.3 6	0 .5 6
Group: 2	Dose Leve	1: 0.03	Dosage 1	Unit: mg/kg	g/day						
I05537 I05541 I05547 I05550	8.5 6.5 15.9 6.4	4.2 2.2 10.2 3.5	3.0 3.6 2.8 2.1	.9 .5 2.6 .5	.4 .1 .1	.2 .1 .1	49 34 64 55	35 56 18 34	10 8 16 9	4 1 1 2	2 1 0
MEAN S.D. N	9.3 4.49 4	5.0 3.55 4	2.9 .62 4	1.1 1.00 4	.2 .14 4	.1 .08 4	50 12.6 4	36 15.6 4	11 3.6 4	2 1.4	1 1.0 4
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	g/day						
105532 105538 105539 105545 105548 105552	5.6 10.6 6.3 11.0 7.6 7.5	2.5 6.6 1.1 5.3 3.2 3.4	2.4 2.9 4.5 4.8 3.1 3.0	.6 .5 .6 .8	.1 .3 .2 .2 .4 .5	.0 .0 .0 .0	45 63 18 48 42 45	43 27 71 44 41 40	10 7 8 5 11 7	1 3 2 5 6	1 0 0 0 0
MEAN S.D. N	8.1 2.23 6	3.7 1.98 6	3.4 .96 6	.6 .14 6	.3 .15 6	.0 .00 6	44 14.5 6	44 14.4 6	8 2.2 6	3 1.9	0 .5

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Individual Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X103/mcL	LYMPH X10 ⁵ /mcL	MONO 1 X10 ³ /mcI				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	4 Dose Level: 0.75		Dosage Unit: mg/kg/day								
105533	8.2	2.1	4.9	.9	. 2	.1	26	60	11	3	1
I05534	13.2	3.8	7.9	1.0	. 4	.1	29	60	7	3	1
I05536	10.1	6.6	1.9	1.3	. 2	.1	65	19	13	2	1
I05540	11.7	7.4	3.5	.6	.1	. 0	64	3.0	5	1	0
I05542	9.0	5.0	3.6	.3	.2	. 0	55	39	3	2	0
I05551	4.6	1.7	2.2	.6	.0	.0	38	48	13	1	1
MEAN	9.5	4.4	4.0	.8	.2	.0	4.6	43	9	2	1
S.D.	2.99	2.33	2.19	.35	.13	.05	17.4	16.5	4.3	. 9	.5
TAT	-	_	-	ے	c	_	c	_	c	-	_

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Appendix 4 Individual Clinical Hematology Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	'kg/day
I05529 I05530 I05531 I05535 I05544 I05549		- - - -	- - - -	- - - -	- - - - -
Group: 2	Dose Level	L: 0.03	Dosage	: Unit: mg/	'kg/day
I05537 I05541 I05547 I05550		- - -	- - -	- - -	- - -
Group: 3	Dose Level	l: 0.15	Dosage	Unit: mg/	'kg/day
105532 105538 105539 105545 105548 105552	- - - - -	- - - -	- - - -	- - - - -	- - - -
Group: 4	Dose Level	l: 0.75	Dosage	: Unit: mg/	'kg/day
105533 105534 105536 105540 105542 105551		- - - -	- - - -	- - - - -	- - - -

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Appendix 4

Individual Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	tg/day				
105508 105517 105519 105520 105526 105527	6.17 6.48	12.8 13.1 12.7 11.7 12.2 12.3	44.2 42.0 38.0 40.4	62.7 65.8 58.1 61.6 62.3 63.5	19.5 17.6 18.9 18.8	31.7 29.6 30.2 30.7 30.2 29.6	399 445 591 392	.1 .2 .2 .1 .1	13 14 6 6
MEAN S.D. N	6.60 .354 6	12.5 .50 6	41.1 2.07 6	62.3 2.53 6	18.9 .78 6	30.3 .79 6	467 90.4 6	.2 .08 6	11 5.8 6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	g/day				
I05516	6.47 6.61	12.2	40.7 40.8	61.7 62.9 61.7 56.6	18.8 18.9	29.9 30.6	398 559 246 663	.2	13
MEAN S.D. N	6.96 .627 4	12.5 .45 4	42.1 1.79 4	60.7 2.81 4	18.0 1.05 4	29.6 .88 4	466 183.0 4	.2 .17 4	12 11.8 4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	rg/day				
I05510 I05518 I05523 I05524	6.57	12.5 12.4 12.8 12.6 12.6 11.9	41.8 40.8 42.1 40.7 41.8 39.0	65.0 58.4 58.4 62.6 63.5 62.9	19.5 17.8 17.7 19.3 19.2	30.0 30.4 30.4 30.9 30.2 30.2	411 464 514 526 527 380	.3 .3 .3 .3 .2	19 21 22 20 13 19
MEAN S.D.	6.65 .372	12.5	41.0 1.15	61.8	18.8	30.4	470 63.1	.3	19 3.2

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Appendix 4 Individual Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
NUMBER	X10°/mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05506 a I05507 I05511 I05512 I05522	7.69 6.64 5.76 6.46 6.44	13.3 11.0 10.4 11.7 12.3	44.3 38.4 35.7 39.8 41.5	57.7 57.9 62.0 61.6 64.5	17.2 16.5 18.1 18.1 19.1	29.9 28.5 29.2 29.4 29.6	560 78 PA 486 429 610	.2 .3 .5 .0	15 20 29 0
MEAN	6.32	11.4	38.8	61.5	17.9	29.2	401	.2	12
S.D.	.387	.83	2.45	2.72	1.08	.48	228.0	.24	14.6
N	4	4	4	4	4	4	4	4	4

a Unscheduled sacrifice on Day 179.

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Individual Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mo	EOSIN CL X103/mc	BASO N	I-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%	
Group: 1	Dose Leve	1: 0	Dosage U	Jnit: mg/k	g/day							
I05508 I05517 I05519 I05520 I05526 I05527	9.5 9.0 6.8 12.0 10.0 10.8	3.6 2.6 4.0 5.8 6.7 2.8	4.8 5.6 2.5 5.0 2.8 6.0	.6 .6 .3 .7 .4 1.6	.5 .1 .4 .1	.0 .1 .0 .1 .0	38 30 58 49 67 26	50 62 37 42 28 55	6 7 4 6 4 15	6 1 1 3 1 3	0 1 0 1 0	
MEAN S.D. N	9.7 1.76 6	4.2 1.66 6	4.4 1.46 6	.7 .46 6	.2 .18 6	.0 .05 6	45 16.1 6	46 12.4 6	7 4 .1 6	. 2 2.0 6	0 .5 6	
Group: 2	Dose Level	1: 0.03	Dosage (Jnit: mg/k	g/day							
I05514 I05515 I05516 I05521	8.9 7.5 8.1 9.1	5.7 2.7 5.8 5.2		.4 .9 .3 .6	.2	.0 .0 .0	64 36 71 58	30 48 23 35	4 12 4 6	2 3 1 1	0 1 0 0	
MEAN S.D. N	8.4 .74 4	4.8 1.46 4	2.8 .74 4	.6 .26 4	.2 .06 4	.0 .00 4	57 15.1 4	34 10.6 4	6 3.8 4	2 1.0 4	0 .5 4	
Group: 3	Dose Leve	1: 0.15	Dosage (Jnit: mg/k	g/day							
I05505 I05510 I05518 I05523 I05524 I05528	10.3 9.1 13.6 10.8 6.1 10.0	7.5 4.6 6.6 6.3 1.6 4.6	2.3 3.9 6.6 3.8 3.8 4.1	.4 .4 .3 .5 .5	.2 .1 .1 .1 .1	.0 .0 .0 .0	72 51 48 59 26 46	22 43 48 35 63 41	4 5 2 5 9 7	2 1 0 1 1 6	0 0 0 0 0	
MEAN S.D. N	10.0 2.44	5.2 2.10	4.1 1.39	.5 .14	.2 .20	.0 .00	50 15.2	42 13.6	5 2.4	. 2.1		

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Appendix 4 Individual Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO I				YMPH%	MONO% E	OSIN%	BASO%
Group: 4	Dose Level	.: 0.75	Dosage 1	Jnit: mg/kg	/day						
I05506 a I05507 I05511 I05512 I05522	19.7 9.4 5.1 6.6 9.2	14.7 3.9 2.0 1.9 3.9	4.0 4.9 2.3 4.3 4.5	1.0 .4 .6 .4 .6	.0 .1 .2 .0	.0 .0 .1 .0	74 42 39 28 43	20 52 45 66 49	5 5 11 5	0 1 4 0 2	0 0 1 0
MEAN S.D. N	7.6 2.09 4	2.9 1.13 4	$^{4.0}_{1.16}$.5 .12 4	.1 .10	.0 .06 4	38 6.9 4	53 9.1 4	7 2.9 4	2 1.7 4	0 .6 4

a Unscheduled sacrifice on Day 179.

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Appendix 4 Individual Clinical Hematology Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	ANISO POLY	POIK	НҮРО	TOXNEUT
Group: 1	Dose Level: 0	Dosage	e Unit: m	g/kg/day
I05508 I05517 I05519 I05520 I05526 I05527		-	- - - -	- - - -
Group: 2	Dose Level: 0.03	Dosage	e Unit: m	g/kg/day
I05514 I05515 I05516 b I05521		-	-	-
Group: 3	Dose Level: 0.15	Dosage	e Unit: m	g/kg/day
105505 105510 105518 105523 105524 105528		- - - - -	- - - - -	- - - - -
Group: 4	Dose Level: 0.75	Dosage	e Unit: m	g/kg/day
I05506 a I05507 I05511 I05512 I05522		- - - -	- - - -	= = = =

a Unscheduled sacrifice on Day 179. b Plasmodium was observed.

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Individual Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	tg/day				
105529		11.0		63.0	19.5	31.0	595	. 2	11
I05530		12.6		66.8	19.7	29.6	583		
	6.63	12.0	40.5	61.2	18.1	29.5	534	. 3	20
I05535	7.04	12.7	42.8	60.8	18.1	29.7	369	.2	14
I05544	6.20	11.9	40.9	65.9	19.2	29.1	439	.8	50
I05549	6.52	12.5	42.3	65.9 64.9	19.2 19.2	29.6	383	.6	39
MEAN	6.40	12.1	40.8	63.8	19.0	29.7	484	. 4	27
S.D.	.461	.64	2.67	2.49	.70	.65	100.1	.24	15.1
N	.461 6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	g/day				
105537	6.69 5.80 5.20	10.8	38.9	58.2	16.2	27.9 29.5 30.0	442 380 501	.2	13
I05541	5.80	12.2	41.4	71.3	21.1	29.5	380	.2	12
I05547	5.20	9.0	30.1	58.0	17.4	30.0	501	. 4	21
I05550	6.92	12.7	42.7	61.8	18.3	29.7	394	.1	7
MEAN	6.15	11.2	38.3	62.3	18.2	29.3	429	. 2	13
S.D.	.798	1.66	5.67	6.23	2.09	. 94	54.7	.13	5.8
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	g/day				
105532		12.3	40.8	61.3	18.4	30.1	373	.3	20
I05538	6.14	11.0	37.6	61.2	17.9	29.3	381	.3	18
I05539	6.67	12.5	41.9	62.7	18.8	29.9	400	.2	13
I05545	6.81	12.4	41.0	60.3	18.3	30.3	381 400 318	. 0	0
105548	6.75	11.3	37.8	56.1	16.8	30.0	484	. 2	14
I05552	6.38	12.4 11.3 11.9	40.2	60.3 56.1 63.0	18.7	30.3 30.0 29.7	517	. 1	6
MEAN	6.57	11.9	39.9	60.8	18.2	29.9	412	. 2	12
S.D.	.256	.62	1.78	2.50	.73	.35	74.4	.12	7.5
N	6	6	6	6	6	6	6	- 6	6

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Individual Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
NUMBER	X10 ⁶ /mcL	G/DL	%	FL	PG	%	X10 ³ /mcL	%	X10 ³ /mcL
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533 I05534 I05536 I05540 I05542 I05551	6.00 5.65 6.08 5.99 6.75 6.09	11.3 11.0 10.9 11.6 11.9	37.6 37.7 39.3 38.6 43.4 38.4	62.6 66.8 64.6 64.5 64.3	18.9 19.4 17.9 19.3 17.7	30.1 29.1 27.8 29.9 27.5 29.5	288 587 559 454 725 328	.2 .5 .0 .0 .4	12 28 0 0 27 6
MEAN	6.09	11.3	39.2	64.3	18.6	29.0	490	.2	12
S.D.	.360	.37	2.17	1.46	.71	1.09	166.0	.21	12.7
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI	EOSIN B L X103/mcL	ASO N X10 ³ /1	-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/kg	/day						
I05529 I05530 I05531 I05535 I05544 I05549	14.6 7.3 10.5 13.9 10.4 5.4	11.4 2.6 5.2 5.5 2.9 2.4	2.5 3.9 4.3 7.0 6.2 2.1	.6 .7 1.0 .6	.1 .2 .2 .3 .6	.1 .0 .1 .1 .0	78 35 50 39 28 44	17 54 41 50 60 40	4 8 7 7 6 14	1 3 2 2 6 2	1 0 1 1 0
MEAN S.D. N	10.4 3.59 6	5.0 3.41 6	4.3 1.96 6	.7 .15 6	.2 .19 6	.0 .05 6	46 17.5 6	44 15.1 6	8 3.4 6	3 1.8 6	0 .5 6
Group: 2	Dose Level	L: 0.03	Dosage	Unit: mg/kg	/day						
I05537 I05541 I05547 I05550		5.4 2.4 4.0 5.5	3.5		.4 .2 .1 .4	.2 .0 .0	54 37 58 53	30 53 35 35	11 7 6 7	4 3 1 4	2 0 0
MEAN S.D. N	8.5 2.05 4	4.3 1.45 4	3.2 .57 4	.7 .32 4	.3 .15 4	.0 .10 4	50 9.3 4		8 2.2 4	$\begin{smallmatrix}3\\1\\4\\4\end{smallmatrix}$	0 1.0 4
Group: 3	Dose Level	L: 0.15	Dosage	Unit: mg/kg	/day						
I05532 I05538 I05539 I05545 I05548 I05552	8.2 9.2 7.5 11.0 11.3 8.0	3.9 4.5 1.6 6.3 6.2 4.3	3.8 3.8 4.9 3.9 3.7 3.0	.4 .6 .8 .6 .6	.1 .3 .1 .1 .7	.0 .0 .1 .0 .0	48 49 22 57 55	46 41 65 36 33	5 10 6 5 4	1 4 2 1 6 4	0 0 2 0 0
MEAN S.D.	9.2 1.61	1.73	3.8	.6 .18	.3 .24	.0	48 13.0	43 11.7	2.1		0 .8

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Individual Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ⁵ /mcL	MONO X10 ³ /mcI				LYMPH%	MONO%	EOSIN%	BASO%
Group: 4	Dose Level	: 0.75	Dosage (Jnit: mg/kg	/day						
105533 105534 105536 105540 105542 105551	7.5 12.1 8.4 10.3 13.4 6.4	3.2 5.0 4.1 5.9 3.0 4.0	3.8 6.0 2.8 3.8 9.3	.4 1.0 1.2 .5 .8	.1 .2 .2 .1 .3	.1 .1 .0 .1	42 41 49 58 22 63	51 49 34 37 69 28	5 8 14 5 6 8	1 1 2 1 3	1 1 0 0
MEAN S.D.	9.7 2.73	4.2 1.10	4.6 2.70	.7 .32	.2	.1 .05	46 14.6	45 14.8	8 3.4	2 .8	0 .5

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Individual Clinical Hematology Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Level	L: 0	Dosage	e Unit: mg,	/kg/day
I05529 I05530 I05531 I05535 I05544 I05549		- - - -	- - - - -	- - - -	- - - -
Group: 2	Dose Level	L: 0.03	Dosage	e Unit: mg,	/kg/day
I05537 I05541 I05547 I05550	- :	- - -	- - -	-	-
Group: 3	Dose Level	l: 0.15	Dosage	e Unit: mg,	/kg/day
I05532 I05538 I05539 I05545 I05548 I05552	- - - - -	- - - -	- - - -	- - - -	- - - -
Group: 4	Dose Level	l: 0.75	Dosage	e Unit: mg,	/kg/day
105533 105534 105536 105540 105542 105551	- - - - -	- - - -	- - - -	- - - -	- - - -

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	tg/day				
I05520 I05526		12.1 11.8		61.0 60.5		31.7 31.2	620 346	.3	19 25
MEAN S.D. N	6.26 .007 2	12.0 .21 2	38.1 .28 2	60.8 .35 2			483 193.7 2		22 4.2 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	tg/day				
I05505 I05523		13.0 12.4		63.7 61.8		31.3 31.2	404 572	.4	26 13
MEAN S.D. N	6.49 .057 2	12.7 .42 2		62.8 1.34 2		31.2 .07 2	488 118.8 2	.3 .14 2	20 9.2 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	tg/day				
I05511 I05522		11.6 11.5		64.5 63.5		30.3 30.9		.3	18 35
MEAN S.D. N	5.90 .042 2	11.6 .07 2		64.0 .71 2	19.5 .07 2	30.6 .42 2	469 22.6 2	.4 .21 2	26 12.0 2

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Individual Clinical Hematology Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mc	EOSIN L X10 ³ /mc	BASO N L X10 ³ /1	-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg/kg	J/day						
I05520 I05526	8.5 6.1	2.5 2.3	5.2 2.9	.5 .7	. 3	.0	30 37	61 47	6 12	3 3	1
MEAN S.D. N	7.3 1.70 2	2.4 .14 2	4.0 1.63 2	.6 .14 2	.2 .07 2	.0 .00 2	34 4.9 2	54 9.9 2	9 4.2 2	3 2.0	1 2.0
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	/day						
I05505 I05523	8.8 14.2	4.7 7.6	3.0 6.0	.7 .4	.4	.0	53 53	34 42	8	5 1	0
MEAN S.D. N	$\substack{11.5\\3.82\\2}$	6.2 2.05 2	4.5 2.12 2	.6 .21 2	.3 .14 2	.0 .00 2	53 .0 2	38 5.7 2	6 3.5 2	3 2.8 2	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage	Unit: mg/kg	ı/day						
I05511 I05522	8.9 14.7	4.1 7.9	3.9 5.0	.5 1.3	.4	.0	46 54	44 34	5 9	4 4	0
MEAN S.D. N	11.8 4.10 2	6.0 2.69 2	4.4 .78 2	.9 .57 2	.4 .07 2	.0 .00 2	50 5.7 2	39 7.1 2	7 2.8 2	4 2.0	0 2.0

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Individual Clinical Hematology Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO POLY	POIK	HYPO TOXNEUT
Group: 1	Dose Level: 0	Dosage U	Jnit: mg/kg/day
I05520 I05526	Ξ Ξ		-
Group: 3	Dose Level: 0.15	Dosage U	Jnit: mg/kg/day
I05505 I05523	<u> </u>		-
Group: 4	Dose Level: 0.75	Dosage U	Jnit: mg/kg/day
I05511 I05522	: :	: :	-

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APPENDIX 4

Individual Clinical Hematology Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
I05529 I05549	5.44 6.45	10.9 12.6		61.5 62.4		32.7 31.3	547 390	.1 .5	5 32
MEAN S.D. N		11.8 1.20 2	36.9 4.81 2	62.0 .64 2		32.0 .99 2	468 111.0 2	.3 .28 2	18 19.1 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05539 I05552		11.8 12.0		61.4 61.3		31.8 31.6	382 435	. 2 . 5	12 31
MEAN S.D. N	6.14 .092 2	11.9 .14 2	37.6 .57 2	61.4 .07 2	19.5 .07 2	$\substack{31.7\\.14\\2}$	408 37.5 2	.4 .21 2	22 13.4 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533 I05542		11.8 12.2		62.2 63.0	19.2 18.2	30.8 28.9		.3	18 47
MEAN S.D.	6.42 .417	12.0	2.90	62.6 .57	18.7 .71	29.8 1.34	444 160.5	.5	32 20.5

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Individual Clinical Hematology Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcl	EOSIN L X10 ³ /mc	BASO N L X10 ³ /t	-SEG% !	LYMPH%	MONO% E	COSIN% B	ASO%
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg/kg	/day						
I05529 I05549	10.1 6.2	6.1 3.1	3.0 2.5	. 8 . 4	:1 :1	.0	60 50	30 41	8 7	1 2	0
MEAN S.D. N	8.2 2.76 2	4.6 2.12 2	2.8 .35 2	.6 .28 2	.1 .00 2	.0 .00 2	55 7.1 2	36 7.8 2	8 .7 2	2 .7 2	0 .0 2
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/kg	/day						
I05539 I05552	6.9 8.4	1.8	4.3	.7 .5	. 2 . 5	.1	26 41	61 45	10 6	3 6	1
MEAN S.D. N	7.6 1.06 2	2.6 1.20 2	4.0 .35 2	.6 .14 2	.4 .21 2	.0 .07 2	34 10.6 2	53 11.3 2	8 2.8 2	4 2.1 2	1 2.0
Group: 4	Dose Leve	1: 0.75	Dosage	Unit: mg/kg	/day						
I05533 I05542	7.7 10.9	2.1	5.0 6.7	.3	.3	.0	27 28	65 62	4 8	4 2	0 1
MEAN S.D. N	9.3 2.26	2.6	5.8 1.20	.6 .35	.2	.0	28	64 2.1	6 2.8	3 1.4	0.7

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APPENDIX 4

Individual Clinical Hematology Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO PO	DLY I	POIK H	IYPO TOXNEUT
Group: 1	Dose Level: (0	Dosage Un	nit: mg/kg/day
I05529 I05549	: :	-	_	-
Group: 3	Dose Level: (0.15	Dosage Ur	nit: mg/kg/day
I05539 I05552	<u> </u>	-	-	-
Group: 4	Dose Level: 0	0.75	Dosage Un	nit: mg/kg/day
I05533 I05542	: :	-	-	-

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Individual Clinical Hematology Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10°/mcL		HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL		RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
I05520 I05526	6.75 6.28	13.0 12.2				32.1 32.1		.1	7 19
MEAN S.D. N	6.52 .332 2	12.6 .57 2		60.2 .07 2		32.1 .00 2	556 181.7 2		13 8.5 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05505 I05523	6.75 6.82			62.9 61.3		31.4 31.7		.1	7 14
MEAN S.D. N	6.78 .049 2	13.3 .00 2		62.1 1.13 2		31.6 .21 2	493 36.8 2		10 4.9 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05511 I05522	6.06 6.33	$11.4 \\ 12.4$		64.4 63.0		29.2 31.0		.8 .4	48 25
MEAN S.D. N	6.20 .191 2	11.9 .71 2	39.5 .64 2		19.2 .49 2			.6 .28 2	36 16.3 2

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Individual Clinical Hematology Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI	EOSIN :	BASO N L X10 ³ /t		LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Jnit: mg/kg	/day						
I05520 I05526	12.1 8.0	3.8 2.7	7.6 4.6	.5 .4	. 3	.0	31 33	63 58	4 5	2 4	0
MEAN S.D. N	10.0 2.90 2	3.2 .78 2	6.1 2.12 2	.4 .07 2	.3 .00 2	.0 .00 2	32 1.4 2	60 3.5 2	$\frac{4}{2}.7$	$\begin{smallmatrix} 3\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 3	Dose Leve	1: 0.15	Dosage 1	Jnit: mg/kg	/day						
I05505 I05523	10.6 12.2	5.2 5.8	4.1 5.6	.8	. 4	.0	49 48	39 46	8 3	4 2	0
MEAN S.D. N	$\substack{11.4\\1.13\\2}$	5.5 .42 2	4.8 1.06 2	.6 .28 2	.4 .07 2	.0 .00 2	48 2.7	42 4.9 2	6 3.5 2	$\begin{smallmatrix} 3\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage 1	Jnit: mg/kg	/day						
I05511 I05522	9.5 17.3	3.6 7.6	4.9 7.4	.6 1.5	. 4 . 6	.1	38 44	51 43	6 9	4 4	1 1
MEAN S.D. N	13.4 5.52 2	5.6 2.83 2	6.2 1.77 2	1.0 .64 2	.5 .14 2	.1	41 4.2 2	47 5.7 2	8 2.1 2	4 .0	1.0

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Individual Clinical Hematology Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO POLY	POIK	HYPO TOXNEUT
Group: 1	Dose Level: 0	Dosage U	Jnit: mg/kg/day
I05520 I05526	Ξ Ξ		-
Group: 3	Dose Level: 0.15	Dosage U	Jnit: mg/kg/day
I05505 I05523	<u> </u>		-
Group: 4	Dose Level: 0.75	Dosage U	Jnit: mg/kg/day
I05511 I05522	: :	: :	-

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Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	tg/day				
I05529 I05549	5.70 6.74	11.3 13.3		61.1 62.1	19.8 19.7	32.4 31.7	577 461	. 2	11 20
MEAN S.D. N		12.3 1.41 2	38.4 4.95 2	61.6 .71 2	19.8 .07 2	32.1 .49 2	519 82.0 2	.2 .07 2	16 6.4 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	tg/day				
I05539 I05552		12.9 12.5		59.4 61.2		31.4 31.0	391 459	.1	7 13
MEAN S.D. N	6.74 .191 2	12.7 .28 2		60.3 1.27 2	18.8 .14 2	31.2 .28 2	425 48.1 2	.2 .07 2	10 4.2 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	tg/day				
I05533 I05542	6.38 7.02	12.2 12.8		62.5 62.8		30.7 29.0	335 546	. 1 . 4	6 28
MEAN S.D. N	6.70 .453 2	12.5 .42 2	42.0 2.97 2	62.7 .21 2	18.7 .71 2	29.8 1.20 2	440 149.2 2	.2 .21 2	17 15.6 2

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Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcl	EOSIN :	BASO N L X10 ³ /t	-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Unit: mg/kg	ı/day						
I05529 I05549	12.5 10.3	9.1 5.1	2.8	.5 .9	.1	.0	73 50	22 39	4 8	1 3	0
MEAN S.D. N	$\substack{11.4\\1.56\\2}$	7.1 2.83 2	3.4 .85 2	.7 .28 2	.2 .14 2	.0 .00 2	62 16.3 2	30 12.0 2	6 2.8 2	$\begin{smallmatrix}2\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 3	Dose Leve	1: 0.15	Dosage 1	Unit: mg/kg	/day						
I05539 I05552	7.5 11.4	.9 5.1	5.3 4.6	1.0	. 2	.1	12 45	71 40	13 9	3 5	1 0
MEAN S.D. N	9.4 2.76 2	3.0 2.97 2	5.0 .49 2	1.0 .00 2	.4 .28 2	.0 .07 2	28 23.3 2	56 21.9 2	11 2.8 2	$\begin{smallmatrix}4\\1\\1.4\\2\end{smallmatrix}$	0 2.7
Group: 4	Dose Leve	1: 0.75	Dosage 1	Unit: mg/kg	/day						
I05533 I05542	10.8 11.1	4.5 2.6	5.0 7.5	1.1	.2	.1	41 23	46 67	10	1 3	1 1
MEAN S.D. N	11.0 .21 2	3.6 1.34 2	6.2 1.77 2	.9 .28 2	.2 .07 2	.1	32 12.7 2	56 14.8 2	8 2.8 2	2 1.4 2	1.0

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Individual Clinical Hematology Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

		,,	
ANIMAL NUMBER	ANISO POLY	POIK HYPO	TOXNEUT
Group: 1	Dose Level: 0	Dosage Unit:	mg/kg/day
I05529			-
I05549 a			-
Group: 3	Dose Level: 0.1	.5 Dosage Unit:	mg/kg/day
I05539			-
I05552	-		-
Group: 4	Dose Level: 0.7	75 Dosage Unit:	mg/kg/day
I05533			-
I05542			-

a Plasmodium was observed.

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Individual Clinical Hematology Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL		HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL		RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
I05520 I05526	6.86 6.58			60.6 58.7		31.3 31.9		. 2	14 20
MEAN S.D. N	6.72 .198 2	12.6 .49 2	2.12	59.6 1.34 2		31.6 .42 2	504 228.4 2		17 4.2 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05505 I05523	6.86 6.71			62.9 60.1		31.0 31.7		.6	41 13
MEAN S.D. N	6.78 .106 2	13.1 .42 2		61.5 1.98 2		31.4 .49 2	496 105.4 2		27 19.8 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05511 I05522	6.10 6.80	11.5 13.1		64.4 62.8		29.3 30.6		.4	24 14
MEAN S.D. N	6.45 .495 2		41.0 2.40 2		19.1 .21 2	29.9 .92 2	519 60.8 2		19 7.1 2

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Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI	EOSIN :	BASO N L X10 ³ /r	-SEG% !	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage 1	Jnit: mg/kg	/day						
I05520 I05526	7.6 7.0	2.4 2.8	4.0	1.0	.1	.0	32 41	53 49	13 7	2 2	1
MEAN S.D. N	7.3 .42 2	2.6 .28 2	3.7 .42 2	.8 .35 2	.1 .00 2	.0 .07 2	36 6.4 2	51 2.8 2	10 4.2 2	2 2.0	1.0
Group: 3	Dose Leve	1: 0.15	Dosage 1	Jnit: mg/kg	/day						
I05505 I05523	13.1 9.9	8.1 5.2	4.0	.6 .3	.3	.0	62 53	30 42	5 3	3 1	0
MEAN S.D. N	11.5 2.26 2	6.6 2.05 2	$\substack{4.1\\.14\\2}$.4 .21 2	.2 .14 2	.0 .00 2	58 6.4 2	36 8.5 2	$\begin{smallmatrix}4\\1\\1\\2\end{smallmatrix}$	$\begin{smallmatrix}2\\1\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage 1	Jnit: mg/kg	/day						
I05511 I05522	7.2 16.0	2.5 7.5	4.0	.5 1.2	.2	.0	34 47	56 42	7 7	2 3	1
MEAN S.D. N	11.6 6.22	5.0 3.54	5.4 1.91	.8	.4	.0	40 9.2	49 9.9	7.0	2 .7	1.0

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Individual Clinical Hematology Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO PO	DLY I	POIK H	YPO TOXNE	TUE
Group: 1	Dose Level:	0	Dosage Un	it: mg/kg/day	7
I05520 I05526		-	-	-	
Group: 3	Dose Level: 0	0.15	Dosage Un	it: mg/kg/day	7
I05505 I05523		-	-	-	
Group: 4	Dose Level:	0.75	Dosage Un	it: mg/kg/day	7
I05511 I05522	<u> </u>	-	_	-	

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Individual Clinical Hematology Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
I05529 I05549	5.55 7.08	11.1 13.5		60.7 62.7		33.0 30.3	606 414	. 4	22 28
MEAN S.D. N		12.3 1.70 2	39.0 7.57 2	61.7 1.41 2	19.5 .71 2		510 135.8 2	.4 .00 2	25 4.2 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05539 I05552		12.6 12.5		60.2 60.5		31.7 30.8	419 427	.5	33 13
MEAN S.D. N	6.64 .071 2	12.6 .07 2	40.1 .57 2	60.3 .21 2	18.8 .35 2	31.2 .64 2	423 5.7 2	$\begin{smallmatrix} \cdot 4 \\ \cdot 21 \\ 2 \end{smallmatrix}$	23 14.1 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533 I05542		12.2 12.7		61.2 59.3	18.8 17.9	30.7 30.2	343 538	.7	45 14
MEAN S.D.	6.78 .410	12.5 .35	1.56	60.2 1.34	18.4		440 137.9	.4	30 21.9

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Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X103/mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X10 ³ /mcI	EOSIN :	BASO N L X10 ³ /t	-SEG% L mcL	YMPH%	MONO% I	EOSIN% E	BASO%
Group: 1	Dose Leve	1: 0	Dosage (Jnit: mg/kg	/day						
I05529 I05549	9.6 8.0	7.1 3.7	2.1 3.5	.4 .6	.0	.0	73 46	22 44	4 8	0 2	0 1
MEAN S.D. N	8.8 1.13 2	5.4 2.40 2	2.8 .99 2	.5 .14 2	.0 .07 2	.0 .00 2	60 19.1 2	33 15.6 2	6 2.8 2	$\begin{smallmatrix}1\\1\\1.4\\2\end{smallmatrix}$	0 2.7
Group: 3	Dose Leve	1: 0.15	Dosage (Jnit: mg/kg	/day						
I05539 I05552	6.2 9.4	1.1 4.7	4.3 3.4	.5 .6	.2 .6	.0	18 50	69 37	8 7	4 6	1
MEAN S.D. N	7.8 2.26 2	2.9 2.55 2	3.8 .64 2	.6 .07 2	.4 .28 2	.0 .07 2	34 22.6 2	53 22.6 2	8 .7 2	5 1.4 2	1.0
Group: 4	Dose Leve	1: 0.75	Dosage (Jnit: mg/kg	/day						
I05533 I05542	10.8 7.6	5.0 3.7	4.7	1.0	.1 .1	.1	46 49	43 46	9 4	0 1	1 0
MEAN S.D. N	9.2 2.26	4.4	4.1 .85	.6	.1	.0	48 2.1	44 2.1	6 3.5	0.7	0.7

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Individual Clinical Hematology Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO POL	Y POIK	HYPO	TOXNEUT
Group: 1	Dose Level: 0	Dosag	e Unit: mg/	'kg/day
I05529 I05549		-	-	_
Group: 3	Dose Level: 0.	15 Dosag	e Unit: mg/	'kg/day
I05539 I05552		-	-	-
Group: 4	Dose Level: 0.	75 Dosag	e Unit: mg/	'kg/day
I05533 I05542	: :	-	-	-

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Individual Clinical Hematology Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/k	g/day				
I05520 I05526		12.9 12.4		59.8 59.7		31.8 31.2	692 396	.5 .1	3 4 7
MEAN S.D. N		12.6 .35 2		59.8 .07 2	18.8 .28 2	31.5 .42 2	544 209.3 2	.3 .28 2	20 19.1 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05505 I05523		13.6 12.8		62.6 60.5		31.6 31.5	434 548	.2	14 7
MEAN S.D. N	6.80 .127 2	13.2 .57 2		61.5 1.48 2	19.4 .49 2	31.5 .07 2	491 80.6 2	.2 .07 2	10 4.9 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05511 I05522		11.5 12.1		62.1 60.2		30.5 31.5	542 603	. 8	49 19
MEAN S.D.	6.22 .198	11.8	38.1 .35	61.1 1.34	19.0		572 43.1	.6 .35	34 21.2

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ³ /mcL	MONO X103/mcI	EOSIN :	BASO N L X10 ³ /t		LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	1: 0	Dosage (Jnit: mg/kg	/day						
I05520 I05526	9.5 7.8	4.3 4.0	4.5 3.0	.6 .7	.1	.0	45 52	47 38	7 9	1 1	0
MEAN S.D. N	8.6 1.20 2	4.2 .21 2	3.8 1.06 2	.6 .07 2	.1 .00 2	.0 .00 2	48 4.9 2	42 6.4 2	8 1.4 2	1 2.0	0 2
Group: 3	Dose Leve	1: 0.15	Dosage (Jnit: mg/kg	/day						
I05505 I05523	13.7 11.8	9.6 6.7	3.0 4.4	.9 .6	.2 .1	.0	70 57	22 37	7 5	1 1	0
MEAN S.D. N	$12.8 \\ 1.34 \\ 2$	8.2 2.05 2	3.7 .99 2	.8 .21 2	.2 .07 2	.0 .00 2	64 9.2 2	30 10.6 2	5 1.4 2	$\frac{1}{2}.0$	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage (Jnit: mg/kg	/day						
I05511 I05522	6.3 11.6	2.2 5.8	3.1 4.7	. 8 . 9	.2	.1	36 50	49 40	12 8	3 1	1 0
MEAN S.D. N	9.0 3.75 2	4.0 2.55 2	3.9 1.13 2	.8 .07 2	.2	.0	43 9.9 2	44 6.4 2	10 2.8 2	2 1.4 2	0 .7

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Individual Clinical Hematology Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO POLY	POIK	HYPO TOXNEUT
Group: 1	Dose Level: 0	Dosage U	Jnit: mg/kg/day
I05520 I05526	Ξ Ξ		-
Group: 3	Dose Level: 0.15	Dosage U	Jnit: mg/kg/day
I05505 I05523	<u> </u>		-
Group: 4	Dose Level: 0.75	Dosage U	Jnit: mg/kg/day
I05511 I05522	: :	: :	-

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Individual Clinical Hematology Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10 ⁶ /mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC %	PLT X10 ³ /mcL	RETIC %	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/k	g/day				
I05529 I05549	6.0 4 6.61	11.9 12.8	36.9 39.9	61.1 60.4		32.2 32.1	645 447	.1	6 20
MEAN S.D. N	6.32 .403 2	12.3 .64 2		60.8 .49 2	19.6 .21 2	32.1 .07 2	546 140.0 2	.2 .14 2	13 9.9 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	g/day				
I05539 I05552		12.5 12.5	39.6 40.7	58.2 60.7	18.3 18.6	31.5 30.6	399 546	. 4	27 20
MEAN S.D. N	6.76 .071 2	12.5 .00 2	40.1 .78 2	59.4 1.77 2	18.4 .21 2	31.0 .64 2	472 103.9 2	.4 .07 2	24 4.9 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/k	g/day				
I05533 I05542		11.6 12.2	37.9 41.0	61.2 60.3	18.8 17.9	30.7 29.7	314 534	.1 .5	6 34
MEAN S.D.	6.50 .431	11.9	39.5 2.19	60.8	18.4	30.2	424 155.6	.3	20 19.8

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Individual Clinical Hematology Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 ³ /mcL	N-SEG X10 ³ /mcL	LYMPH X10 ⁵ /mcL	MONO I	EOSIN 1	BASO N L X10 ³ /t	-SEG% mcL	LYMPH%	MONO%	EOSIN%	BASO%
Group: 1	Dose Leve	l: 0	Dosage (Jnit: mg/kg	/day						
I05529 I05549	14.9 8.7	10.0 4.4	3.2 3.3	1.4 .6	.2	.0	67 51	22 38	10 7	1 3	0
MEAN S.D. N	11.8 4.38 2	7.2 3.96 2	3.2 .07 2	1.0 .57 2	.2 .07 2	.0 .00 2	59 11.3 2	30 11.3 2	$\begin{smallmatrix} 8\\2.1\\2\end{smallmatrix}$	$\begin{smallmatrix}2\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 3	Dose Leve	1: 0.15	Dosage U	Jnit: mg/kg	/day						
I05539 I05552	$7.4 \\ 11.4$	2.0 6.5	4.5	.7 .4	.2	.0	27 57	61 34	10 4	3 5	0
MEAN S.D. N	9.4 2.83 2	4.2 3.18 2	4.2 .42 2	.6 .21 2	.4 .28 2	.0 .00 2	$\frac{42}{21.2}$	48 19.1 2	7 4.2 2	$\begin{smallmatrix}4\\1\\1.4\\2\end{smallmatrix}$	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage U	Jnit: mg/kg	/day						
I05533 I05542	7.8 10.0	2.3	5.0 6.1	.5 .6	.1	.0	29 31	63 61	7 6	1 2	0
MEAN S.D. N	8.9 1.56 2	2.7 .57 2	5.6 .78 2	.6 .07 2	.2 .07 2	.0	30 1.4 2	62 1.4 2	6 .7	2 2.7	0.0

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APPENDIX 4

Individual Clinical Hematology Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO POL	Y POIK	HYPO	TOXNEUT
Group: 1	Dose Level: 0	Dosag	e Unit: mg/	'kg/day
I05529 I05549		-	-	_
Group: 3	Dose Level: 0.	15 Dosag	e Unit: mg/	'kg/day
I05539 I05552		-	-	-
Group: 4	Dose Level: 0.	75 Dosag	e Unit: mg/	'kg/day
I05533 I05542	: :	-	-	-

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC	PLT X10 /mcL	RETIC	RETIC X103/mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day				
I05520 I05526	6.50 6.56	12.5 12.4	39.5 39.4	60.8 60.1	19.3 19.0	31.7 31.6	641 387	.2	13
MEAN S.D. N	6.53 .042 2	12.4 .07 2	39.5 .07 2	60.5 .49 2	19.2 .21 2	31.6 .07 2	514 179.6 2	$\begin{smallmatrix} &1\\&1\\1\\2\end{smallmatrix}$	6 9.2 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/l	kg/day				
I05505 I05523	6.92 6.52	13.5 12.6	43.3 39.1	62.7 60.0	19.6 19.2	31.3 32.1	399 496	.2	14 0
MEAN S.D. N	6.72 .283 2	13.0 .64 2	41.2 2.97 2	61.3 1.91 2	19.4 .28 2	31.7 .57 2	448 68.6 2	$\begin{array}{c} \cdot 1 \\ \cdot 14 \\ 2 \end{array}$	7 9.9 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day				
I05511 I05522	6.09 6.37	12.0 12.3	39.1 38.7	64.2 60.8	19.7 19.3	30.6 31.8	520 495	1.5	91 0
MEAN S.D.	6.23 .198	12.2	38.9 .28	62.5 2.40	19.5 .28	31.2 .85	508 17.7	1.06	46 64.3

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 /mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO X10 ² /mcL	EOSIN X10°/mcI	BASO N X10 ² /m	-SEG% L	YMPH% M	ONO% EO	SIN% B	ASO%
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg/kg	/day						
I05520 I05526	10.7 10.9	5.9 7.3	$\frac{4.1}{2.8}$.6	.0	.1	55 67	38 25	6 7	0 1	<u>1</u> 0
MEAN S.D. N	10.8 .14 2	6.6 .99 2	3.4 .92 2	.7 .14 2	.0 .07 2	.0 .07 2	61 8.5 2	32 9.2 2	6 2.7	0.7	0 2.7
Group: 3	Dose Level: 0.15 Dosage Unit: mg/kg/day										
I05505 I05523	13.8 11.2	9.6 6.8	3.0 4.0	$\overset{1}{\overset{1}{\cdot}\overset{1}{\cdot}\overset{1}{\cdot}}$.2	.0	69 60	21 36	8 4	1 0	0
MEAN S.D. N	12.5 1.84 2	8.2 1.98 2	3.5 .71 2	.8 .49 2	.1 .14	.0 .00 2	64 6.4 2	28 10.6 2	6 2.8 2	$\frac{0}{2}.7$	0 2.0
Group: 4	Dose Leve	1: 0.75	Dosage	Unit: mg/kg	/day						
I05511 I05522	9.4 15.0	4.5 8.3	3.7 4.8	.8 1.4	.3	.0	4.8 5.5	40 32	9 9	3 3	0 1
MEAN S.D.	12.2 3.96	6.4 2.69	4.2 .78	$^{1.1}_{.42}$.4	.07	52 4.9	36 5.7	9.0	3.0	0.7

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 364

				-			
2					JOROOCTANE IN CYNOMOLG	SULFONIC ACID US	
	ANIMAL NUMBER	ANISO	POLY	POIK	HYPO	TOXNEUT	
	Group: 1	Dose Lev	el: 0	Dosa	ge Unit: mg	/kg/day	
	I05520 I05526	-	-	-	-	-	
	Group: 3	Dose Lev	el: 0.15	Dosa	ge Unit: mg	/kg/day	
	I05505 I05523	-	-	-	-	-	
	Group: 4	Dose Lev	el: 0.75	Dosa	ge Unit: mg	/kg/day	
	I05511 I05522	-	-	-	-	-	

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APPENDIX 4 Individual Clinical Hematology Data

Females Day 364

26-WEEK							SULFONIC	ACID
	POTAS	SIUM SALT	PFOS	; T-6	295) IN	CYNOMOL	JUS	

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC	PLT X10 /mcL	RETIC	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	tg/day				
I05529 I05549	5.96 6.60	$\frac{11.9}{13.0}$	36.1 40.2	60.5 61.0	19.9 19.7	32.9 32.3	635 433	.1	6 13
MEAN S.D. N	6.28 .453 2	12.4 .78 2	38.1 2.90 2	60.8 .35 2	19.8 .14 2	32.6 .42 2	534 142.8 2	.2 .07 2	10 4.9 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	tg/day				
I05539 I05552	6.69 6.85	12.5 12.7	39.8 41.7	59.5 60.8	18.7 18.6	31.4 30.5	408 504	.2	13
MEAN S.D. N	6.77 .113 2	12.6 .14 2	40.8 1.34 2	60.2 .92 2	18.6 .07 2	31.0 .64 2	456 67.9 2	.2 .07 2	10 4.2 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	g/day				
I05533 I05542	6.56 6.52	12.2 12.1	39.7 40.5	60.5 62.1	18.7 18.5	30.9 29.8	320 577	.1	7
MEAN S.D. N	6.54 .028	12.2	40.1 .57	61.3	18.6 .14	30.4 .78	448 181.7	.2	10 4.2

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APPENDIX 4 Individual Clinical Hematology Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

			202	imorati biimi	(1100)	0820, 221 0	22101702000				
ANIMAL NUMBER	WBC X10 /mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO X10 ² /mcL	EOSIN X10°/mcI	BASO N X10 ² /m	-SEG% I CL	YMPH%	MONO% E	OSIN% B	ASO%
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/kg	/day						
I05529 I05549	8.5 6.4	4.2 2.6	3.1 2.5	1.2	.3	.0	50 41	36 38	10 19	4 2	0
MEAN S.D. N	$\begin{smallmatrix}7.4\\1.48\\2\end{smallmatrix}$	$\begin{smallmatrix}3.4\\1.13\\2\end{smallmatrix}$	2.8 .42 2	1.0 .28 2	.2 .14 2	.0 .00 2	46 6.4 2	$\begin{smallmatrix} 37\\1\\2\cdot 4\end{smallmatrix}$	$\begin{smallmatrix}14\\ & 6.4\\ 2\end{smallmatrix}$	$\begin{smallmatrix}3\\1\\2\cdot4\end{smallmatrix}$	0 2.0
Group: 3	Dose Level	.: 0.15	Dosage	Unit: mg/kg	/day						
I05539 I05552	8.5 7.7	2.5 3.5	4.4 3.0	1.2	.3	.1	30 45	52 39	14 8	3 7	1 0
MEAN S.D. N	8.1 .57 2	3.0 .71 2	3.7 .99 2	.9 .42 2	$\begin{smallmatrix} \cdot 4 \\ \cdot 14 \\ 2 \end{smallmatrix}$.0 .07 2	38 10.6 2	46 9.2 2	$\begin{smallmatrix}11\\4.2\\2\end{smallmatrix}$	5 2.8 2	0 2.7
Group: 4	Dose Level	.: 0.75	Dosage	Unit: mg/kg	/day						
I05533 I05542	11.4 10.3	5.1 4.3	5.1 5.4	1.1	. 0	.0	44 42	45 52	10 5	0 2	0
MEAN S.D.	10.8 .78	4.7 .57	5.2 .21	.8 .42	$\frac{1}{14}$.00	43 1.4	48 4.9	8 3.5	$\frac{1}{2} \cdot 4$	0.0

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Individual Clinical Hematology Data

Females Day 364

26-WEEK	CAPSULE TOXIC					ACID
	POTASSIUM	SALT (PFOS	S; T-6295)	IN CYNOMOLO	JUS	

ANIMAL NUMBER	ANISO	POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Leve	el: 0	Dosa	ge Unit: mg	g/kg/day
I05529 I05549	-	_	Ī	-	-
Group: 3	Dose Leve	1: 0.15	Dosa	ge Unit: mg	g/kg/day
I05539 I05552	-	-	-	-	Ī
Group: 4	Dose Leve	el: 0.75	Dosa	ge Unit: mg	g/kg/day
I05533 I05542	-	-	-	=	-

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
NUMBER	X10°/mcL	G/DL	%	FL	PG	%	X10 /mcL		X103/mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	tg/day				
I05520	6.82	13.3	41.2	60.4	19.4	32.2	584	.4	27
I05526	6.44	12.5	39.3	61.0	19.4	31.8	337		13
MEAN	6.63	12.9	40.2	60.7	19.4	32.0	$^{460}_{174.7}$.3	20
S.D.	.269	.57	1.34	.42	.00	.28		.14	9.9
N	2	2	2	2	2	2		2	2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	tg/day				
I05505	7.19	14.1	46.3	64.3	19.6	30.5	415	.5	36
I05523	7.12	13.8	44.9	63.0	19.4	30.8	566	.1	7
MEAN	7.16	14.0	45.6	63.7	19.5	30.6	490	.3	22
S.D.	.049	.21	.99	.92	.14	.21	106.8	.28	20.5
N	2	2	2	2	2	2	2	2	2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	g/day				
I05511 I05522	5.93 6.68	11.9 13.2	38.7 42.5	65.3 63.7	20.1 19.8	30.9 31.1	445 576	1.4	83
MEAN S.D. N	6.30 .530	12.6 .92	40.6 2.69	64.5 1.13	19.9 .21	31.0 .14	510 92.6 2	.7 .99	42 58.7 2

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10/mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO H X10 ² /mcL	EOSIN : X10 ³ /mcL	BASO N- X10 ³ /mo	SEG% LY	MPH% M	ONO% EOS	SIN% BA	ASO%
Group: 1	Dose Level	: 0	Dosage U	Jnit: mg/kg/	/day						
I05520 I05526	11.2 12.0	5.4 7.5	4.9 3.8	.7 .6	.1	.1	48 62	44 32	6 5	1	10
MEAN S.D. N	11.6 .57 2	6.4 1.48 2	4.4 .78 2	.6 .07 2	.1 .00	.0 .07 2	55 9.9 2	38 8.5 2	6 2.7	1.0	0 2.7
Group: 3	Dose Level	: 0.15	Dosage U	Jnit: mg/kg/	day						
I05505 I05523	10.7 12.5	4.1 5.7	5.6 6.2	.8	.2	.0	38 45	52 49	7 4	2 1	0 0
MEAN S.D. N	11.6 1.27 2	$\substack{\textbf{4.9}\\1.13\\2}$	5.9 .42 2	.6 .21 2	.2 .00 2	.0 .00 2	42 4.9 2	50 2.1 2	6 2.1 2	$\frac{2}{2}.7$	0 2.0
Group: 4	Dose Level	: 0.75	Dosage U	Jnit: mg/kg/	/day						
I05511 I05522	12.0 21.2	7.5 13.1	3.5 6.0	.7 1.6	.2	:1 :1	63 62	29 28	6 7	1 3	1 0
MEAN S.D.	16.6 6.51	10.3 3.96	4.8 1.77	1.2	.4 .21	:1 :00	62.7	²⁸ .7	6.7	2 1.4	0.7

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Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	ANISO	POLY	POIK	HYPO	TOXNEUT	
Group: 1	Dose Leve	:1: 0	Dos	sage Unit: m	ng/kg/day	
I05520 I05526	-	_	-	-	-	
Group: 3	Dose Leve	1: 0.15	Dos	sage Unit: π	ng/kg/day	
I05505 I05523	Ξ.	Ξ	-	Ξ	Ī	
Group: 4	Dose Leve	1: 0.75	Dos	sage Unit: m	ng/kg/day	
I05511 I05522	-	-	-		-	

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APPENDIX 4 Individual Clinical Hematology Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RETIC	RETIC
NUMBER	X10°/mcL	G/DL	%	FL	PG	%	X10 /mcL		X103/mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	tg/day				
I05529	5.63	11.3	34.8	61.8	20.1	32.6	580	.6	34
I05549	6.88	13.5	42.2	61.3	19.6	31.9	407		28
MEAN	6.26	12.4	38.5	61.6	19.8	32.2	494	.5	31
S.D.	.884	1.56	5.23	.35	.35	.49	122.3	.14	4.2
N	2	2	2	2	2	2	2	2	2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/k	tg/day				
I05539 I05552	6.61 6.70	12.7 12.7	$\frac{40.2}{41.4}$	60.9 61.9	19.3 19.0	31.7 30.6	441 461	.4	26 13
MEAN	6.66	12.7	40.8	61.4	19.2	31.2	451	.3	20
S.D.	.064	.00	.85	.71	.21	.78	14.1	.14	9.2
N	2	2	2	2	2	2	2	2	2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	g/day				
I05533	6.62	12.7	40.7	61.4	19.1	31.2	293	.0	0
I05542	7.51	13.5	45.2	60.1	18.0	29.9	598		23
MEAN S.D. N	7.06 .629	13.1 .57	42.9 3.18	60.8 .92	18.5 .78	30.6 .92	446 215.7	.2	12 16.3

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APPENDIX 4 Individual Clinical Hematology Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 /mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO X10 ² /mcL	EOSIN 1	BASO N X10 ² /m	-SEG% 1	LYMPH%	MONO% E	SIN% B	ASO%
Group: 1	Dose Level	1: 0	Dosage	Unit: mg/kg	/day						
I05529 I05549	8.2 9.3	4.5 4.3	2.9 3.8	.6	.2	.0	55 46	36 4 1	7 8	2 4	0
MEAN S.D. N	8.8 .78 2	$\overset{4\cdot 4}{\overset{1\cdot 4}{\overset{2}{\circ}}}$	3.4 .64 2	.7 .14 2	.3 .14 2	.0 .00 2	50 6.4 2	38 3.5 2	8 2.7	$\frac{3}{1} \cdot 4$	0 2.0
Group: 3	Dose Level	1: 0.15	Dosage	Unit: mg/kg	/day						
I05539 I05552	11.1 8.7	5.0 2.6	4.7 4.6	1.0	.4	.0	45 29	43 52	9 9	3 9	0
MEAN S.D. N	9.9 1.70 2	3.8 1.70 2	4.6 .07 2	.9 .14 2	.6 .28 2	.0 .00 2	${ \begin{smallmatrix} 37\\11\\2 \end{smallmatrix}.}_2$	48 6.4 2	9 2.0	6 4.2 2	0 2.0
Group: 4	Dose Level	1: 0.75	Dosage	Unit: mg/kg	/day						
I05533 I05542	9.9 11.2	3.5 2.5	5.1 7.3	1.0	. 2	.1	36 22	51 65	10	2 4	1 2
MEAN S.D. N	10.6 .92 2	3.0 .71	6.2 1.56	1.0 .07	.3 .14	.2 .07	29 9.9 2	58 9.9 2	9 1.4 2	3 1.4	$\frac{2}{2}$.7

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Individual Clinical Hematology Data

Females Day 456

			2	-		
26-WEEK				UOROCTANE	SULFONIC ACID)
ZATTMZT	ANTCO	DOLA	, I obser	HVDO	TOVNDITE	

ANIMAL NUMBER	ANISO	POLY	POIK	HYPO	TOXNEUT
Group: 1	Dose Leve	el: 0	Dosag	ge Unit: mg	/kg/day
I05529 I05549	-	_	-	-	-
Group: 3	Dose Leve	el: 0.15	Dosag	ge Unit: mg	/kg/day
I05539 I05552	-	-	-	-	-
Group: 4	Dose Leve	el: 0.75	Dosag	ge Unit: mg	/kg/day
I05533 I05542	-	-	-	-	-

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APPENDIX 4 Individual Clinical Hematology Data

Males Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

		200		(0111011011011001	*		
ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT %	MCV FL	MCH PG	MCHC	PLŢ X10 /mcL	RETIC	RETIC X10 ³ /mcL
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	cg/day				
I05520 I05526	6.54 6.59	12.6 12.6	39.9 41.4	61.0 62.8	19.2 19.1	31.5 30.5	503 366	.7	46 20
MEAN S.D. N	6.56 .035 2	12.6 .00 2	40.7 1.06 2	61.9 1.27 2	19.2 .07 2	31.0 .71 2	434 96.9 2	.5 .28 2	$\begin{smallmatrix} 3 3 \\ 18 . 4 \\ 2 \end{smallmatrix}$
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day				
I05505 I05523	6.80 7.00	13.5 13.8	43.6 44.2	64.1 63.1	19.8 19.8	30.9 31.3	377 369	:7	48 49
MEAN S.D. N	6.90 .141 2	13.6 .21 2	43.9 .42 2	63.6 .71 2	19.8 .00 2	31.1 .28 2	373 5.7 2	.7 .00 2	48 2.7
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day				
I05511 I05522	6.42 6.42	12.7 12.5	43.5 41.3	67.6 64.3	19.7 19.5	29.2 30.3	478 562	. 9 . 3	58 19
MEAN S.D.	6.42	12.6	42.4 1.56	66.0 2.33	19.6 .14	29.8 .78	520 59.4	.6 .42	38 27.6

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Males Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	WBC X10 /mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO X103/mcL	EOSIN 1 X10°/mcL	BASO N X10 ² /m	-SEG% 1	LYMPH%	MONO% E	COSIN% B	ASO%
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/kg	/day						
I05520 I05526	7.1 9.6	2.0 4.2	4.3 4.1	.5 1.1	.1	.3	28 44	60 43	7 11	1	4 1
MEAN S.D. N	$\begin{smallmatrix}8.4\\1.77\\2\end{smallmatrix}$	3.1 1.56 2	$\begin{smallmatrix}4.2\\.14\\2\end{smallmatrix}$.8 .42 2	.1 .00 2	.2 .21 2	36 11.3 2	52 12.0 2	9 2.8 2	1.0	$\frac{2}{2}.1$
Group: 3	Dose Level	L: 0.15	Dosage	Unit: mg/kg	/day						
I05505 I05523	8.1 13.7	3.8 6.2	3.2 6.2	.9	.2	.1	47 45	39 4 5	11 5	2 3	1
MEAN S.D. N	10.9 3.96 2	5.0 1.70 2	$\substack{4.7\\2.12\\2}$.8 .14 2	.4 .21 2	.1 .00 2	46 1.4 2	42 4.2 2	8 4.2 2	$\frac{2}{2}.7$	1 2.0
Group: 4	Dose Level	L: 0.75	Dosage	Unit: mg/kg	/day						
I05511 I05522	15.7 16.2	10.9 8.8	3.4 5.4	1.2 1.3	. 1 . 4	.1	70 54	22 33	7 8	1 2	1 2
MEAN S.D. N	16.0 .35	9.8 1.48 2	$\frac{4.4}{1.41}$	1.2 .07	.2	.2	62 11.3	28 7.8 2	8 2.7	² .7	$\frac{2}{2}.7$

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Males Day 546

26-WEEK					SULFONIC ACID
	POTASSIUM	SALT (PFOS	S; T-6295)	IN CYNOMOLO	JUS

ANIMAL NUMBER	ANISO F	POLY	POIK H	YPO TOX	KNEUT
Group: 1	Dose Level:	0	Dosage Un	it: mg/kg/d	lay
I05520 I05526	Ī .	_	_	-	
Group: 3	Dose Level:	0.15	Dosage Un	it: mg/kg/d	lay
I05505 I05523	ī	Ξ	Ī	Ī	
Group: 4	Dose Level:	0.75	Dosage Un	it: mg/kg/d	lay
I05511 I05522	: :	-	-	-	

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APPENDIX 4 Individual Clinical Hematology Data

Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC X10°/mcL	HGB G/DL	HCT	MCV FL	MCH PG	MCHC	PLT X10/mcL	RETIC	RETIC X10 ³ /mcL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	g/day				
I05529 I05549	5.52 6.51	$\frac{11.1}{12.6}$	34.6 40.5	62.6 62.3	20.1 19.4	32.1 31.1	533 483	.6	33 20
MEAN S.D. N	6.02 .700 2	11.8 1.06 2	$^{37.5}_{4.17}$	62.5 .21 2	19.8 .49 2	31.6 .71 2	508 35.4 2	.4 .21 2	26 9.2 2
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	g/day				
I05539 I05552	6.60 6.33	12.6 12.0	41.2 39.3	62.4 62.1	19.1 18.9	30.7 30.5	405 408	.3	20 38
MEAN S.D. N	6.46 .191 2	12.3 .42 2	40.2 1.34 2	62.2 .21 2	19.0 .14 2	30.6 .14 2	406 2.1 2	.4 .21 2	29 12.7 2
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day				
I05533 I05542	6.62 6.81	12.5 12.3	41.0 40.6	61.9 59.7	18.9 18.1	30.5 30.3	293 500	.2	13 27
MEAN S.D.	6.72 .134	12.4	40.8	60.8 1.56	18.5 .57	30.4 .14	396 146.4	.3	20 9.9

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Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

Total and Table Total and Table Total											
ANIMAL NUMBER	WBC X10/mcL	N-SEG X10 /mcL	LYMPH X10 /mcL	MONO X103/mcL	EOSIN X10°/mcI	BASO N X10 ³ /m	-SEG% CL	LYMPH%	MONO% I	EOSIN* I	BASO%
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/kg	/day						
I05529 I05549	6.9 15.6	3.5 10.5	2.5 3.2	1.3	.2	.1	50 67	36 20	10 9	2	1
MEAN S.D. N	11.2 6.15 2	7.0 4.95 2	2.8 .49 2	1.0 .42 2	$\begin{smallmatrix} \cdot & 3 \\ \cdot & 14 \\ 2 \end{smallmatrix}$.2 .07 2	58 12.0 2	28 11.3 2	10 2.7	2 2.7	1 . 0
Group: 3	Dose Level	.: 0.15	Dosage	Unit: mg/kg	/day						
I05539 I05552	13.8 9.2	7.1 3.8	5.1 3.4	1.0	.4 .7	.2	51 41	37 37	8 12	3 7	2 2
MEAN S.D. N	11.5 3.25 2	5.4 2.33 2	$\begin{smallmatrix}4.2\\1.20\\2\end{smallmatrix}$	1.0 .07 2	.6 .21 2	.2 .00 2	$\begin{smallmatrix}46\\7.1\\2\end{smallmatrix}$	37.0 2.0	10 2.8 2	5 2.8 2	2 2.0
Group: 4	Dose Level: 0.75 Dosage Unit: mg/kg/day										
I05533 I05542	9.8 11.0	3.2 3.0	5.7 7.0	. 5 . 5	. <u>1</u> . 3	.2	33 28	58 64	5 5	1 2	2 1
MEAN S.D. N	10.4 .85 2	3.1 .14 2	6.4 .92 2	.5 .00 2	.2 .14 2	.2 .07 2	30 3.5 2	61 4.2 2	5 2.0	$\frac{2}{2}.7$	$\frac{2}{2}.7$

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Individual Clinical Hematology Data

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26-WEEK	CAPSULE TOXI					ACID
	POTASSIUM	SALT (PFO	S; T-6295) IN CYNOMOL	GUS	

ANIMAL NUMBER	ANISO	POLY	POI	к нүро	TOXNEUT
Group: 1	Dose Leve	:1: 0	D	osage Unit:	mg/kg/day
I05529 I05549	-	_	-		-
Group: 3	Dose Leve	1: 0.15	D	osage Unit:	mg/kg/day
I05539 I05552	-	Ξ	Ī	Ξ	-
Group: 4	Dose Leve	1: 0.75	D	osage Unit:	mg/kg/day
I05533 I05542	-	_	-	-	-

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10 2.2 6

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Males Day -27 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHCL	TRIG
NUMBER	MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	cg/day					
105508 105517 105519 105520 105526 105527	62 76 74 69 75 99	22 21 27 17 19	1.0 1.3 1.2 1.1 1.1	8.7 9.2 9.3 8.7 9.4 8.8	4.6 4.7 5.0 4.9 5.2 4.9	4.1 4.5 4.3 3.8 4.2 3.9	1.3 1.0 .3 .7 .3	5 11 10 9 9	88 137 174 111 150 170	71 92 58 78 63 58
MEAN	76	20	1.2	9.0	4.9	4.1	.6	9	138	70
S.D.	12.5	3.8	.10	.32	.21	.26	.45	2.0	33.7	13.3
N	6	6	6	6	6	6	6	6	6	6
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/}	kg/day					
I05514	76	17	1.2	9.7	5.5	4.2	.5	9	138	41
I05515	69	17	1.0	9.5	4.6	4.9	.2	8	111	48
I05516	58	29	1.1	8.8	5.0	3.8	.6	11	98	113
I05521	75	16	1.4	10.2	5.6	4.6	.3	8	93	41
MEAN	70	20	1.2	9.6	5.2	4.4	.4	9	110	61
S.D.	8.3	6.2	.17	.58	.46	.48	.18	1.4	20.1	35.0
N	4	4	4	4	4	4	4	4	4	4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day					

MEAN S.D. N

82 30.4

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Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg/	kg/day					
105506 105507 105509 105511	67 102 71 58	18 22 22 21	1.3 1.4 1.4 1.1	9.6 9.9 9.5 8.8	5.1 5.0 5.3 4.7	4.5 4.9 4.2 4.1	.4 .4 .8 1.0	10 7 10 8	129 121 117 115	68 58 62 55
I05512 I05522	75 64	22 18	1.3	9.2 9.5	5.3 5.5	3.9 4.0	.3	10 9	188 159	77 83
MEAN S.D.	73 15.	20 4 2.	0 1.3	9.4 .38	5.2 .28	4.3	.5 .29	9 1.:	138 3 29.3	67 11.0

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	IÚ/L	IU/L	ALK PHOS IU/L	IU/L	IU/L	IU/L	AMYLASE IU/L	IU/L	P AMYL U/L
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day				
T05519	58 84 58 36 58 43	24 51 33 26 31 29	546 628 514 866 1156 556	117	8 9 4 7 6	783	508 448	12 17	249 220 168
MEAN S.D. N	56 16. 6	5 32 9. 6	711 252.6 6	134 42.8 6	7 1.9 6	1133 535.3 6	395 93.4 6	55 8 4 .4 6	247 54.0 6
-			Dosage	Unit: mg/	kg/day				
I05514 I05515 I05516 I05521	53 38 43 43	27 43 48 26	642 787 1002 369	155 125 182 103	4 4 2 3	1955 348 848 595	413 715 435 340	43	243 441 326 196
MEAN S.D. N	44 6. 4	3 36 11.	700 265.6 4	141 34.5 4	3 1.0 4	936 709.0 4	476 164.6 4	35 20.6 4	302 107.4 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day				
I05523 I05524	66 39 54 99 84 93	78 118	720 814 579 716 1165 624	130 124 82 154	4 2 16 10	820	450 326 471 469	133 15 33 29 56 39	301 218 291 296
MEAN S.D. N	72 23. 6	5 69 5 35.	770 210.3 6	160 68.4 6	8 5.4 6	1087 322.3 6	386 94.5 6	51 42.4 6	242 62.4 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day				
105506	54	49	1443	167	6	1602	653	52	359
105507	54	94	447	138	و	575	515	19	326
I05509	80	181	585	156	6	1265	704	39	435
I05511	71	32	927	199	6	540	543	99	325
I05512	69	48	646	105	5	907	396	15	274
I05522	80	78	992	259	5	1676	362	21	224
MEAN	68	80	840	171	6	1094	529	41	324
S.D.	11.	7 54.	2 360.9	53.3	1.5	497.4	135.0	5 31.8	72.2
NT.	_	_	_	_	_	_	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 1	Dose Level	L: 0	Dosage	Unit: mg/	'kg/day
I05508 I05517 I05519 I05520 I05526 I05527	10.2 10.3 11.1 10.5 11.8 10.7	6 6	154 154 161 158 166 160	5.9	113
MEAN S.D. N	10.8 .60 6	.84	4.6		2.9
Group: 2	Dose Level	L: 0.03	Dosage	Unit: mg/	kg/day
I05515 I05516	12.2 11.3 11.1 12.0	6.9 7.1	159 159	5.8 5.5	110 109
MEAN S.D. N	.53	6.6 .44 4	164 6.0 4	.32	2.2
Group: 3	Dose Leve	l: 0.15	Dosage	Unit: mg/	kg/day
I05524	11.9 10.7 12.2 11.2 11.9 10.9	7.5 6.9 6.6 8.8	168	5.8 7.2 6.1 7.0	111 113 116 110
MEAN S.D. N	.62	.99	163 5.3	.60	112 2.7 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg/	'kg/day
105506	11.8	8.0	165	6.1	112
I05507	11.3	6.0	157	6.5	108
I05509	10.9	5.9	158	5.5	104
I05511	10.5	6.1	156	4.8	106
I05512	11.8	7.0	162	5.8	109
I05522	11.7	8.3	168	6.3	110
MEAN	11.3	6.9	161	5.8	108
S.D.	.54	1.06	4.8	.62	2.9
N	ے	c	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day					
I05529 I05530 I05531 I05535 I05544 I05549			1.2	9.4 9.9 8.6 9.9 10.8 9.0	4.6 4.6 4.7	5.3 6.1	1.2 .3 .5 .5 .4	10 7 4		56 91 54 131 56 48
MEAN S.D. N	76 22. 6	2 2 1.0	1.2 6 .08 6	9.6 .78 6	4.9 .35 6	4.7 .83 6	.5 .34 6	7 1.9 6	149 37.2 6	32.4
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day					
I05537 I05541 I05547 I05550	71 66 89 67	23	1.2	10.0 9.2 8.9 9.0	4.5		.5 .7 .3 .6	6 9	120 133 146 120	68 69 55 56
MEAN S.D. N	73 10. 4	7 1.	1.2 3 .08 4	9.3 .50 4	4.7 .18 4	4.6 .41 4	.5 .17 4	1.7	12.4	62 7.5 4
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day					
105532 105538 105539 105545 105548 105552	87 82 72 55	21 29 20	1.2 1.1 1.3 1.1 1.0	10.7 9.8 9.2 9.1 9.1 9.8	5.5 5.2 3.9 4.7 4.4 4.6	5.2 4.6 5.3 4.4 4.7 5.2	. 8 3 6 9 5 6	7 7 37 11	162 142 141 156 122 140	50 42 66 74 63 53
MEAN S.D. N	76 12. 6	0 3.3	9 .10	9.6 .62 6	.57	4.9 .38 6	.6 .21 6	12.1		58 11.7 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	e Unit: mg,	/kg/day					
I05533	106	27	1.3	9.4	4.9	4.5	. 4	11	163	69
I05534	71	21	1.4	10.1	5.5	4.6	. 4	8	149	65
I05536	88	17	1.2	10.5	4.6	5.9	.3	9	137	53
I05540	74	26	1.1	8.6	4.4	4.2	. 4	8	164	37
I05542	71	25	1.3	8.8	4.6	4.2	.5	9	152	86
I05551	60	26	.9	8.8	4.5	4.3	1.3	7	158	56
MEAN	78	24	1.2	9.4	4.8	4.6	.6	9	154	61
S.D.	16.	3 3.	9 .18	.78	.40	.65	.37	1.	4 10.	1 16.6
N	6	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUCROCCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	IÚ/L	IU/L	ALK PHOS IU/L	IU/L	SDH IU/L	IU/L	AMYLASE IU/L	IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	tg/day				
I05535	66 65 75 61 61 55	202 211 215 48 82 83	195 274 217 550 256 254	101 121 98 163 204 50	3 5 7 5 3 3	484 1588 792 872 896 1242	425 281 360 314 595 272	27 39 46 12 27 19	265 135 211 184 342 185
MEAN S.D. N	64 6. 6	7 140 76.	9 291 130.1 6	123 54.0 6	4 1.6 6	979 384.3 6	374 121.9 6	28 12.5 6	220 73.1 6
Group: 2	Dose Lev	el: 0.03	Dosage	Unit: mg/	g/day				
I05537 I05541 I05547 I05550	68 54 44 50	89 146 80 98	200 184 210 211	166 72 62 75	2 3 3 4	706 395 47 7 356	219 293 433 566	25 12 17 48	152 189 286 322
MEAN S.D. N	54 10. 4	2 103 29.	201 12.5 4	94 48.5 4	3 4.8	484 156.7 4	378 153.7 4	26 15.9 4	237 79.9 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day				
I05548	77 68 39 140 74 48	135 65 160 143	334	120 64 41 80	2 4 2 8 6 3	1192 1003 362 663 1073 769	411 269 484 352	35 46 44 25 0 62	177 230 179 272 210 393
MEAN S.D. N	74 35. 6	5 110 41.	0 257 118.5 6	87 32.9 6	$\begin{smallmatrix}4\\2\\2.4\\6\end{smallmatrix}$	844 306.4 6	121.0	35 21.2 6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	e Unit: mg	/kg/day				
105533	101	216	301	121	5	3858	411	25	269
I05534	63	88	329	64	3	902	545	0	343
I05536	68	148	575	63	7	2229	336	15	205
I05540	57	126	182	52	4	417	380	39	223
I05542	74	99	204	79	3	1377	294	31	196
I05551	67	63	269	70	1	964	337	4	246
MEAN	72	123	310	75	4	1624	384	19	247
S.D.	15.	4 54.	2 141.4	4 24.	3 2.0	1251.5	5 88.	6 15.4	4 54.1
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA I MG/DL M	PHOS G/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 1	Dose Level:	0	Dosage	Unit: mg,	/kg/day
I05529 I05530 I05531 I05535 I05544 I05549	10.9 13.0 10.4 12.4 11.5	5.8 6.5 5.6 7.1 6.8 5.7	155 173 159 166 167 156	5.6 8.0 5.4 6.4 6.0 5.7	106 119 110 116 118 112
MEAN S.D. N	11.4 1.10 6	.63	163 7.1 6	.96	5.0
Group: 2	Dose Level:	0.03	Dosage	Unit: mg/	/kg/day
I05541 I05547	10.9 11.7 10.3 10.8	3.8 4.4	16 4 158	6.5	117 112
MEAN S.D. N	10.9 .58 4	4.7 .99 4	163 3.4 4	5.9 .70 4	115 3.3 4
Group: 3	Dose Level:	0.15	Dosage	Unit: mg,	/kg/day
I05532 I05538 I05539 I05545 I05548 I05552	11.5 11.5 10.5 10.3 10.6 11.6	6.2 5.6 6.1 4.9 5.3 7.1	167 164 164 156 152 166	6.4 6.3 6.3 5.3 5.5 7.0	113 116 118 111 112 118
MEAN S.D. N	11.0 .59	5.9 .78	162 6.1	6.1 .63	115 3.1

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg,	/kg/day
I05533	10.9	5.1	163	5.1	114
I05534	11.6	5.7	164	6.3	112
I05536	12.1	5.7	168	6.0	115
I05540	10.7	6.1	159	6.8	116
I05542	11.7	4.7	167	7.1	115
I05551	10.7	5.6	155	5.3	113
MEAN	11.3	5.5	163	6.1	114
S.D.	.59	.50	4.9	.80	1.5
M	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	MG/DL		CHOL MG/DL	TRIG MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day					
105508 105517 105519 105520 105526 105527	57 62 54	19 26 19 19	1.2 1.1 1.0 .9	9.2 9.9 8.5 8.7 8.4 8.8	4.8 4.5 4.8 4.6	5.1 4.0 3.9 3.8	1.1 .4 .9 .4		118 171 161 117 134 139	70 85 45 90 48 74
MEAN S.D. N	60 5. 6	.9 3.	1.1 .12 6	.56	4.7 .13 6	.49	.8 .43	1.5	22.1	L 18.7
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day					
I05514 I05515 I05516 I05521	72 58	22 14 21 16	1.0	10.0 9.9 7.8 9.5	4.8 4.7	5.1 3.1	.2	9 7 8 6	132 108	45 50
MEAN S.D. N	62 8. 4	3 3.5	1.2 .18 4	9.3 1.02 4	5.0 .46 4	4.3 .85 4	.4 .16 4	8 1.3 4	118 28.4	47 4.6 4
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day					
105505 105510 105518 105523 105524 105528	62 71 68	18 26	.8 1.4	9.0 9.0 9.7 9.3 8.8 9.4	4.7 4.9 5.2 4.5	4.3	. 7	7	176 159 135 116 134 155	54 61 65 59
MEAN S.D. N	61 9.	.8 4.9	1.2	9.2 .33	4.8 .25	4.4	.6 .27	8 .8		58 5.3

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	
Group: 4	4 Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day						
I05506	58	20	1.4	9.1	4.9	4.2	.5	8	112	109	
I05507	75	24	1.4	9.4	5.0	4.4	.3	6	109	72	
I05509	66	19	1.3	9.9	5.4	4.5	. 4	6	127	68	
I05511	54	21	1.1	9.3	4.5	4.8	.7	5	130	62	
I05512	64	23	1.2	8.8	5.1	3.7	.2	8	156	108	
I05522	71	18	1.3	9.4	5.5	3.9	. 4	9	143	128	
MEAN	65	21	1.3	9.3	5.1	4.2	. 4	7	130	91	
S.D.	7.	.8 2.3	3 .12	.37	.36	.40	.17	1.	5 18.0	27.3	
7.7	_	-	_	-	_	_	-	_	-	_	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
			Dosage						
105508 105517 105519 105520 105526 105527	37 53 46 26 35 71	30 59 28 23 27 69	776 605 690 876 1552 830	159 130 112 77 203 126	4 7 11 5 9 7	173 170 231 99 160 1291	482 268 451 349 235 462	21 23 12 11 17 45	288 155 235 223 152 278
MEAN S.D. N	45 15.9 6	39 19.! 6	888 339.5 6	134 42.9 6	7 2.6 6	354 461.0 6	374 106.3 6	22 12.5 6	222 58.4 6
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg/k	g/day				
I05515 I05516	3.8	53	855 999 1284 365	1.04	4	137	666	14 44 18 20	252 391 314 171
MEAN S.D. N	37 6.3 4	3 40 13.6	876 384.3 4	120 35.4 4	3 1.5 4	191 58.2 4	459 149.3 4	24 13.6 4	282 93.3 4
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/k	kg/day				
105505 105510 105518 105523 105524 105528	55 25 46 35 54 70	58 20 38 45 91 45	721 1042 733 878 1359 643	154 127 117 73 103 239	10 1 3 6 6 3	176 138 140 143 222 287	339 451 339 436 407 240	6 61 39	238
MEAN S.D.	48 15.9	50 23.8	896 3 267.3	136 57.3	5 3.2	184 59.7	369 78.9	40 21.7	221 55.5

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L	
Group: 4	Dose Lev	rel: 0.75	Dosage	: Unit: mg,	/kg/day					
105506	29	20	1772	149	3	154	675	38	341	
I05507	33	35	564	112	2	164	536	9	329	
I05509	54	87	967	169	2	436	626	21	380	
I05511	46	36	798	138	2	143	539	35	311	
I05512	50	43	808	85	2	329	348	20	236	
I05522	48	54	1069	197	2	473	409	30	247	
MEAN	43	46	996	142	2	283	522	26	307	
S.D.	10.	0 23.	0 417.0	39.9	9 .	4 149.	7 124.	7 10.	9 55.9	
N	6	6	6	6	6	6	6	6	6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

NUMBER	CA MG/DL	MG/DL	NA MMOL/L	MMOL/L	MMOL/L	
Group: 1	Dose Leve	∋1: 0	Dosage	Unit: mg	/kg/day	
I05520 I05526	10.3 11.0 10.6 10.5 10.4 10.7	6.8 7.4	158 159	5.2 5.2	115 114	
MEAN S.D. N	10.6 .25 6	6.7 .80 6	160 3.6 6	5.4 .28	115 3.4 6	
	Dose Leve					
I05514 I05515 I05516 I05521	12.9 10.8 10.5 10.7	9.0 6.8 6.5 5.2	180 162 160 158	6.6 6.2 5.1 5.2	121 114 116 111	
MEAN S.D. N	11.2 1.12 4	6.9 1.58 4	165 10.1 4	5.8 .74 4	116 4.2 4	
Group: 3	Dose Leve	≘1: 0.15	Dosage	Unit: mg	/kg/day	
105505 105510 105518 105523 105524 105528	11.2 11.4 10.9 10.4 10.6	5.4 7.4 6.4 6.9 8.3 6.3	159 161 162 163 163 155	5.1 5.3 5.6 6.1 5.8 5.9	114 116 114 116 115 115	
MEAN S.D. N	11.0 .39	6.8 1.00 6	3.1	5.6 38	. 9	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	unit: mg	/kg/day
I05506	10.6	7.8	164	5.1	119
I05507	10.6	5.1	158	5.1	111
I05509	10.9	6.1	162	5.4	115
I05511	10.6	5.2	157	5.8	114
I05512	11.3	7.8	162	5.5	114
I05522	11.6	7.6	166	5.7	113
MEAN	10.9	6.6	162	5.4	114
S.D.	.43	1.29	3.4	.29	2.7
N	ے	c	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	MG/DL	CREAT MG/DL			GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 1	Dose Leve	el: 0	Dosage	Unit: mg/	kg/day					
105529 105530 105531 105535 105544 105549	50 86 57 43 59 55	21 25 25 16 27 18	1.2 1.1 1.1	9.2 9.0 8.5 9.6 10.6 9.1	4.8 4.4 4.0 4.5	4.7 4.2 4.1 5.6 6.1 4.6	1.1 .4 .8 .3 .6	8 7 7	106 154 160 183 127 151	64 56 65 123 63 56
MEAN S.D. N	58 14.	7 4	1.1 4 .16 6	9.3 .71 6	4.4 .26 6	4.9 .80 6	.6 .34 6	8 6 . 5		
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg/	kg/day					
I05537 I05541 I05547 I05550	87 65 65 50	20 22 18 25	1.1 1.1 1.0 1.1	9.1 9.3 8.4 9.2	4.4	4.7 4.9 4.0 4.5	.4 .8 .2 .5	10 10	114 130 137 116	60 78 50 69
MEAN S.D. N	67 15.: 4	2 3.	1.1 0 .05 4	9.0 .41 4		4.5 .39 4	.25			64 12.0 4
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day					
105532 105538 105539 105545 105548 105552	53 60 72 64 48 60	22 21 15 17 20 25		9.4 9.0 9.0 9.4 8.9 9.5		5.0 4.3 5.1 4.7 4.9 5.5	.7 .4 .7 .6 .4	7	146 105 149 162 114 123	60 36 65 66 54 63
MEAN S.D. N	60 8	20 4 3.	1.0 6 .04 6	9.2 .26 6		4.9 .40 6	.14	8 3.2 6	133 22.4	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	rel: 0.75	Dosage	: Unit: mg/	kg/day					
I05533	86	27	1.1	9.2	4.3	4.9	.3	9	136	68
I05534	70	19	1.3	9.1	4.3	4.8	.3	6	130	59
I05536	77	15	1.1	9.6	4.3	5.3	.3	7	102	51
I05540	58	21	1.0	9.0	4.5	4.5	. 4	6	121	61
I05542	74	30	1.2	8.7	4.5	4.2	. 4	7	138	110
I05551	56	22	. 9	8.9	4.4	4.5	.7	6	113	46
MEAN	70	22	1.1	9.1	4.4	4.7	. 4	7	123	66
S.D.	11.	5 5.4	4 .14	.31	.10	.38	.15	1.	2 14.	1 23.0
7.7	_	ے	_	_	_	-	ے	c	ے	c

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	IU/L	SDH IU/L	CK IU/L	IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	tg/day				
	28 54 33 44 44 60	36 108 51 38 38	330 583 351	8.0	3 9 4 7 3 5	109 205 156 180 274 518	376 244 326 332 494 263	14 27 38 11 18 0	232 107 188 186 279 169
MEAN S.D. N	44 12.	1 30.	362 2 125.6 6	102 42.9 6	2.4	146.6	339 89.9 6	13.2	194 58.2 6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
I05537 I05541 I05547 I05550	49 68 29 49	73 81 51 76	210 257 193 301	170 65 54 64	3 2 3 5	287 761 165 301	254 344 423 514	24 15 23 50	168 218 273 290
MEAN S.D. N	49 15. 4	9 70 13.	3 240 48.7 4	88 54.7 4	3 1.3 4		384 110.9 4	28 15.2 4	237 55.5 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day				
I05545 I05548	35	35 69 49 125 70 60	423	103 90 73 43 70 76		206 121 110 267 123 363	387 305 533 317	41 50 36 41 0 36	172 200 198 282 179 350
MEAN S.D. N	36 6. 6	6 30.	9 319 129.0 6	76	3	198	414 115.1 6	34 17.4 6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	/kg/day				
I05533	34	56	305	95	1	153	404	32	261
I05534	37	35	543	37	2	766	485	15	298
I05536	42	49	743	52	2	352	341	20	203
I05540	37	50	269	46	3	413	394	27	215
I05542	22	40	296	61	3	130	233	24	119
I05551	4.5	46	332	60	1	174	383	21	284
MEAN	36	46	415	58	2	331	373	23	230
S.D.	8.	.0 7.	5 188.9	20.0) .9	242.1	83.	3 5.9	9 66.0
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL I				CL MMOL/L
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day
I05529 I05530 I05531 I05535 I05544 I05549	10.5 10.8 9.7 10.6 10.6	5.6		6.0	111
MEAN S.D. N		.73	161 4.9 6	.38	4.4
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	kg/day
I05541	9.9 10.7 9.8 10.4	4.3	166	6.2	118
MEAN S.D. N	.42	4.2 .37 4	161 5.4 4	.92	4.3
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day
105532 105538 105539 105545 105548 105552	10.5 9.7	4.0	160	5.0 5.3 5.3 5.0 4.8 5.9	116 113
MEAN S.D. N	.73	.65	157 2.5 6	.39	1.1

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	/kg/day
I05533	10.0	5.4	152	5.6	114
I05534	10.5	4.1	162	5.9	117
I05536	10.6	4.9	161	5.9	117
I05540	10.5	5.1	158	6.3	115
I05542	10.7	5.4	168	6.3	122
I05551	10.3	4.9	158	5.2	114
MEAN	10.4	5.0	160	5.9	116
S.D.	.25	.48	5.3	.42	3.0
N	6	6	6	- 6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL		CREAT MG/DL	G/DL		GLOB G/DL	T BILI MG/DL	UMOL/L	CHOL MG/DL	TRIG MG/DL	
Group: 1	Dose Lev	rel: 0	Dosage								
I05508 I05517 I05519 I05520 I05526 I05527	51 71 54 56 52 70	17 26 16 22	1.2 1.1 1.0 1.0	9.1 9.3 8.4 8.3 8.1 8.2	4.8	4.5 3.7 3.9 3.4	1.0	8 11 11 8 8	179 178	67 97 44 63 48 56	
MEAN S.D. N	59 9. 6	1 3.9	.08	8.6 .50 6	.17	4.0 .42 6	.7 .42 6	1.5	153 23.0 6	62 19.0 6	
Group: 2	Dose Lev	el: 0.03	Dosage	Unit: mg/	kg/day						
I05514 I05515 I05516 I05521	61	17 25	1.3	8.6 9.9 8.4 9.3	4.8	5.1 4.2	.4	13 8 10 9	129 98	57 73 71 41	
	59 2. 4	9 3.5			.36	4.3 .58 4	.10		114 25.1 4		
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05510 I05518 I05523 I05524 I05528	83 84 62	16 14 16 19 22 24	.8	8.8 8.1 9.0 9.0 8.4 9.2		4.0 4.2 3.6 4.0	.9 .3 .3 .5 .5	9 8 10 13 10 9	130 135	53 57 48 55 46 83	
MEAN S.D. N	67 13. 6	3 3.9		8.8 .42 6	.48	4.1 .44 6	.23		7 19.7	13.4	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	rel: 0.75	Dosage	e Unit: mg	/kg/day					
I05506	68	18	1.3	8.2	4.4	3.8	.3	10	106	70
I05507	95	23	1.4	9.1	4.5	4.6	. 3	8	104	81
I05509	71	18	1.2	9.3	5.1	4.2	.3	14	117	62
I05511	67	17	1.1	8.8	4.3	4.5	. 4	6	125	56
I05512	71	22	1.4	8.4	4.9	3.5	.2	11	144	96
I05522	70	17	1.2	8.8	5.7	3.1	.3	9	155	94
MEAN	74	19	1.3	8.8	4.8	4.0	.3	10	125	76
S.D.	10.	6 2.	6 .12	.41	. 53	.59	.06	2.	7 20.	6 16.6
N	5	6	6	6	5	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUORCOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
			Dosage						
105508	34	24 47	709	154	4 8	116	510	18	312
	44	47	512	102	8	144	280	47	168
		27		125	9 5	148		9	235
I05520	24	21	848	77	5	82	365	11	241
I05526	33	27	1455	209	9	143	197	20	
105527	33	59	767	114	5	156	428	27	256
MEAN	36	34	839 2 321.9 6	130	7	132	371	22	224
S.D.	7.	9 15.	2 321.9	46.2	2.3	27.8	115.8	13.9	64.2
N	6	6	6	6	6	6	6	6	6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
105514	26 43 38	16	634 955 1125 287	121	5	93	359	11	214
I05515	4.3	57	955	109	5	173	641	38	390
I05516	38	40	1125	147	2	201	383	9	295
I05521	34	28	287	87	5	129	331	27	182
MEAN	35	35	750	116	4	149	428	21	270
S D	7	2 17	5 369 9	25.0	1.5	47 7	1433	13.8	92.9
N.	4	4	750 5 369.9 4	4	4	4	4	4	
			Dosage						
105505	44	41	643	143	10	127	305	14	155
T05510	2.3	2.0	980	134	1	157	442	0	294
I05518	38	31		109	3	133	327	32	216
I05523	38 41 49	40	798	80 106	6	175	436	24	268
I05524	49	55	1181	106	و	152	354	23	212
I05528	47	33	535	194	1 3 6 9 2	173	203	26	135
MEAN	40	37	806				344	2.0	213
	9.	4 11.	7 237.8	39.4	3.8	19.9	89.3	11.3	
N N	6	6	7 237.8	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day				
105506	26	28	1502	139	4	155	657	38	349
105507	27	31	462	96	2	163	496	14	312
I05509	36	64	626	127	2	300	593	15	367
I05511	4.3	38	683	127	2	169	516	20	299
I05512	34	34	725	89	3	189	340	8	237
I05522	35	63	941	171	3	244	390	40	243
MEAN	34	43	823	125	3	203	499	22	301
S.D.	6.	3 16.	2 367.0	29.9	. 8	57.2	119.4	1 13.4	53.4
M	ے	c	ے	c	_	_	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	MG/DL	MG/DL	NA MMOL/L	MMOL/L	CL MMOL/L	
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg/	/kg/day	
I05508 I05517 I05519 I05520 I05526 I05527	10.0 10.9	6.4 8.2	158 159	5.4 5.0	120 121	
MEAN S.D. N	10.4 .39 6	7.1 .66 6	160 2.9 6	5.4 .44 6	120 2. 6	5
Group: 2	Dose Leve	1: 0.03	Dosage	Unit: mg/	'kg/day	
I05514 I05515 I05516 I05521	10.0 11.0 10.3 10.7	6.8 7.2 7.5 5.5	160 185 159 161	5.1 7.0 5.2 5.2	117 136 116 120	
MEAN S.D. N	10.5 .44 4	6.8 .88 4	166 12.5 4	5.6 .92 4	122 9. 4	3
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg,	'kg/day	
I05510	10.6 10.1 10.7 10.4 10.2 10.1	7.4 6.6	154 161	4.9 6.1	115 120	
MEAN S.D. N	.26		3.5		3.	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	/kg/day
I05506	10.0	7.6	159	5.3	121
I05507	10.3	6.2	153	5.6	118
I05509	10.1	5.9	158	5.3	121
I05511	10.1	5.1	152	4.7	115
I05512	11.1	8.7	163	6.5	123
I05522	11.4	7.3	169	6.0	120
MEAN	10.5	6.8	159	5.6	120
S.D.	.60	1.31	6.4	.63	2.8
M	6	6	6	- 6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	MG/DL		CHOL MG/DL	TRIG MG/DL
Group: 1	Dose Leve	el: O	Dosage	Unit: mg/	kg/day					
105529 105530 105531 105535 105544 105549	61 47 67	18 22 25 16 24 22	.9 1.2 1.2 1.2 1.2	8.5 8.5 9.5 9.8 9.3	4.4 4.5 4.5 4.2 4.0 4.5	4.1 4.1 4.0 5.3 5.8 4.8	.9 .3 .7 .4 .6	8	93 152 176 227 126 156	59 59 61 185 79 70
MEAN S.D. N	57 10.2 6	2 3.!	.13	9.0 .57 6		.75	.24	. 8	3 45.4	86 49.4 6
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg/	kg/day					
I05537 I05541 I05547 I05550	62 58		1.1	9.2 9.2 8.3 8.7	4.2	4.8 5.0 4.0 4.3	.8	7 8 15 12	140	87 99 50 68
MEAN S.D. N	66 17.1 4	3 3.4	1.1 1.05 4	8.8 .44 4	4.3 .10 4	4.5 .46 4	.26	10 3.7 4	7 11	21.5
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day					
105532 105538 105539 105545 105548 105552	76 79 48	16	.9 1.0	9.2 9.1 8.9 9.0 8.8 9.1	4.4 4.0	4.9 4.6 4.8	.4 .8 .4 .5	10 9 6 15 13 9	113 153 153 112 145	33 86 62
MEAN S.D. N	62 12.6	6 2.	7 1.0	.15		4.7 .24	.6 .18	10 3.2	137 2 19.5	18.0

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Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day					
I05533	88	19	1.2	8.8	4.4	4.4	.3	9	139	53
I05534	73	20	1.4	9.5	4.7	4.8	.5	9	142	63
I05536	75	14	1.2	9.6	4.3	5.3	.2	9	101	56
I05540	68	18	1.1	9.0	4.5	4.5	. 4	12	148	78
I05542	74	19	1.2	8.5	4.2	4.3	.3	6	120	68
I05551	69	29	1.0	8.7	4.4	4.3	.4	8	111	50
MEAN	74	20	1.2	9.0	4.4	4.6	. 4	9	127	61
S.D.	7.	2 5.	0 .13	.44	.17	.39	.10	1.	9 18.	9 10.5
7.7	_	ے	_	_	_	-	ے	c	ے	c

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	TÚ/Ti	TU/L	ALK PHOS IU/L	TU/L	TU/L	TU/L	AMYLASE IU/L	IU/L	P AMYL U/L
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day				
I05529	35	49		86	2 6 5 6	182	352	11	219
	3.8	49		92	6	226		-5	118
	32	45		83	5	490	346	38	201
	39	39		170	6	294		5	191
I05544		49	290	159	2	245		26	
I05549	40	86	308	48	4	138	251	0	170
MEAN	38	53	360	106	4	262	342	14	198
S.D.	3.	4 16.	7 152.5	47.7	1.8	123.6	86.9	14.7	55.5
N	6	6	360 7 152.5 6	6	6	6	6	6	6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
105537	55	77 98 60	241	150	3	316	244	27	166
I05541	55 41	98	239	67	2	334	296	0	196
I05547	33	6.0	186	53	4	182	410	12	270
I05550	51	73	241 239 186 297	66	7	270	483	38	
MEAN	4.5	77	241	8.4	4	276	358	19	228
S D	- 0	9 15	241 8 45.3	44 5	2 2	67 9	1083	16.7	55.8
N.	4	4	4	4	4	4	4	4	
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day				
105532	35	31	233	99	2	302	365	41	172
T05538	4.5	87	451	89	5	124	381	35	208
I05539	29	43	129	72	3	121	271	3.0	180
I05545	48	105	129 202 428	39	5 3 4 4	253	528	11	283
I05548	33	41	428	68	4	142	310	-0	182
I05552	29 48 33 33	54	386	81	4	224	605	53	380
	37		305	75	4	194	410	28	234
	7	8 29	3 134.0	20.8	1 0	76.1	129 7		82.3
N N	7. 6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg,	/kg/day				
I05533	29	39	285	96	2	172	414	3.0	271
I05534	35	41	506	39	2	285	503	41	317
I05536	31	44	755	52	1	204	340	23	204
I05540	31	52	240	48	2	483	434	34	240
I05542	19	33	250	52	2	113	241	18	161
105551	43	42	351	62	2	200	377	15	283
MEAN	31	42	398	58	2	243	385	27	246
S.D.	7.	8 6.	2 200.5	20.0	0 .4	1 130.1	1 89.4	4 9.	9 56.7
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	CA MG/DL					
Group: 1	Dose Level: 0		Dosage Unit: mg/kg/day			
I05535 I05544	9.7 9.6 10.4 10.3 9.9 10.3	6.2 5.9 6.5 5.7	167	6.1 5.5	114 123 125 119	
MEAN S.D. N	10.0 .34 6	6.0 .36 6	162 6.5 6	5.8 .59 6	120 5.: 6	1
Group: 2	Dose Level: 0.03		Dosage Unit: mg/kg/day			
I05537 I05541 I05547 I05550	9.7 10.2 10.0 9.8	4.8 4.2 4.4 4.8	159 163 156 160	4.9 5.6 4.8 5.6	120 119 118 123	
MEAN S.D. N	.22	4.6 .30 4	160 2.9 4	.43	2.:	2
Group: 3	Dose Level: 0.15		Dosage Unit: mg/kg/day			
	9.7 10.0 8.8 10.1 9.9 9.4	4.8 5.3 4.3	156 160 158 158	5.4 5.6 5.5 4.7	121 127 121 122	
MEAN S.D. N			160 3.6 6		3.	0

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg/	'kg/day
I05533	9.9	5.0	157	5.4	118
I05534	10.8	4.6	163	6.9	121
I05536	11.0	5.1	160	6.2	119
I05540	9.4	5.2	157	5.8	121
I05542	10.4	4.7	164	5.1	119
I05551	10.0	5.4	165	5.3	123
MEAN	10.2	5.0	161	5.8	120
S.D.	.60	.30	3.5	.67	1.8
M	6	6	6	- 6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL		CREAT MG/DL	G/DL		GLOB G/DL	T BILI MG/DL		CHOL MG/DL	TRIG MG/DL	
Group: 1	Dose Leve	el: 0	Dosage								
I05508 I05517 I05519 I05520 I05526 I05527	57 54 56	19 29	1.3 1.1 1.0 1.1	8.7 9.1 8.3 8.4 8.3 9.2	4.8	4.3 3.6 3.7 3.5	1.1	6 8 9 8 7 9	177	61 101 56 81 43 66	
	60 8.6 6	0 4.3	.14	8.7 .40 6	.12	3.9 .33 6		8 1.2 6		20.4	
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg/	kg/day						
I05514 I05515 I05516 I05521	57 74 64 59		1.2	9.0 10.3 8.5 10.5	5.2 5.1	5.1 3.4	.3	7 8 7 8	109	60 64	
MEAN S.D. N	64 7.8 4	6 4.9	1.3 .22 4		.39	.75		8 4	126 14.9 4		
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05510 I05518 I05523 I05524 I05528	70 108 78 75				5.1 4.9 5.0 5.2 4.8 5.0	4.1 4.0 3.9 4.0	.8 .3 .2 .3 .5	8 6 8 9 14 8	173 163 125 139 136 161	49 56 38 48 68 44	
MEAN S.D. N	75 18.9 6	5 4.6		9.0 .19 6	.14	4.0 .21 6	.22		7 18.8	10.4	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	/kg/day					
I05506	63	20	1.6	9.5	5.5	4.0	.3	9	107	88
I05507	111	21	1.6	9.8	5.1	4.7	.2	8	8.0	57
I05509	75	18	1.3	9.8	5.4	4.4	.3	17	90	59
I05511	62	18	1.1	9.0	4.7	4.3	.3	9	105	56
I05512	63	20	1.4	9.0	5.3	3.7	.2	10	147	68
I05522	65	18	1.3	9.5	5.5	4.0	.3	7	141	108
MEAN	73	19	1.4	9.4	5.2	4.2	.3	10	112	73
S.D.	19.	1 1.	3 .19	.36	.31	.35	.05	3.	6 27.	0 21.0
N	6	6		6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
			Dosage						
105508 105517 105519 105520 105526 105527	41 48 46 27 36 36	25 45 31 24 24 63	706 533 782 901 1408 863	152 102 130 82 226 126	4 6 11 7 9 5	222 164 166 120 167 168	525 275 437 377 251 487	18 23 0 20 53 84	359 184 261 275 186 325
MEAN S.D. N	39 7. 6	7 35 15.	866 8 296.2 6	136 50.1 6	7 2.6 6	168 32.4 6	392 111.8 6	33 30.3 6	265 71.2 6
			Dosage						
I05515 I05516	35 37	38 46	692 824 1306 335	113	5 4 2 5	153	741	10 134 30 18	492 322
MEAN S.D. N	35 7. 4	60 55. 4	789 401.7 4	131 34.5 4	$\begin{smallmatrix}4\\1\\1&4\end{smallmatrix}$	175 42.5 4	465 185.6 4	48 57.9 4	318 125.4 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/k	kg/day				
105505 105510 105518 105523 105524 105528	46 25 41 34 45 61	39 21 37 38 87 49	710 1097 645 724 1271 660	143 160 111 76 108 244	11 4 11 4 3	164 137 140 129 194 220	356 501 324 454 394 235	38 5 25 25 12 56	365 240 306 266
MEAN S.D.	42 12.	45 2 22.	851 4 265.3	140 58.6	6 4.3	164 36.2	377 94.9	27 18.3	258 70.1

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Leve	el: 0.75	Dosage	Unit: mg/	kg/day				
105506	29	21	1624	154	3	133	730	63	433
I05507	3.0	34	463	108	2	174	556	18	381
I05509	40	75	563	122	2	305	409	26	417
I05511	4.3	35	566	118	1	204	345	35	320
I05512	31	34	726	95	2	157	353	15	263
I05522	41	65	900	166	2	308	414	38	287
MEAN	36	44	807	127	2	214	468	32	350
S.D.	6.3	3 21.	0 428.6	27.4	. 6	75.7	149.3	1 17.5	70.4
M	ے	c	ے	c	_	_	_	_	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg/	'kg/day
I05520 I05526	9.7 11.0 9.8 10.2 9.5 11.4	6.7 6.9	156 159	5.2 4.9	114 119
MEAN S.D. N	10.3 .77 6	6.8 .37 6	160 7.1 6	5.1 .56 6	117 5.3 6
	Dose Leve				
I05514 I05515 I05516 I05521	9.8 10.1 10.6 11.6	6.9 6.7 7.5 5.8	163 173 163 169	4.6 6.8 5.1 6.4	117 125 117 123
MEAN S.D. N	10.5 .79 4	6.7 .70 4	167 4.9 4	5.7 1.04 4	120 4.1 4
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg/	'kg/day
I05510 I05518 I05523 I05524	11.0 11.4 10.0 10.7 10.4 10.3	8.2	169 159 160 162	5.6	129 115 122 110
MEAN S.D. N	10.6 .51 6	6.8 1.05 6	161 4.6 6	.35	7.0

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	CA	I PHOS	NA	K	CL
NUMBER	MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	/kg/day
I05506 I05507 I05509 I05511 I05512 I05522	10.7 11.2 10.4 10.3 11.2	7.1 6.7 5.6 5.0 6.6 7.5	170 160 158 158 163 167	5.1 5.8 5.1 5.0 5.2 6.1	125 114 117 116 115 114
MEAN	10.8	6.4	163	5.4	117
S.D.	.41	.94	5.0		4.2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 1	Dose Leve	el: 0	Dosage	Unit: mg/	kg/day					
105529 105530 105531 105535 105544 105549	95 58 78	22 21 15 22	1.3	9.8 8.5 9.4 9.7	4.7 5.4 4.5 4.4 4.7	4.0 5.0 5.3	.7 .3 .4 .3 .5	8 6 10 7 9 9	99 189 182 217 136 171	65 61 88 57 65
MEAN S.D. N	66 20.5 6	20 2.7 6	7 1.2	9.2 .51 6	4.7 .38 6	4.6 .51 6		8 1.5 6	5 42.	10.9
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg/	kg/day					
I05537 I05541 I05547 I05550	51	22 22	1.2	9.0 9.8 8.1 9.0	4.7 4.3	3.8	.9 .4	7 7 8 10	149	53 81 50 60
MEAN S.D. N	68 14.7 4	7 22 3.3	1.1 .08 4	9.0 .69 4	4.6 .19 4	$^{4.4}_{.54}$.27	8 1.4 4	134 1 15.6 4	5 14.0
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day					
105532 105538 105539 105545 105548 105552	74 49	24 17	1.1 1.0 1.0 1.0	9.2 9.3 8.7 8.9 9.0 9.3	4.6 4.3	4.4 4.9 4.3 4.7	.5 .4	7 7 8 22 10 8	125	42 35 77 67 43 72
MEAN S.D. N		4.3	1.0	.24		4.6 .32			3 13.3	1 18.0

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day					
I05533	84	22	1.2	9.8	4.8	5.0	.3	9	142	62
I05534	89	18	1.4	9.5	5.0	4.5	.3	6	131	76
I05536	89	14	1.2	9.6	4.5	5.1	.3	6	65	51
I05540	63	20	1.4	10.0	5.2	4.8	.3	13	105	53
I05542	93	32	1.3	9.1	4.5	4.6	.3	7	115	78
I05551	56	26	. 9	8.8	4.6	4.2	.5	24	109	42
MEAN	79	22	1.2	9.5	4.8	4.7	.3	11	111	60
S.D.	15.	5 6.	3 .19	.45	.29	.33	.08	7.	0 26.	6 14.4
7.7	_	_	_	_	_	-	ے	c	ے	c

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Leve	el: 0	Dosage (Jnit: mg/l	tg/day				
105529 105530 105531 105535 105544 105549	36 57 35 53 40 44	55 78 43 38 38 74	220 322 292 583 274 284	81 123 84 161 164 50	3 9 6 7 5 4	188 1481 128 2407 146 368	350 510	8 0 45 10 25 0	264 144 259 224 327 198
MEAN S.D. N	44 9.1 6	54 . 17.9 6	329 128.7 6	110 46.5 6	6 2.2 6	786 947.2 6	370 87.4 6	15 17.5 6	236 62.7 6
Group: 2	Dose Leve	1: 0.03	Dosage (Jnit: mg/1	kg/day				
I05537 I05541 I05547 I05550	39 39 30 64	72 80 50 114	219 238 168 307	220 73 53 67	2 2 3 11	247 250 165 217	269 348 454 487	2 23	249 330
MEAN S.D. N	43 14.6 4	79 26.6 4	233 57.5 4	103 78.3 4	$\begin{smallmatrix}4\\4\\4.4\end{smallmatrix}$	220 39.4 4	390 99.8 4	18 10.9 4	269 62.5 4
Group: 3	Dose Leve	1: 0.15	Dosage I	Jnit: mg/	kg/day				
I05545 I05548	30 37 23 56 38 40	34 57 52 153 54 54	235 531 157 229 404 390	98 85 69 42 68 82	1 4 3 2 7 7	196 149 107 345 230 227	447 426 290 520 329 640	130 41 26 25 0 18	319 214
MEAN S.D.	37 11.1	. 42.8	324 140.3	19.2	2.5	81.8	127.6	40 46.1	282 87.7

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	unit: mg	/kg/day				
105533	35	43	296	106	1	1132	389	35	281
I05534	3.8	34	447	43	1	476	482	0	338
I05536	33	42	668	54	2	367	343	18	221
I05540	31	41	294	52	2	141	480	35	292
I05542	20	40	280	58	2	105	225	16	169
I05551	50	71	346	63	2	276	353	12	279
MEAN	34	45	388	63	2	416	379	19	263
S.D.	9.	8 13.	0 150.3	. 22.	3 .5	377.0	0 96.	5 13.6	6 59.4
N	6	6	6	6	6	6	6	6	6

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Individual Clinical Chemistry Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

NUMBER	CA MG/DL	MG/DL	NA MMOL/L	MMOL/L	CL MMOL/L
Group: 1	Dose Leve	el: 0	Dosage	: Unit: mg,	/kg/day
I05530 I05531 I05535	10.2 11.1 10.3 11.0 8.1 10.7	6.0 4.8 6.8	168 160 166	6.7 5.1 5.7	125 116 125
MEAN S.D. N	10.2 1.11 6	5.7 .66 6	161 5.9 6	5.6 .74 6	118 6.1 6
Group: 2	Dose Leve	el: 0.03	Dosage	Unit: mg,	/kg/day
I05537 I05541 I05547 I05550	9.7 11.5 8.8 10.9	4.5 3.6 4.5 4.0	156 170 154 165	4.6 6.5 4.5 5.4	110 122 113 124
MEAN S.D. N	10.2 1.21 4	4.2 .44 4	7.5	5.2 .93 4	6.8
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg,	/kg/day
I05538 I05539 I05545	9.7 10.7 9.2 10.1 10.4 9.9	5.0 5.4 4.1 5.2	160 161 156 156 160 165	6.2 5.3 5.6 5.7	121 116 118 125
MEAN S.D. N	10.0 .53 6	5.2 .63 6	160 3.4 6	5.7 .45 6	120 4.2 6

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Individual Clinical Chemistry Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg,	/kg/day
I05533	10.4	4.9	159	5.4	122
I05534	10.5	4.2	165	6.2	124
I05536	10.7	5.0	160	5.9	114
I05540	11.5	5.8	170	6.6	117
I05542	10.6	5.3	163	5.8	118
I05551	9.7	5.2	157	5.1	115
MEAN	10.6	5.1	162	5.8	118
S.D.	.58	.53	4.7	.54	3.9
N	6	6	6	6	6

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Appendix 4 Individual Clinical Chemistry Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Le	vel: 0	Dosage	Unit: mg/	kg/day						
I05508 I05517 I05519 I05520 I05526 I05527	57 74 52 55 60 65	16 25 19 20	1.0 1.2 1.1 1.0 1.2 1.3	7.7 8.9 7.9 8.2 8.1 8.6	4.6 5.0 4.7 4.6 5.0 4.9	3.1 3.9 3.2 3.6 3.1 3.7	1.2 1.2 .4 .6 .4 .3	8 11 12 11 9	115 178 183 124 147 178	68 82 39 78 42 54	58 77 84 57 70 67
MEAN S.D. N	60 8 6	.0 3.	0 1.1 .12 6	8.2 .45 6	4.8 .19 6	3.4 .34 6	.7 .41 6	10 1.5 6	154 29.9 6	60 18.3 6	69 10.6 6
Group: 2	Dose Le	vel: 0.03	Dosage	Unit: mg/	kg/day						
I05514 I05515 I05516 I05521	56 63 60 66	19 22	1.1 1.3 1.1 1.5	8.3 9.6 7.9 9.4	5.0 5.2 5.0 5.5	3.3 4.4 2.9 3.9	.5 .3 .4 .4	7 8 8 6	136 127 117 98	49 97 49 44	52 45 42 43
MEAN S.D. N	61 4 4	.3 2.:	1.2 2 .19 4	8.8 .83 4	5.2 .24 4	3.6 .66 4	.4 .08 4	7 1.0 4	120 16.3 4	60 24.9 4	46 4.5 4
Group: 3	Dose Le	vel: 0.15	Dosage	unit: mg/	kg/day						
I05505 I05510 I05518 I05523 I05524 I05528	58 62 71 74 65 48	16 24 17 27	1.1 .9 1.3 1.1 1.4	8.4 8.2 9.3 9.6 8.6	5.3 4.7 5.4 4.7 5.0 4.8	3.1 3.5 3.9 4.9 3.5 3.8	.7 .3 .4 .2 .6	11 7 10 9 11 14	191 135 145 129 136 157	49 69 73 74 64 59	74 60 56 49 53 36
MEAN S.D. N	63 9 6	.4 4.	1.2 5 .18 6	8.8 .55 6	5.0 .31 6	3.8 .61 6	.5 .20 6	10 2.3 6	149 22.8 6	65 9.5 6	55 12.5 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 4	Dose Leve	el: 0.75	Dosage	Unit: mg/	kg/day						
105506 105507 105509 105511 105512 105522	80 98 60 55 91 72	22 23 21 17 19 19	1.6 1.4 1.2 1.0 1.2	9.4 9.0 9.0 9.0 8.7 9.2	5.4 4.8 4.2 4.6 5.1	4.0 4.2 4.8 4.4 3.6 3.8	.2 .3 .3 .2	11 14 17 8 24 13	57 29 65 75 76 87	51 29 89 41 58 95	16 9 18 25 27 20
MEAN S.D.	76 17.0	20	1.3	9.0 .23	4.9 .48	4.1	.2	14 5.	65 5 20.	60 3 26.	19 3 6.5

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	IU/L	SDH IU/L	IU/L	IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day				
105508 105517 105519 105520 105526 105527	29 34 37 23 30 33	31 51 29 22 30 95	723 490 666 842 1370 659	128 79 238	2 2 8 3 1	157 130 194 135 184 191	527 290 457 408 226 446	28 27 12 20 12 39	377 203 285 307 174 309
MEAN S.D. N	4.	9 43 27. 6	792 3 305.3 6	142 53.1 6	2.6	165 28.5 6	112.8	23 10.5 6	276 74.9 6
Group: 2	Dose Lev	el: 0.03	Dosage	Unit: mg/	kg/day				
I05514 I05515 I05516 I05521	22 35 35 28	13 59 43 28	606 778 1093 258	132 109 163 88	4 3 1 1	92 144 188 108	713	14 100 19 31	273 502 360 220
MEAN S.D. N	30 6. 4	36 19.	8 684 348.2 4	123 32.2 4	2 1.5 4	133 42.6 4	470 165.2 4	40.0	339 123.2 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day				
105518 105523 105524	50	72 43 40 36 75 63	897	160 143 129 70 121 262	7	218 178 201 122 213 225	514 356 479	30 9 36 28 36 860	211 392 274 346 282 365
MEAN S.D. N	40 15. 6	7 55 17. 6	853 2 207.5 6	148 63.8 6	4 3.1 6	193 38.4 6	429 69.9 6	166 339.9 6	

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Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	/kg/day				
105506	28	24	1262	168	2	180	758	61	475
I05507	31	39	239	109	2	219	499	9	359
I05509	52	85	902	88	5	954	504	25	371
I05511	44	33	415	98	2	207	494	33	340
I05512	40	46	377	70	2	267	439	25	346
I05522	37	85	683	141	2	285	406	36	296
MEAN	39	52	646	112	2	352	517	32	364
S.D.	8.	8 26.	6 384.1	. 36.1	1.2	297.5	5 124.	5 17.:	2 59.9
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	CA	I PHOS	NA	K	CL
NUMBER	MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
Group: 1	Dose Leve	1: 0	Dosage	Unit: mg,	'kg/day
I05526	9.0 11.0 10.3 9.8 9.9 10.8	6.9	163	4.7 5.4 5.3 5.3 5.8 6.1	116 110 112 121
MEAN	10.1	6.6	157	5.4	116
S.D.	.73	.31	6.1	.48	4.1
N	6	6	6	6	6
Group: 2	Dose Leve	1: 0.03	Dosage	Unit: mg/	'kg/day
I05514	10.2	6.6	154	5.0	118
I05515	11.3	6.6	163	6.1	
I05516	10.4	7.2	159	4.9	
I05521	11.2	4.7	161	6.1	
MEAN	10.8	6.3	159	5.5	117 4.1 4
S.D.	.56	1.09	3.9	.67	
N	4	4	4	4	
Group: 3	Dose Leve	1: 0.15	Dosage	Unit: mg,	'kg/day
I05510 I05518 I05523 I05524	9.6 10.1 11.3 10.9 9.9 10.3	7.2 6.9 6.2 8.6	154 159 158 161	4.8 6.0 5.3 5.6	119 114 116 109
MEAN	10.4	6.8	158	5.5	115
S.D.	.64	1.01	3.2	.43	4.2
N	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg,	/kg/day
I05506	11.4	7.9	171	6.6	128
I05507	10.4	6.7	150	6.4	111
I05509	9.5	4.3	153	4.8	107
I05511	10.5	5.9	153	5.8	108
I05512	11.4	9.1	160	5.1	109
I05522	11.3	7.2	163	6.2	114
MEAN	10.8	6.8	158	5.8	113
S.D.	.76	1.66	7.9	.73	7.8
M	6	6	6	6	6

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Individual Clinical Chemistry Data

Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	e Unit: mg/	kg/day						
105529 105530 105531 105535 105544 105549	48 74 62 57 57 47	21 22 25 16 23 15	.9 1.3 1.2 1.2 1.1	7.6 9.6 8.2 9.2 9.4 9.3	4.3 5.6 4.6 4.4 4.6 4.8	3.3 4.0 3.6 4.8 4.8	1.0 .3 .6 .4 .6 .3	7 9 9 9 9	80 175 177 226 143 175	53 65 70 175 59 56	39 73 64 56 42 81
MEAN S.D. N	58 9. 6	9 2 0 4 .	0 1.1 0 .14 6	8.9 .80 6	4.7 .47 6	4.2 .63	.5 .27 6	9 1.3 6	163 48.5	80 47.1 6	59 . 16.8 6
Group: 2	Dose Lev	el: 0.03	Dosage	e Unit: mg/	kg/day						
I05537 I05541 I05547 I05550	46 70 72 68	18 25 12 24	1.0 1.3 .9 1.1		4.4 4.6 3.8 4.7	4.2 4.3 4.5 3.8	.4 1.0 .2 .5	6 9 10 9	102 128 82 127	61 123 65 77	43 61 41 42
MEAN S.D. N	64 12. 4	1 20 6.		8.6 .25 4	$^{4.4}_{.40}$	4.2 .29 4	.5 .34 4			82 28.5 4	47 9.5 4
Group: 3	Dose Lev	el: 0.15	Dosage	e Unit: mg/	kg/day						
105532 105538 105539 105545 105548 105552	49 53 62 59 58 60	20 23 18 24 23 27	1.1 1.0 1.2 1.0 1.1	9.2 8.5 8.8 8.3 8.7 9.0	5.1 4.6 4.2 4.7 4.3 4.1	4.1 3.9 4.6 3.6 4.4 4.9	.6 .3 .4 .5 .4	8 7 9 12 15 8	133 100 144 136 107 162	54 57 72 83 86 60	33 37 56 37 48 34
MEAN S.D.	57 4.		1.1	8.8 .33	4.5 .37	4.2			130 L 23.2		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533	81	21	1.2	9.6	5.1	4.5	. 3	15	100	62	25
I05534	74	12	1.4	9.1	4.6	4.5	. 3	9	128	69	23
I05536	70	13	1.1	9.0	3.9	5.1	. 2	8	62	44	20
I05540	62	15	1.1	8.7	4.6	4.1	.3	8	80	67	16
I05542	87	18	1.1	8.4	4.2	4.2	. 4	9	77	84	25
I05551	46	26	1.0	8.6	4.6	4.0	. 4	43	99	55	28
MEAN	70	18	1.2	8.9	4.5	4.4	.3	15	91	64	23
S.D.	14.	6 5.	3 .14	.43	.41	.40	.08	13.	8 23.	1 13.	5 4.3
N	6	6	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day				
I05529 I05530 QS I05531 I05535 I05544 I05549	52 33 30 31 37 33	159 82 51 48 44 79	175 305 277 593 266 272	176	1	192 377 156 362 155 169	499	11 45 8 25 0	175 255 244 342
MEAN S.D. N	36 8. 6	2 77 43.	315 3 143.3 6	112 51.2 6	2 .8	235 105.0 6	373 74.3 6	18 17.7 5	256 55.7 6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
I05541 I05547	54 33 17 46	70	221 233 280 312	7.0	2	263	358	25 3 11 33	276 302
MEAN S.D. N	38 16. 4	2 80 52.	8 262 42.2 4	108 97.8 4	2 4.8	255 131.7 4	378 108.8 4	18 13.5 4	275 67.7 4
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day				
	26 38	75 52	259 498 169 228 401 292					45 34 28 0 19	264 211 322 208
MEAN S.D.	36 13.	4 66 4 34.	308 1 120.9	72 20.3	3 2.5	242 116.5	432 165.5	25 15.2	293 129.4

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Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	e Unit: mg	j/kg/day				
I05533	33	4.5	285	107	1	297	374	33	284
I05534	73	42	359	44	2	3173	554	6	406
I05536	34	41	616	47	7	99	344	23	238
I05540	30	40	230	44	2	139	404	36	270
I05542	22	62	216	57	1	154	232	31	178
I05551	46	60	310	66	1	306	373	30	308
MEAN	40	48	336	61	2	695	380	26	281
S.D.	18.	1 10.	0 146.9	9 24.	2 2.	3 1217.	1 104.	1 10.5	9 76.1
N	6	6	6	6	6	6	6	6	6

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Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA : MG/DL I				CL MMOL/L
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day
I05529 I05530 I05531 I05535 I05544 I05549	9.4 11.7 10.1 10.7 10.1 9.4	6.0 5.8	169	6.6 5.8	124 116
MEAN S.D. N	10.2 .87 6	.34	8.5	.81	7.2
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	kg/day
I05541 I05547	8.4 10.9 10.0 10.0	4.9 3.0	163 151	6.1 5.3	118 113
MEAN S.D. N	1.04	4.1 .84 4	155 6.9 4	.46	6.8
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day
105532 105538 105539 105545 105548 105552	9.3 9.7 9.9 10.4	3.8 5.7 4.0 5.1	158	5.3 5.8 5.7	118 115 114 120
MEAN S.D. N			154 2.2 6		116 3.6 6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg,	/kg/day
I05533	10.6	5.0	158	5.3	116
I05534	11.7	6.0	166	7.1	114
I05536	10.5	5.0	153	7.1	116
I05540	10.1	4.0	153	5.9	111
I05542	10.6	4.3	161	6.5	124
I05551	9.7	5.3	156	5.7	114
MEAN	10.5	4.9	158	6.3	116
S.D.	.67	.71	5.0	.75	4.4
M	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
105508 105517 105519 105520 105526 105527	64 68 51 59 57 64	18 14 25 16 21 17	1.1 1.2 1.0 .8 1.2	8.5 9.1 7.7 7.7 8.4 8.1	4.9 4.6 4.5 5.1 4.6	3.6 4.2 3.1 3.2 3.3 3.5	.9 .8 .5 .5 .3	5 7 5 6 6	127 166 186 112 165 158	45 55 37 35 41 55	56 66 82 53 67 54
MEAN S.D. N	60 6. 6	18 1 3.9 6	1.1 9 .16 6	8.2 .54 6	4.8 .23 6	3.5 .40 6	.6 .23 6	6 . 8 6	152 27.5 6	45 8.7 6	63 11.1 6
Group: 2	Dose Lev	el: 0.03	Dosage	Unit: mg/	kg/day						
I05514 I05515 I05516 I05521	62 77 59 57	18 12 27 16	1.2 1.2 1.0 1.4	8.6 9.1 8.0 9.5	4.9 4.8 4.8 5.5	3.7 4.3 3.2 4.0	.3 .2 .4 .3	5 4 5 5	135 104 98 102	28 35 41 27	47 42 38 41
MEAN S.D. N	64 9. 4	18 6.3 4		8.8 .65 4	5.0 .34 4	3.8 .47 4	.3 .08 4	5 4	110 17.0 4		42 3.7 4
Group: 3	Dose Lev	el: 0.15	Dosage	: Unit: mg/	kg/day						
105505 105510 105518 105523 105524 105528	70 71 83 68 72 57	15 13 18 16 19 20	1.1 .8 1.2 1.1 1.3	8.6 8.2 8.5 9.0 8.4 8.2	5.2 4.4 5.0 5.2 4.8 4.7	3.4 3.8 3.5 3.8 3.6 3.5	.5 .2 .3 .3 .4 .4	8 5 7 5 5 5	190 136 119 137 151 149	22 51 31 45 32 35	73 53 48 39 42 32
MEAN S.D.	70 8.		1.1	8.5 .30	4.9	3.6		6 1.3	147 24.0		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05506 a I05507 I05511 I05512 I05522	107 93 66 78 67	28 22 23 27 16	1.8 1.4 .9 1.3 1.4	9.2 9.3 8.0 8.8 9.8	4.4 4.8 4.2 5.2 5.4	4.8 4.5 3.8 3.6 4.4	.2 .2 .2 .2	58 28 18 7 19	67 28 59 38 69	75 22 36 19 44	11 8 20 10 15
MEAN S.D. N	76 12.	22 6 4.9 4	1.2 5 .24 4	9.0 .77 4	4.9 .53 4	$\substack{4.1\\.44\\4}$.2 .05 4	18 8.4 4	48 18.8	30 8 11.8 4	13 5.4 4

a Unscheduled sacrifice on Day 179.

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Individual Clinical Chemistry Data

Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
			Dosage						
105508	28	32 52	756	169	2 5	122		15	373
I05517	35	52	420	126	5	106	308	37	210
	41	27		149	10	526	440	19	281
I05520	23	26	776	72	3 7	207	388	30	298
I05526	30	26	1322	266	7	159	243	22	194
I05527	33	69	510	118	11	140	454	51	327
MEAN	32	39	735 9 318.7 6	150	6	210	393	29	280
S.D.	6.	2 17.	9 318.7	65.6	3.7	158.7	102.8	13.4	68.5
N	6	6	6	6	6	6	6	6	6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
105514	19 34	16 35 34	548 552 1085 233	136	2	93	379	15	260
I05515	34	35	552	100	6	219	646	37	443
I05516	29	34	1085	182	2	143	391	15	329
I05521	27	31	233	87	4	96	354	27	224
MEAN	27	29	604	126	4	138	442	24	314
S.D.	6.	2 8.	8 353.5	42.6	1.9	58.8	136.5	10.6	96.4
N	4	4	8 604 353.5 4	4	4	4	4	4	4
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day				
105505	30	39		171	4 3 7 3	118	412	36	234
I05510	21 39 22 50	20	634	133	3	102	431	7	333
I05518	39	51	558	115	7	116	336	36	256
I05523	22	58	697	95 125	3	101	472	36	337
I05524	50	69	697 1035	125	13	296	397	37	277
I05528	51	43	557	250	13 5	296 314	240	27	184
MEAN	36	47	688	148	6	174	381	30	270
S.D.	13.	3 16.	9 178.3	55.8	3.8	101.5	82.3	11.8	59.0
N	6	6	6	6	6	6	6	6	6

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Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day				
I05506 a	73	29	876	134	10	4040	738	67	432
I05507	3.0	46	208	110	2	192	474	17	344
I05511	41	25	344	101	4	101	524	27	339
I05512	36	44	422	71	3	175	379	32	297
I05522	30	73	581	132	2	258	408	68	299
MEAN	34	47	389	104	3	182	446	36	320
S.D.	5.	3 19.	7 155.7	25.3	1.0	64.5	65.3	22.2	25.2
N	4	4	4	4	4	4	4	4	4

a Unscheduled sacrifice on Day 179.

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Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	CA	I PHOS	NA	K	CL
NUMBER	MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	'kg/day
I05508	10.1	6.8	156	4.7	111
I05517	10.9	5.5	160	5.3	113
I05519	10.2	6.5	149	5.2	112
I05520	9.7	6.2	151	5.2	109
I05526	10.5	7.7	159	5.2	112
I05527	9.9	5.6	150	4.9	110
MEAN S.D. N	10.2 .43 6	.82	154 4.8 6	.23	1.5
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	kg/day
I05514	9.9	5.7	157	5.1	112
I05515	9.9	5.3	155	4.8	107
I05516	9.9	7.1	154	4.7	109
I05521	10.3	4.9	157	5.4	108
MEAN	10.0	5.8	156	5.0	109
S.D.	.20	.96	1.5	.32	2.2
N	4	4	4	4	4
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	'kg/day
I05505	10.8	5.0	157	4.8	112
I05510	9.7	6.5	152	4.9	113
I05518	10.2	6.1	147	5.4	107
I05523	10.2	6.3	158	5.2	112
I05524	10.1	7.5	158	5.2	110
I05528	9.7	5.8	150	4.8	106
MEAN	10.1	6.2	154	5.0	110
S.D.	.41	.82	4.7	.25	2.9

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Males Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	CA	I PHOS	NA	K	CL
NUMBER	MG/DL	MG/DL	MMOL/L	MMOL/L	MMOL/L
Group: 4	Dose Leve	1: 0.75	Dosage	Unit: mg/	kg/day
I05506 a	10.6	6.9	157	7.5	111
I05507	10.1	7.2	144	5.5	99
I05511	9.6	4.4	152	5.2	111
I05512	10.3	6.1	157	5.6	109
I05522	11.1	6.7	158	5.4	106
MEAN	10.3	6.1	153	5.4	106
S.D.	.62	1.22	6.4	.17	5.3
N	4	4	4	4	4

a Unscheduled sacrifice on Day 179.

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Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
105529 105530 105531 105535 105544 105549	35 58 68 44 75 65	23 21 22 16 22 14	.8 1.3 1.2 1.2 1.2	8.0 9.6 8.4 9.4 9.5 8.7	4.4 5.5 4.5 4.7 4.4	3.6 4.1 3.9 4.7 5.1 4.1	.9 .3 .4 .3 .4	5 6 6 7 6	87 181 176 226 143 149	46 48 74 72 55 44	32 71 59 60 43 73
MEAN S.D. N	58 15. 6	20 3.7 6	7 1.1	8.9 .66 6	4.7 .42 6	4.2 .55 6	.4 .25 6	6 6		56 13.1	56 16.0 6
Group: 2	Dose Lev	el: 0.03	Dosage	unit: mg/	kg/day						
I05537 I05541 I05547 I05550	62 58 53 44	18 18 19 25	1.1 1.2 .8 1.0		4.6 4.7 3.7 4.6	4.5 4.6 3.9 3.9	.5 .8 .2 .5	4 6 4 7	99 143 109 138	53 66 31 45	33 54 42 37
MEAN S.D. N	54 7. 4		4 .17	8.6 .76 4	${4.4} \atop {.47} \atop {4}$	4.2 .38 4	.5 .24 4	5 1.! 4		49 14.'	7 42 9.1 4
Group: 3	Dose Lev	el: 0.15	Dosage	unit: mg/	kg/day						
105532 105538 105539 105545 105548 105552	80 63 66 56 55 66	17 17 18 21 16 24	1.1 .9 1.1 1.0 .9	9.2 8.6 9.0 8.4 8.5 9.6	5.0 4.6 4.3 4.7 4.3	4.2 4.0 4.7 3.7 4.2 5.6	.4 .3 .4 .5 .3	10 7 6 11 7 7	130 98 154 137 108 149	44 26 68 56 37 61	25 34 58 38 38 25
MEAN S.D.	64 9.		1.0	8.9 . 4 7	4.5 .35	4.4			129 0 22.3		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533	78	23	1.2	9.1	4.8	4.3	.2	5	88	46	22
I05534	74	22	1.4	9.4	4.8	4.6	. 2	6	93	77	15
I05536	86	12	1.2	9.9	4.0	5.9	. 2	5	67	34	21
I05540	67	18	1.1	9.1	4.7	4.4	.3	12	76	45	11
I05542	80	22	1.1	9.2	4.4	4.8	.2	4	66	67	26
I05551	55	25	.9	8.8	4.6	4.2	. 4	11	102	50	31
MEAN	73	20	1.2	9.2	4.6	4.7	.2	7	82	53	21
S.D.	11.	0 4.	7 .16	.37	.31	.63	.08	3.	4 14.	7 15.8	7.2
N	6	6	6	6	6	6	6	6	6	6	6

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Individual Clinical Chemistry Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day				
105529	91	262		86	10	151	350	19	252
	3.0	55	274	113	2	197		16	158
	25	42	243	81	4	84	407	103	274
I05535	37	56	554	172	5	287	351	14	234
I05544	39	61	237	182	7	134	530	41	355
I05549	26	47	222	48	2 4 5 7 2	422	345	0	275
MEAN	41	87	283 9 137.1 6	114	5	212	378	32	258
S.D.	25.	.0 85.	9 137.1	53.3	3.1	123.4	84.6	37.1	64.1
N	6	6	6	6	6	6	6	6	6
Group: 2	Dose Lev	rel: 0.03	Dosage	Unit: mg/	kg/day				
105537	58 34 26	61 60 55	207 218 296	260	3	2745	254	14	184
I05541	34	60	218	70	2	209	337	12	252
I05547	26	55	296	50	5	147	347	8	265
I05550	50	111	236	65	15	190	496	41	341
MEAN	42	72	239 3 39.7	111	6	823	358	19	260
S.D.	14.	.6 26.	3 39.7	99.5	6.0	1281.8	100.7	15.0	64.4
N	4	4	4	4	4	4	4	4	4
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day				
105532	34	38	228	102	5	167	372		204
I05538	29	32	363	69	5	95	430	52	272
I05539	21 59	43	118	74	2	238	302	42	232
I05545	59	126	219	41	3	321	514	29	323
105548	42	35	303	65	14	109	335	0	226
I05552	35	43	228 363 118 219 303 295	76	13	164	683	17	505
MEAN	37	53	254	71	7	182	439	33	294
	13.	.0 36.	1 85.3	19.7	5.2	84.7	140.9		
N	6	6	6	6	6	6	6	6	6

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 4	Dose Lev	el: 0.75	Dosage	unit: mg/	/kg/day				
I05533	33	43	243	107	4	253	337	29	256
I05534	33	34	245	43	1	203	467	9	338
I05536	31	3.8	659	58	4	189	408	19	277
I05540	25	37	217	48	2	296	399	68	252
I05542	32	59	212	63	5	515	279	42	213
I05551	44	53	320	65	4	251	358	20	300
MEAN	33	44	316	64	3	284	375	31	273
S.D.	6.	2 9.	9 172.4	22.7	7 1.5	119.3	64.9	9 21.2	43.1
N	6	6	6	6	6	6	6	6	6

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Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 1	Dose Level	: 0	Dosage	Unit: mg,	/kg/day
T05530	9.1 11.1 9.8 10.6 10.2 10.1	6 1	159	6 1	112
MEAN S.D. N	10.2 .68 6	.84	156 6.8 6	. 56	5.0
Group: 2	Dose Level	: 0.03	Dosage	Unit: mg/	/kg/day
I05541	9.2 10.9 9.1 9.4	4.2	163	6.1	114
MEAN S.D. N	9.6 .84 4	4.4 .39 4	152 7.2 4	4.8 .94 4	109 3.6 4
-	Dose Level		-	-	
I05532 I05538 I05539 I05545 I05548 I05552	9.7 9.6 9.8 9.9 9.6 10.0	5.4 3.3 5.8 3.7 4.6 5.9	155 149 155 156 151 158	4.8 4.4 5.1 5.1 5.0 5.5	110 108 110 112 113 110
MEAN S.D.	9.8 .16	4.8 1.10	154 3.3	5.0 .37	110 1.8

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Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CA MG/DL	I PHOS MG/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 4	Dose Lev	el: 0.75	Dosage	: Unit: mg/	'kg/day
I05533	9.3	4.7	148	4.3	109
I05534	10.8	5.3	160	6.6	113
I05536	10.9	5.3	162	5.9	112
I05540	9.9	4.4	155	5.0	106
I05542	11.0	6.6	158	5.7	107
I05551	10.0	5.0	155	4.9	113
MEAN	10.3	5.2	156	5.4	110
S.D.	.69	.76	4.9	.82	3.1
M	6	6	6		6

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APPENDIX 4 Individual Clinical Chemistry Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
I05520 I05526	59 55	12 19	1.1 1.0	7.9 8.2	4.6 4.7	3.3 3.5	.6 .4	11 13	112 152	43 44	49 67
MEAN S.D. N	57 2.3 2	16 8 4.9 2	1.0 .07 2	8.0 .21 2	4.6 .07 2	3.4 .14 2	.5 .14 2	$\begin{smallmatrix}12\\1&.4\\2\end{smallmatrix}$	132 28.3 2	44 .7	58 12.7 2
Group: 3	Dose Lev	el: 0.15	Dosage	: Unit: mg/	kg/day						
I05505 I05523	61 78	17 17	.8 1.0	8.7 9.3	5.1 5.1	3.6 4.2	.8	16 16	184 131	37 41	75 47
MEAN S.D. N	70 12. 2	0 17 0 2	.9 .14 2	9.0 .42 2	5.1 .00 2	3.9 .42 2	.6 .21 2	16 2	158 37.5 2	39 2.8 2	61 19.8 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	70 76	13 16	1.0 1.1	8.7 8.7	4.3 4.8	4.4 3.9	.6 .6	12 17	140 134	46 92	33 22
MEAN S.D.	73 4.:	14 2 2.1	1.0	8.7	4.6 .35	4.2	.6	14 3.5	137 4.2	69 32.5	28 7.8

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APPENDIX 4 Individual Clinical Chemistry Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT I		ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Leve	1: 0	Dosage L	Jnit: mg/k	g/day				
I05520 I05526	19 24	23 28	709 1156		3 4	84 194	400 276	30 41	292 209
MEAN S.D. N	22 3.5 2		932 316.1 2		$\frac{4}{2}$.7	139 77.8 2	338 87.7 2	36 7.8 2	
Group: 3	Dose Leve	1: 0.15	Dosage L	nit: mg/k	g/day				
I05505 I05523	43 31	45 42	9 1 7 669	186 89	11 13	177 146	424 484	48 45	244 332
MEAN S.D. N	37 8.5 2		793 175.4 2		$\begin{smallmatrix}12\\1.4\\2\end{smallmatrix}$	162 21.9 2	454 42.4 2		
Group: 4	Dose Leve	1: 0.75	Dosage U	nit: mg/k	g/day				
I05511 I05522	36 29	28 68	538 499	127 159	1 2	177 223	543 467	23 53	362 329
MEAN S.D.	32 4.9			143 22.6	2.7	200 32.5	53.7	38 21.2	346 23.3

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Individual Clinical Chemistry Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA I MG/DL M				
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day
I05520 I05526	9.6 10.4	5.5 7.1			
MEAN S.D. N	10.0 .57 2		152 2.8 2	5.0 .49 2	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day
I05505 I05523	11.5 10.4				
MEAN S.D. N			$\begin{smallmatrix} 155\\ & 1.4\\ 2\end{smallmatrix}$		
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day
I05511 I05522	10.6 10.9	$\frac{5.4}{7.0}$	157 161		
MEAN S.D. N	10.8 .21 2	6.2 1.13 2		5.4 .07 2	

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Individual Clinical Chemistry Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	51 67	19 12	.7 .9	8.3 8.9	4.4 4.7	3.9 4.2	.7 .1	13 15	86 152	108 37	33 74
MEAN S.D. N	59 11. 2	3 4.9 2	.8 .14 2	8.6 .42 2	4.6 .21 2	4.0 .21 2	.4 .42 2	$\begin{smallmatrix}14\\1\\1.4\\2\end{smallmatrix}$	119 46.7 2	72 7 50.2 2	54 29.0 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05539 I05552	76 77	19 16	1.0 1.0	8.6 8.8	$\begin{array}{c} 4.1 \\ 4.0 \end{array}$	4.5 4.8	.6 .6	14 13	142 148	59 52	61 26
MEAN S.D. N	76 2	7 2.1	1.0 .00 2	8.7 .14 2	4.0 .07 2	4.6 .21 2	.6 .00 2	14 2.7	145 4.2 2	56 4.9 2	$\frac{44}{24.7}$
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533 I05542	82 68	21 25	1.1	9.6 9.0	5.0 4.2	4.6 4.8	.6 .5	14 24	135 131	62 93	25 42
MEAN S.D. N	75 9. 2	9 2.8 2	1.0	9.3 .42 2	4.6 .57 2	4.7 .14 2	.6 .07	19 7.1 2	133 2.8 2	78 21.9	34 12.0 2

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Individual Clinical Chemistry Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT/S	GPT ALK PHOS L IU/L	GGT IU/L	SDH IU/L		AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level: 0	Dosage	Unit: mg/k	g/day				
I05529 I05549	35 34	120 161 86 208	81 41	4 5	157 117	377 309	26 0	257 232
MEAN S.D. N		103 184 24.0 33.2 2 2	61 28.3 2	4 2.7	137 28.3 2	343 48.1 2	13 18.4 2	244 17.7 2
Group: 3	Dose Level: 0.	15 Dosage	Unit: mg/k	g/day				
I05539 I05552	19 33	43 113 54 251	69 72	1 7	117 1197	313 658	48 17	235 466
MEAN S.D. N	26 9.9 2	48 182 7.8 97.6 2 2	70 2.1 2	$\begin{smallmatrix}4\\4.2\\2\end{smallmatrix}$	657 763.7 2	486 244.0 2	32 21.9 2	350 163.3 2
Group: 4	Dose Level: 0.	75 Dosage	Unit: mg/k	g/day				
I05533 I05542	23 23	38 241 61 200	121 68	2 5	144 186	394 296	35 41	289 222
MEAN S.D. N	23.0	50 220 16.3 29.0 2 2	94 37.5 2	4 2.1 2	165 29.7 2	345 69.3 2		256 47.4 2

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Individual Clinical Chemistry Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA I MG/DL M				
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day
I05529 I05549	9.7 9.9	5.9 3.7			
MEAN S.D. N	9.8 .14 2		148 4.9 2		
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day
I05539 I05552	9.9 9.7	5.7 5.3		5.5 5.5	
MEAN S.D. N	9.8 .14 2			5.5 .00 2	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day
I05533 I05542	10.4 10.2	5.4 6.3		5.2 4.9	
MEAN S.D. N	10.3 .14 2	5.8 .64 2	152 .0	5.0 .21 2	

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Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG	HDL
NUMBER	MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL	MG/DL
Group: 1	Dose Leve	el: 0	Dosage	Unit: mg/	kg/day						
I05520	116	15	1.2	8.8	4.9	3.9	.5	8 9	114	28	73
I05526	86	17	1.0	8.6	4.8	3.8	.4		155	38	81
MEAN	101	16	1.1	8.7	4.8	3.8	.4	8	134	33	77
S.D.	21.2	2 1.4	.14	.14	.07	.07	.07	.7	7 29.0	7.1	5.7
N	2	2	2	2	2	2	2	2	2	2	2
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505	79	17	1.2	9.1	5.3	3.8	.8	5	193	44	103
I05523	83	17	1.0	8.9	5.2	3.7		11	128	52	65
MEAN S.D. N	81 2.8 2	17 2	1.1	9.0 .14 2	5.2 .07 2	3.8 .07 2	.6 .28 2	8 4.2 2	160 46.0 2	48 5.7 2	84 26.9 2
Group: 4	Dose Leve	el: 0.75	Dosage	Unit: mg/	kg/day						
I05511	61	16	1.0	8.6	4.4	4.2	.4	7	132	56	54
I05522	84	18	1.0	9.1	4.9	4.2		15	139	71	51
MEAN S.D. N	72 16.3 2	17 1.4	1.0	8.8 .35 2	4.6 .35 2	4.2 .00 2	.4 .00 2	11 5.7 2	136 4.9 2	64 10.6 2	52 2.1 2

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Individual Clinical Chemistry Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT/SG		GGT IU/L		CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level: 0	Dosage	Unit: mg/kg	g/day				
I05520 I05526		27 664 28 1137	68 220	2 6	145 209	409 307	33 52	306 234
MEAN S.D. N		28 900 334.5 2 2		4 2.8 2	177 45.3 2	358 72.1 2		270 50.9 2
Group: 3	Dose Level: 0.1	.5 Dosage	Unit: mg/kg	g/day				
I05505 I05523		40 882 40 793	186 98	6 1	189 124	422 503	22 52	241 353
MEAN S.D. N	$\begin{smallmatrix} 34\\21.2\\2\end{smallmatrix}$	40 838 .0 62.9 2 2	142 62.2 2		156 46.0 2	462 57.3 2		297 79.2 2
Group: 4	Dose Level: 0.7	'5 Dosage	Unit: mg/kg	g/day				
I05511 I05522		33 736 73 625	156 176	1 6	178 336	628 460	17 48	410 333
MEAN S.D. N	4.9	53 680 28.3 78.5	166 14.1 2	4 3.5	257 111.7			372 54.4

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Individual Clinical Chemistry Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA I				
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day
I05520 I05526	9.9 10.4	6.2 7.1		5.0 5.0	117 117
MEAN S.D. N	10.2 .35 2	6.6 .64 2	154 3.5 2	5.0 .00 2	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day
I05505 I05523	11.3 10.5		160 159		
MEAN S.D. N	10.9 .57 2			5.2 .07 2	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day
I05511 I05522	10.4 11.3	6.2 7.8	159 164	5.0 5.4	118 114
MEAN S.D. N	10.8 .64 2	7.0 1.13 2	162 3.5 2	5.2 .28 2	

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Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	48 68	20 15	.7 1.2	8.5 9.4	4.5 4.7	4.0 4.7	.8	8 10	94 168	61 53	52 88
MEAN S.D. N	58 14. 2	1 18 1 3.5 2	1.0 .35 2	9.0 .64 2	$\substack{4.6\\.14\\2}$	$\begin{array}{c} 4.4 \\ .49 \\ 2 \end{array}$.6 .35 2	9 1.4 2	131 52.3 2	57 5.7 2	70 25.5 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05539 I05552	83 91	19 21	1.1 .9	8.8 9.2	$\frac{4.0}{4.2}$	4.8 5.0	.5	12 10	163 138	72 70	91 52
MEAN S.D. N	87 5. 2	7 1.4	1.0 1.14 2	9.0 .28 2	$\overset{4.1}{\overset{14}{\overset{2}{\circ}}}$	4.9 .14 2	$\begin{smallmatrix} \cdot 4 \\ \cdot 14 \\ 2 \end{smallmatrix}$	$\begin{smallmatrix}11\\1\\2\\2\end{smallmatrix}.4$	150 17.7 2	71 1.4 2	72 27.6 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533 I05542	92 91	22 22	1.3 1.2	9.8 9.0	5.0 4.4	4.8 4.6	.2	19 11	151 147	61 129	54 73
MEAN S.D. N	92	7 22.0	1.2	9.4 .57 2	4.7 .42 2	4.7 .14 2	.2 .07 2	15 5.7 2	149 2.8 2	95 48.1 2	64 13.4 2

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Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT/SG					AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level: 0	Dosage	Unit: mg/kg	/day				
I05529 I05549		158 160 74 203	73 44	2	204 132	363 295	21 0	261 222
MEAN S.D. N	9.2	116 182 59.4 30.4 2 2			168 50.9 2			242 27.6 2
Group: 3	Dose Level: 0.1	L5 Dosage	Unit: mg/kg	/day				
I05539 I05552		61 113 71 262	77 83	1 5	120 663	311 654		235 458
MEAN S.D. N			80 4.2 2					
Group: 4	Dose Level: 0.7	75 Dosage	Unit: mg/kg	/day				
I05533 I05542		41 249 39 224	121 74	2 1	168 129	385 277	113 19	289 212
MEAN S.D. N		40 236 1.4 17.7 2 2	98 33.2 2		148 27.6 2	331 76.4 2	66.5	

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Individual Clinical Chemistry Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA MG/DL I				
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day
I05529 I05549	9.6 9.8	4.8			
MEAN S.D. N	9.7 .14 2		150 4.2 2	4.6 .21 2	
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day
I05539 I05552	9.5 10.2			4.9 5.9	
MEAN S.D. N		5.4 .28 2		5.4 .71 2	
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day
I05533 I05542	10.2 11.0	4.9 5.9	155 166		116 125
MEAN S.D. N	10.6 .57 2	5.4 .71 2	160 7.8 2	5.5 .99 2	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	: Unit: mg/	kg/day						
I05520 I05526	80 54	13 18	1.3 1.1	8.8 8.2	4.8 4.6	4.0 3.6	.7 .1	3 2	112 149	25 47	54 75
MEAN S.D. N	67 18. 2	4 3.5 2	1.2 1.14 2	8.5 .42 2	$\begin{array}{c} 4.7 \\ .14 \\ 2 \end{array}$	3.8 .28 2	.4 .42 2	2 2.7	130 26.2 2	36 15.6 2	$\substack{64\\14.8\\2}$
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05523	76 72	18 20	.9 1.1	9.0 8.7	5.2 4.9	3.8 3.8	. 5 . 3	11 7	203 132	38 57	94 57
MEAN S.D. N	74 2. 2	8 19 1.4 2	1.0 1.14 2	8.8 .21 2	5.0 .21 2	3.8 .00 2	$\begin{smallmatrix} \cdot 4 \\ \cdot 14 \\ 2 \end{smallmatrix}$	9 2.8 2	168 50.2 2	48 13.4 2	76 26.2 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	63 76	20 15	1.0 1.3	8.8 8.9	4.5 5.1	4.3	.4	5 10	135 143	58 91	45 35
MEAN S.D. N	70 9. 2	2 18 2 3.5	1.2	8.8 .07 2	4.8 .42 2	4.0 .35 2	.3 .14 2	8 3.5 2	139 5.7 2	74 23.3 2	40 7.1 2

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Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	AST/SGOT ALT, IU/L IU						LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level: () Dos	age Unit: mg	/kg/day				
I05520 I05526	19 37	31 55 39 113		4 10		368 267		277 201
MEAN S.D. N	28 12.7 2	5.7 40			35.4	71.4		
Group: 3	Dose Level: ().15 Dos	age Unit: mg	/kg/day				
I05505 I05523	31 22		5 195 6 96	2 6	157 125	414 475		232 338
MEAN S.D. N		39 85 4.2 10 2	5.4 70.	0 2.8				
Group: 4	Dose Level: 0).75 Dos	age Unit: mg	/kg/day				
I05511 I05522	41 36	39 82 69 55		3 4	167 294	572 453	18 52	377 331
MEAN S.D. N	38 3.5 2		9 164 6.7 7.5 2 2	8 .7		84.1	24.0	

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Individual Clinical Chemistry Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	CA I				
Group: 1	Dose Level:	0	Dosage	Unit: mg/	'kg/day
I05520 I05526	10.3 10.0		157 150	5.9 5.6	
MEAN S.D. N		6.0 1.13 2	154 4.9 2	5.8 .21 2	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day
I05505 I05523	12.0 10.3			5.9 5.4	
MEAN S.D. N	11.2 1.20 2	6.4 .21 2	159 7.1 2	5.6 .35 2	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day
I05511 I05522	10.8 11.6				
MEAN S.D. N	11.2 .57 2	6.4 .92 2	160 3.5 2	5.6 .35 2	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG	HDL
NUMBER	MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL	MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	45 67	23 16	.8	8.1 9.3	4.2 4.6	3.9 4.7	1.0	7 10	88 170	4 2 53	43 80
MEAN S.D. N	56 15. 2	6 4.9 2	.8	8.7 .85 2	4.4 .28 2	4.3 .57 2	.6 .57 2	8 2.1 2	129 58.0 2	48 7.8 2	62 26.2 2
Group: 3	Dose Lev	el: 0.15	1: 0.15 Dosage Unit: mg/kg/day								
I05539	78	19	.8	8.7	4.0	4.7	.5	5	148	67	68
I05552	71	23	1.0	9.1	4.0	5.1	.2	5	139	51	36
MEAN	74	9 2.8	.9	8.9	4.0	4.9	.4	5	144	59	52
S.D.	4.		.14	.28	.00	.28	.21	.0	6.4	11.3	22.6
N	2		2	2	2	2	2	2	2	2	2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533	95	20	.9	9.2	4.7	4.5	.1	4	145	47	53
I05542	90	26	1.1	8.7	4.1	4.6		7	144	92	59
MEAN	92	5 23	1.0	9.0	4.4	4.6	.1	6	144	70	56
S.D.	3.	4.2	1.14	.35	.42	.07	.00	2.1		31.8	4.2
N	2	2	2	2	2	2	2	2		2	2

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Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT/SGP		GGT IU/L	SDH IU/L		AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level: 0	Dosage	Unit: mg/kg	s/day				
I05529 I05549	47 128 33 79		70 45	2 4	167 435	328 290	18 0	232 218
MEAN S.D. N	40 104 9.9 34 2		58 17.7 2	3 1.4 2	301 189.5 2	309 26.9 2	9 12.7 2	225 9.9 2
Group: 3	Dose Level: 0.15	Dosage	Unit: mg/kg	s/day				
I05539 I05552	27 60 47 5		77 76	$\begin{smallmatrix} 4\\14\end{smallmatrix}$	113 2316	287 649	50 98	214 465
MEAN S.D. N	37 58 14.1 2		76 .7 2	9 7.1 2	1214 1557.8 2	468 256.0 2	74 33.9 2	340 177.5 2
Group: 4	Dose Level: 0.75	Dosage	Unit: mg/kg	r/day				
I05533 I05542	42 5: 16 3:		108 66	6 4	165 120	396 235	34 31	295 177
MEAN S.D. N		226 0.6 25.5 2 2	87 29.7 2	5 1.4 2	142 31.8 2	316 113.8 2	32 2.1 2	236 83.4 2

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Individual Clinical Chemistry Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA MG/DL I					
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day	
I05529 I05549	9.3 10.4	4.6 4.2				
MEAN S.D. N	9.8 .78 2		150 7.8 2	5.0 .92 2		
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day	
I05539 I05552	9.5 9.5					
MEAN S.D. N		5.2 .07 2	150 2.8 2	4.8 .92 2		
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day	
I05533 I05542	10.4 10.4		154 157			
MEAN S.D. N	10.4 .00 2	5.2 .85 2		6.0 .07 2		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	: Unit: mg/	kg/day						
I05520 I05526	74 68	19 16	1.3 1.2	8.5 8.6	4.7 4.9	3.8 3.7	.8	5 6	109 158	67 36	57 81
MEAN S.D. N	71 4. 2	2 18 2 2.1 2	1.2 .07 2	8.6 .07 2	4.8 .14 2	3.8 .07 2	.4 .57 2	6 .7	134 34.6 2	52 21.9 2	69 17.0 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05523	45 78	26 30	1.3 1.6	9.0 8.4	5.2 5.0	3.8 3.4	1.2	8 6	209 117	48 74	91 54
MEAN S.D. N	62 23. 2	3 2.8 2 2.8	1.4 .21 2	8.7 .42 2	5.1 .14 2	3.6 .28 2	.7 .71 2	7 1.4 2	163 65.1 2	61 18.4 2	72 26.2 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	55 76	18 19	1.2 1.7	8.2 8.9	4.4 5.0	3.8 3.9	.6 .2	6	137 136	54 127	$\begin{smallmatrix}44\\34\end{smallmatrix}$
MEAN S.D. N	66 14. 2	8 18	1.4 7 .35 2	8.6 .49 2	4.7 .42 2	3.8 .07 2	.4 .28 2	8 2.1 2	136	90 51.6 2	39 7.1 2

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Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT			GGT IU/L		CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level:	0	Dosage 1	Unit: mg/k	g/day				
I05520 I05526	34 42	34 43	499 1046	50 199	3 5	860 1071	512 462	90 98	380 352
MEAN S.D. N	38 5.7 2		772 386.8 2			966 149.2 2	487 35.4 2		
Group: 3	Dose Level:	0.15	Dosage 1	Jnit: mg/k	g/day				
I05505 I05523	60 46	63 73	995 770	189 92	6 6	515 624	1618 976	87 1 549	1193 731
MEAN S.D. N	53 9.9 2	68 7.1 2	882 159.1 2	140 68.6 2		570 77.1 2	1297 454.0 2		962 326.7 2
Group: 4	Dose Level:	0.75	Dosage 1	Jnit: mg/k	g/day				
I05511 I05522	76 46	59 92	844 573	156 158	3 1	787 1308	727 523	36 25	503 382
MEAN S.D. N	61 21.2 2	76 23.3 2	708 191.6 2	157 1.4 2	2 1.4 2	1048 368.4 2			

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Individual Clinical Chemistry Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	CA I MG/DL M					
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day	
I05520 I05526	10.1 10.8	5.0 5.8		4.9 5.1	107 106	
MEAN S.D. N	10.4 .49 2			5.0 .14 2		
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day	
I05505 I05523	11.6 10.3	6.3 5.4				
MEAN S.D. N	11.0 .92 2	5.8 .64 2		5.0 .07 2		
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day	
I05511 I05522	9.9 11.2		151 158			
MEAN S.D. N	10.6 .92 2	5.8 1.13 2		5.4 .35 2	108 .0	

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Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL	GLU	UN	CREAT	T PRO	ALB	GLOB	T BILI	SBA	CHOL	TRIG	HDL
NUMBER	MG/DL	MG/DL	MG/DL	G/DL	G/DL	G/DL	MG/DL	UMOL/L	MG/DL	MG/DL	MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05529	44	16	$\begin{smallmatrix}1.4\\1.1\end{smallmatrix}$	8.4	4.4	4.0	.9	6	89	48	41
I05549	64	14		8.5	4.3	4.2	.1	13	148	36	74
MEAN	54	15	1.2	8.4	4.4	4.1	.5	10	118	42	58
S.D.	14.	1 1.4	.21	.07	.07	.14	.57	4.9	41.7	8.5	23.3
N	2	2	2	2	2	2	2	2	2	2	2
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day						
I05539	69	27	$\begin{smallmatrix}1.4\\1.2\end{smallmatrix}$	8.2	3.8	4.4	.5	11	141	102	74
I05552	58	28		9.3	4.0	5.3	.5	6	154	69	46
MEAN	64	.8 28	1.3	8.8	3.9	4.8	.5	8	148	86	60
S.D.	7.		7 .14	.78	.14	.64	.00	3.5	9.2	23.3	19.8
N	2		2	2	2	2	2	2	2	2	2
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day						
I05533	86	25	1.6	9.1	4.6	4.5	.1	8	139	68	60
I05542	84	12	1.4	8.2	4.0	4.2		5	119	81	60
MEAN S.D. N	85 1.	.4 9.2	1.5	8.7 .64	4.3	4.4	.0	6 2.1	129 14.1	74 9.2	60

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Individual Clinical Chemistry Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT ALT					CK IU/L		LIPASE IU/L	P AMYL U/L
Group: 1	Dose Level:	0	Dosage U	nit: mg/	g/day				
I05529 I05549	66 46	97 77	143 169	82 39	2 5	1212 1024	390 342	0	277 260
MEAN S.D. N	56 14.1 2	87 14.1 2	156 18.4 2						268 12.0 2
Group: 3	Dose Level:	0.15	Dosage U	nit: mg/	g/day				
I05539 I05552	36 60		114 205	67 79	4 9	602 1513	386 722	63 83	288 524
MEAN S.D. N		78 9.9 2	160 64.3 2	73 8.5 2	6 3.5 2	1058 644.2 2	554 237.6 2		
Group: 4	Dose Level:	0.75	Dosage U	nit: mg/k	g/day				
I05533 I05542	43 46		250 220	105 55	2 1	1471 659	448 450		337 339
MEAN S.D. N	44 2.1 2	112 60.1 2	235 21.2 2	80 35.4 2	2 2.7		449 1.4 2	43.1	

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Individual Clinical Chemistry Data

Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	CA I MG/DL M					
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day	
I05529 I05549		5.0 4.4		5.1 4.8		
MEAN S.D. N	9.7 .14 2		147 1.4 2	5.0 .21 2		
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day	
I05539 I05552	9.4 10.2			5.2 5.1		
MEAN S.D. N	9.8 .57 2	5.2 .49 2		5.2 .07 2		
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day	
I05533 I05542	10.3 10.3	$\frac{4.4}{4.1}$	154 158			
MEAN S.D. N	10.3 .00 2	4.2 .21 2		5.5 .42 2		

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Males Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05520 I05526	74 71	17 24	1.3	8.9 8.9	5.0 5.3	3.9 3.6	.7 .3	5 6	105 148	35 46	51 71
MEAN S.D. N	72 2. 2.	1 20 4.9	1.3	8.9 .00 2	5.2 .21 2	3.8 .21 2	.5 .28 2	6 2	126 30.4 2	40 7.8 2	$\begin{smallmatrix} 61\\14.1\\2\end{smallmatrix}$
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05523	73 76	23 28	1.2 1.1	9.0 8.1	5.4 4.9	3.6 3.2	1.1	7 6	206 127	33 64	93 54
MEAN S.D. N	74 2. 2	1 26 3.5	1.2 .07 2	8.6 .64 2	5.2 .35 2	3.4 .28 2	.8 .42 2	6 2.7	7 166 55.9 2	48 21.9	74 27.6 2
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	63 76	19 17	1.1 1.3	8.3 8.5	4.5 5.0	3.8 3.5	. 6 . 3	6	116 122	36 66	41 34
MEAN S.D. N	70 9.	18 1.4	1.2	8.4	4.8 .35	3.6 .21	.4 .21	4 2.1	119 L 4.2	51 21.2	38 4.9

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Males Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	g/day				
I05520 I05526	46 53	45 38	387 1040	53 222	3 8	2123 2151	388 363	38 37	298 246
MEAN S.D. N	50 4. 2.	9 42 4.	9 714 461.7 2	138 119.5 2	6 3.5 2	2137 19.8 2	376 17.7 2	38 2.7	272 36.8 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	g/day				
I05505 I05523	6 4 55	63 70	915 725	188 98	9 8	1243 1747	1640 948	793 365	1207 710
MEAN S.D. N	60 6. 2	4 66 4.	9 820 13 4 .4	143 63.6 2	8 2.7	1495 356.4 2	1294 489.3 2	579 302.6 2	958 351.4 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day				
I05511 I05522	62 58	48 84	765 479	154 156	6 2	617 2004	616 415	35 31	414 302
MEAN S.D. N	60 2. 2	8 25. 2	5 622 202.2	155 1.4 2	4 2.8 2	1310 980.8 2	516 142.1 2	33 2.8 2	358 79.2 2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	FOIRDSTON SALI	(FFOD,	1-02337 114	CINONOLIGIC	*	
ANIMAL NUMBER	CA I MG/DL M	PHOS G/DL	NA MMOL/L	MMOL/L	CL MMOL/L	
Group: 1	Dose Level:	0	Dosage	Unit: mg/	tg/day	
I05520 I05526	10.3 11.0	4.2 5.2	15 4 157	5.3 5.5	111 111	
MEAN S.D. N	10.6 .49 2	4.7 .71 2	156 2.1 2		111 .0	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	g/day	
I05505 I05523	11.9 9.9	5.7 5.5	160 150	5.8 5.1	113 109	
MEAN S.D. N	10.9 1.41 2	5.6 .14 2		5.4 .49 2	$^{111}_{\begin{subarray}{c}2.8\\2\end{subarray}}$	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	g/day	
I05511 I05522	10.2 10.9	5.2 4.6	153 156	5.9 5.0	113 108	
MEAN S.D. N	10.6 .49	4.9 .42 2	154 2.1 2	5.4 .64	110 3.5 2	

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Individual Clinical Chemistry Data

Females Day 364

26-WEEK			PERFLUOROOCTANE SULFONIC	ACID
	POTASSIUM SAL	T (PFOS; T- ϵ	6295) IN CYNOMOLGUS	

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	54 56	21 18	.9 1.1	8.9 9.0	4.7 4.7	4.2 4.3	1.1	5 6	112 162	56 42	40 79
MEAN S.D. N	55 1. 2.	4 20 2.3	1.0	9.0 .07 2	4.7 .00 2	4.2 .07 2	.8 .49 2	6 2 . 7	137 35.4 2	49 9.9 2	60 27.6 2
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day						
I05539 I05552	66 80	22 26	$\begin{smallmatrix}1&1\\1&0\end{smallmatrix}$	8.3 9.1	3.8 4.0	4.5 5.1	.8 .7	6 6	136 138	66 4 3	71 36
MEAN S.D. N	73 9. 2	9 2.8	1.0 .07 2	8.7 .57 2	3.9 .14 2	4.8 .42 2	.8 .07 2	6 2	137 1.4 2	54 16.3 2	54 24.7 2
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day						
I05533 I05542	91 85	21 25	$\begin{smallmatrix}1.2\\1.1\end{smallmatrix}$	9.2 8.1	4.9 4.0	4.3 4.1	. 3	13 5	152 131	55 95	55 66
MEAN S.D. N	88 4.	2 23.8	3 1.2 3 .07	8.7 .78	4.4	4.2	.4	9 5.7	142 14.8	75 28.3	60 7.8

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Individual Clinical Chemistry Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Leve	el: 0	Dosage 1	Unit: mg/k	g/day				
I05529 I05549	110 61	297 106	157 167	109 45	7 5	2978 1838	459 338	33	336 265
MEAN S.D. N	86 34.6 2	202 135.:	1 162 7.1	77 45.3 2	$\begin{smallmatrix} 6\\1\\2\cdot 4\end{smallmatrix}$	2408 806.1 2	398 85.6 2	16 23.3 2	300 50.2 2
Group: 3	Dose Leve	el: 0.15	Dosage 1	Unit: mg/k	g/day				
I05539 I05552	37 62	61 95	109 188	78 80	8 15	733 1009	30 4 630	42 52	231 459
MEAN S.D. N	50 17.7 2	78 24.	0 148 55.9	79 1.4 2	12 4.9 2	871 195.2 2	467 230.5 2	47 7.1 2	345 161.2 2
Group: 4	Dose Leve	el: 0.75	Dosage 1	Unit: mg/k	g/day				
I05533 I05542	67 45	78 83	243 213	117 56	5 3	2353 1241	527 431	47 47	412 329
MEAN S.D. N	56 15.6	80 3.!	228 5 21.2	86 43.1	$\frac{4}{1.4}$	1797 786.3	479 67.9	47.0	370 58.7

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	FOIRSSION SALI	(Pros;	1-6233) IN	CINOMORGO	۵	
ANIMAL NUMBER	CA I MG/DL MC	PHOS 3/DL	NA MMOL/L	MMOL/L	CL MMOL/L	
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day	
I05529 I05549	9.7 10.1	5.6 4.2		4.3 5.6	103 109	
MEAN S.D. N	9.9 .28 2	4.9 .99 2		5.0 .92 2	106 4.2 2	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day	
I05539 I05552	9.0 9.9	4.8 4.7	146 151	4.9 5.9	108 111	
MEAN S.D. N	9.4 .64 2	4.8 .07 2	148 3.5 2	5.4 .71 2	110 2.1 2	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day	
I05533 I05542	10.5 10.0	$\frac{4.6}{4.3}$	153 157	5.3 5.6	111 113	
MEAN S.D. N	10.2 .35	$\frac{4.4}{.21}$	155 2.8 2	5.4 .21 2	$^{112}_{\stackrel{1}{\scriptstyle 2.4}}$	

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Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	rel: 0	Dosage	Unit: mg/	kg/day						
I05520 I05526	80 68	12 16	1.2 1.2	8.9 8.5	5.2 4.9	3.7 3.6	.8	3 3	122 142	31 32	56 61
MEAN S.D. N	74 8 2	5 2.8	1.2	8.7 .28 2	5.0 .21 2	3.6 .07 2	.6 .35 2	3 2.0	$132 \\ 14.1 \\ 2$	32.7	58 3.5 2
Group: 3	Dose Lev	rel: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05523	88 94	15 17	1.2 1.1	9.3 8.9	5.4 5.5	3.9 3.4	.6	5 6	216 139	39 4 3	106 55
MEAN S.D. N	91 4. 2.	2 16 1.4	1.2 .07 2	9.1 .28 2	5.4 .07 2	3.6 .35 2	.4 .21 2	6 2.7	178 54.4 2	41 2.8 2	80 36.1 2
Group: 4	Dose Lev	rel: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	64 75	13 14	1.0 1.3	8.5 9.3	4.5 5.4	4.0 3.9	. 8 . 3	4 3	122 114	37 81	44 26
MEAN S.D. N	70 7.	8 14.5	7 1.2	8.9 .57	5.0 .64	4.0 .07	.6 .35	4 2.7	118 5.7	59 31.1	35 12.7 2

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APPENDIX 4 Individual Clinical Chemistry Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Leve	el: 0	Dosage '	Unit: mg/k	g/day				
I05520 I05526	19 29	21 26	39 4 847	59 189	10	77 126	319 276	$\frac{11}{21}$	246 220
MEAN S.D. N	24 7.1 2	24 3.	5 620 320.3	124 91.9 2	6 5.7 2	102 34.6 2	298 30.4 2	16 7.1 2	233 18.4 2
Group: 3	Dose Leve	1: 0.15	Dosage '	Unit: mg/k	g/day				
I05505 I05523	29 21	46 45	971 771	198 101	2 1	163 119	413 487	$^{\tt 14}_{\tt 17}$	235 353
MEAN S.D. N	25 5.7 2	46.	7 871 141.4	150 68.6 2	$\frac{2}{2}.7$	$\substack{141\\31.1\\2}$	450 52.3 2	16 2.1 2	294 83.4 2
Group: 4	Dose Leve	el: 0.75	Dosage '	Unit: mg/k	g/day				
I05511 I05522	37 30	32 50	458 379	129 148	10	179 225	480 364	20 13	326 263
MEAN S.D. N	34 4.9	9 41 12.	418 7 55.9	138 13.4	0.7	202 32.5	422 82.0	16 4.9	294 44.5

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Individual Clinical Chemistry Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	FOIRDSTON SALI	(FFOD,	1-02337 114	CINONOLISO.	2	
ANIMAL NUMBER	CA I MG/DL MG	PHOS B/DL	NA MMOL/L	K MMOL/L	CL MMOL/L	
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day	
I05520 I05526	$\begin{smallmatrix} 1 & 0 & . & 4 \\ 1 & 0 & . & 1 \end{smallmatrix}$	5.7 6.4	156 150	5.7 5.1	113 109	
MEAN S.D. N	10.2 .21 2	6.0 .49 2	153 4.2 2	5.4 .42 2	111 2.8 2	ţ
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day	
I05505 I05523	12.6 10.9	6.6 7.2	167 161	6.3 5.6	118 113	
MEAN S.D. N	11.8 1.20 2	6.9 .42 2	164 4.2 2	6.0 .49 2		į
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day	
I05511 I05522	10.0 11.1	3.9 6.7	152 158	4.6 5.4	113 109	
MEAN S.D. N	10.6 .78	5.3 1.98	155 4.2	5.0 .57	111 2.8	ļ

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Females Day 456

26-WEEK			FLUOROOCTANE SULFONIC A	CID
	POTASSIUM SAL	T (PFOS; T-6295	i) IN CYNOMOLGUS	

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	48 79	17 17	.9 1.0	8.3 8.7	4.6 4.6	3.7 4.1	1.0	7 4	99 142	60 52	3 4 67
MEAN S.D. N	64 21.	9 17.0	1.0	8.5 .28 2	4.6 .00 2	3.9 .28 2	.6 .49 2	$\begin{smallmatrix} 6\\2\\2\\1\end{smallmatrix}$	120 30.4 2	56 5.7 2	50 23.3 2
Group: 3	Dose Lev	el: 0.15	Dosage	Dosage Unit: mg/kg/day							
I05539 I05552	79 78	16 18	1.0	8.4 9.0	$\begin{smallmatrix}4.1\\4.1\end{smallmatrix}$	4.3 4.9	.6 .5	4 6	$144 \\ 144$	83 59	58 36
MEAN S.D. N	78 2	7 17 1.4	1.0 .07 2	8.7 .42 2	4.1 .00 2	4.6 .42 2	.6 .07 2	$\begin{smallmatrix} 5\\1\\2\\4\end{smallmatrix}$	144 2.0	71 17.0 2	47 15.6 2
Group: 4	Dose Lev	el: 0.75	Dosage	Dosage Unit: mg/kg/day							
I05533 I05542	98 101	17 21	1.1 1.0	9.1 8.2	4.9 4.1	4.2 4.1	.2	5 3	137 139	42 114	55 72
MEAN S.D.	100 2.	1 2.8	1.0 3 .07	8.7 .64	4.5 .57	4.2	.2 .07	4 1.4	138 1.4	78 50.9	$\frac{64}{12.0}$

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Individual Clinical Chemistry Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/k	g/day				
I05529 I05549	56 30	183 85	139 174	96 49	6 3	200 244	293 244	9 12	216 192
MEAN S.D. N	43 18. 2	4 134 69.	3 156 24.7	72 33.2 2	4 2.1 2	222 31.1 2	268 34.6 2	$\begin{smallmatrix}1 0\\2 \\2 \\1\end{smallmatrix}$	204 17.0 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/k	g/day				
I05539 I05552	25 40	34 66	9 4 186	76 81	4 10	112 254	242 436	15 11	189 312
MEAN S.D. N	32 10. 2	50 22. 2	6 140 65.1	78 3.5 2	7 4.2 2	183 100.4 2	339 137.2 2	13 2.8 2	250 87.0 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/k	g/day				
I05533 I05542	25 25	64 43	248 216	124 63	0	134 114	360 233	13 23	277 183
MEAN S.D. N	25 2.	0 54 14.	8 232 22.6	94 43.1 2	2 2.1 2	124 14.1 2	296 89.8	18 7.1	230 66.5 2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	FUIRSSIUM SALII	(PPOS;	1-6233) IIV	CINOMORGO	5
ANIMAL NUMBER	CA I MG/DL MC	PHOS 3/DL	NA MMOL/L	K MMOL/L	CL MMOL/L
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day
I05529 I05549	9.6 10.2	4.9 5.4	144 152	4.9 5.1	105 110
MEAN S.D. N	9.9 .42 2	5.2 .35 2	148 5.7 2	5.0 .14 2	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day
I05539 I05552	9.5 10.1	5.3 5.0	151 153	5.4 5.9	111 112
MEAN S.D. N	9.8 .42 2	5.2 .21 2	152 1.4 2	5.6 .35 2	112 2.7
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day
I05533 I05542	10.3 10.5	5.1 5.6	155 154	5.6 6.8	114 118
MEAN S.D. N	10.4 .14 2	5.4 .35	154 2.7	6.2 .85 2	116 2.8 2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

					,						
ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
I05520 I05526	79 86	14 18	1.2	8.7 8.9	4.6 4.8	$\frac{4.1}{4.1}$.5	6 5	119 150	30 32	63 77
MEAN S.D. N	82 4. 2.	9 2.	8 1.2 .07	8.8 .14 2	$\overset{4.7}{\overset{14}{\cdot}}$	4.1 .00 2	.4 .21	6 2.7	134 21.	9 31 1.4	70 9.9 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05505 I05523	77 81	19 19	$\begin{smallmatrix}1.2\\1.1\end{smallmatrix}$	8.6 9.0	4.9 5.3	3.7 3.7	.6 .3	5 3	200 132	31 40	1 14 69
MEAN S.D. N	79 2. 2	8 19.	0 1.2 .07	8.8 .28 2	5.1 .28 2	3.7 .00 2	.4 .21 2	$\frac{4}{1} \cdot 4$	166 48.3 2	1 6.4 2	92 31.8 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05511 I05522	75 83	16 16	$\begin{smallmatrix}1.4\\1.4\end{smallmatrix}$	9.5 9.3	5.0 5.2	4.5 4.1	. 8	4 10	145 132	37 52	67 47
MEAN S.D.	79 5.	7 16	0 1.4	9.4 .14	5.1 .14	4.3	.6 .35	7 4.2	138 9.:	2 10.6	57 14.1

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/k	g/day				
I05520 I05526	19 28	20 30	309 701	49 183	1 19	78 144	265 259	10 17	203 201
MEAN S.D. N	24 6. 2	4 ²⁵ 7.	1 505 277.2	116 94.8 2	10 12.7 2	111 46.7 2	262 4.2 2	14 4.9 2	202 1.4 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/k	tg/day				
I05505 I05523	31 30	36 33	846 662	178 93	1 5	130 212	357 446	12 13	206 321
MEAN S.D. N	30 2.	7 34 2.	754 130.1	136 60.1 2	3 2.8 2	171 58.0 2	402 62.9 2	$\frac{12}{2}.7$	264 81.3 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/k	g/day				
I05511 I05522	45 27	37 42	467 342	149 147	0	165 165	519 362	22 11	334 260
MEAN S.D. N	36 12.	7 40 3.	5 404 5 88.4	$\frac{148}{1.4}$	0.0	165	440 111.0	16 7.8	297 52.3

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	FOIRSSIUM SALI	(PPOS;	1-6233) IN	CINOMORGO	5	
ANIMAL NUMBER	CA I MG/DL M	PHOS G/DL	NA MMOL/L	K MMOL/L	CL MMOL/L	
Group: 1	Dose Level:	0	Dosage	Unit: mg/	kg/day	
I05520 I05526	10.8 10.5	6.5 6.6	162 157	6.4 5.6	120 111	
MEAN S.D. N	10.6 .21 2	6.6 .07 2		6.0 .57 2	$\begin{smallmatrix}116\\6.4\\2\end{smallmatrix}$	
Group: 3	Dose Level:	0.15	Dosage	Unit: mg/	kg/day	
I05505 I05523	11.4 11.0	6.3 7.6	16 4 169	5.8 6.9	117 122	
MEAN S.D. N	11.2 .28 2	7.0 .92 2	166 3.5 2	6.4 .78 2	120 3.5 2	
Group: 4	Dose Level:	0.75	Dosage	Unit: mg/	kg/day	
I05511 I05522	12.0 11.8	5.4 6.2	174 169	6.0 6.2	121 116	
MEAN S.D. N	11.9 .14 2	5.8 .57 2	172 3.5 2	6.1 .14 2	118 3.5	

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26-WEEK	CAPSULE TOXICITY			
	POTASSIUM SAL	Γ (PFOS; $T-\epsilon$	(295) IN CYNOMOLO	JUS

ANIMAL NUMBER	GLU MG/DL	UN MG/DL	CREAT MG/DL	T PRO G/DL	ALB G/DL	GLOB G/DL	T BILI MG/DL	SBA UMOL/L	CHOL MG/DL	TRIG MG/DL	HDL MG/DL
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day						
I05529 I05549	67 53	17 16	.9 1.0	8.2 8.8	$\frac{4.4}{4.4}$	3.8 4.4	.8	6 5	96 152	55 51	44 83
MEAN S.D. N	60 9. 2	9 16.7	1.0	8.5 .42 2	4.4 .00 2	4.1 .42 2	.6 .35 2	6 2	124 39.6	53 2.8 2	64 27.6 2
Group: 3	Dose Lev	el: 0.15	Dosage	Unit: mg/	kg/day						
I05539 I05552	71 74	19 17	1.1	8.5 8.2	3.9 3.6	4.6 4.6	.5 .6	5 5	147 129	73 46	86 37
MEAN S.D. N	72 2. 2	1 18 1.4	1.0	8.4 .21 2	3.8 .21 2	4.6 .00 2	.6 .07 2	5 2.0	138 12.7	60 19.1 2	62 34.6 2
Group: 4	Dose Lev	el: 0.75	Dosage	Unit: mg/	kg/day						
I05533 I05542	100 93	19 19	1.2 1.2	9.0 7.9	4.6 4.0	4.4 3.9	. 3	6 4	145 147	40 112	68 79
MEAN S.D. N	96 4.	9 19.0	1.2	8.4 .78	4.3 .42	4.2 .35	.3	5 1.4	146 1.4	76 50.9	$\frac{74}{7.8}$

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	AST/SGOT IU/L	ALT/SGPT IU/L	ALK PHOS IU/L	GGT IU/L	SDH IU/L	CK IU/L	AMYLASE IU/L	LIPASE IU/L	P AMYL U/L
Group: 1	Dose Lev	el: 0	Dosage	Unit: mg/	kg/day				
I05529 I05549	53 30	191 49	131 171	93 45	0	216 93	316 245	$\frac{11}{12}$	232 192
MEAN S.D. N	42 16.	3 120 100.	4 151 28.3	69 33.9 2	0 2.0	154 87.0 2	280 50.2 2	12 2.7	212 28.3 2
Group: 3	Dose Leve	el: 0.15	Dosage	Unit: mg/	kg/day				
I05539 I05552	27 26	31 37	96 195	76 82	2 1	80 109	252 454	14 8	195 327
MEAN S.D. N	26 2.	7 34 4.	2 146 70.0 2	79 4.2 2	$\frac{2}{2}.7$	94 20.5 2	353 142.8 2	11 4.2 2	261 93.3 2
Group: 4	Dose Leve	el: 0.75	Dosage	Unit: mg/	kg/day				
I05533 I05542	36 19	79 39	240 186	117 61	3	164 97	372 250	12 18	286 195
MEAN S.D. N	28 12.	0 59 0 28.	3 213 38.2	89 39.6	2 2.1	130 47.4	311 86.3	15 4.2	240 64.3

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Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

-	OTTENDED TOTAL	. (1100)	1 02307 221	011,01101101	
ANIMAL		I PHOS	NA	K	CL
NUMBER		MG/DL	MMOL/L	MMOL/L	MMOL/L
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	kg/day
I05529	10.1	5.2	150	5.1	108
I05549	10.1	5.6	152	5.3	111
MEAN S.D. N	10.1 .00 2	5.4 .28 2	$\begin{smallmatrix}151\\1\\1\\2\end{smallmatrix}.4$		
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day
I05539	9.8	5.4	155	5.4	112
I05552	10.2	4.9	157	6.1	117
MEAN	10.0	5.2	156	5.8	$^{114}_{\overset{3}{\cancel{}}.5}$
S.D.	.28	.35	1.4	.49	
N	2	2	2	2	
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day
I05533	10.3	5.9	159	5.6	115
I05542	10.7	5.4	165	6.7	124
MEAN	10.5	5.6	162	6.2	120
S.D.	.28	.35	4.2	.78	6.4

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Males Day -27

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL 5	SP GR			
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
105508 105517 105519 105520 105526 105527	37.0 28.0 47.0 75.0 32.0 30.0	1.032 1.025 1.018 1.030	8.0 7.0 8.0 7.5 7.5 6.0		
MEAN S.D. N	41.5 17.76 6	1.026 .0050 6	.75		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05515 I05516	67.0 46.0 52.0 45.0	1.023	7.5 7.0		
MEAN S.D. N	52.5 10.15 4	1.021 .0021 4	7.4 .48 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105505 105510 105518 105523 105524 105528	228.0 52.0 93.0 43.0 46.0 125.0	1.007 1.025 1.020 1.026 1.025 1.013	7.0 7.0 7.0 7.0 7.5 7.0		
MEAN S.D.	97.8 71.41	1.019	7.1		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Ur	it: mg/kg/day
I05506 I05507 I05509 I05511 I05512 I05522	43.0 59.0 68.0 173.0 92.0 66.0	1.026 1.022 1.018 1.008 1.013	7.0 7.5 7.0 7.0 7.5 7.0	
MEAN S.D.	83.5 46.63	1.018	7.2 .26	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

	U GLU	U KET	U BILI	U BLOOD	UROBILI
MG/DL					
	_				
Dose Leve	21: 0	Dosag	ge Unit: mg	/kg/day	
_					
	-		-		-
	-		-	-	-
	-		-	-	-
	+		-	-	-
	+		-	-	-
0	-	++	-	-	-
Dana T		D		/lear / dass	
Dose Teve	11: 0.03	Donag	e onit: mg	/kg/day	
٥	_	_	_	_	_
	=	=	=	=	=
	-	- T.	-		_
	2	++		+	2
10	_	_	_	_	_
Dose Leve	1: 0.15	Dosac	e Unit: ma	/kg/day	
DODC DCVC	0.15	Donas	c onre. mg	, ng, day	
0	_	_	_	_	_
	_	_	_	_	_
	_	_	_	111	_
	_	_	_	-	_
	_	++	_	_	_
	_		_	_	_
•					
Dose Leve	1: 0.75	Dosac	e Unit: ma	/kg/day	
				, 3, 2	
10	_	++	_	+	_
ō	-	-	-	++	-
10	-	-	-	-	-
ō	_	_	_	_	_
Ó	_	+	_	+	_
10	_	-	_	_	_
	0 10 0 0 0 10 0 0 0 10 10 10 10 10 10 10	MG/DL Dose Level: 0 0	MG/DL Dose Level: 0 Dosag 0 - +++ 10 - +++ 10 - +++ 10 - +++ 10	MG/DL Dose Level: 0 Dosage Unit: mg 0 - +++ - 0 - +++ - 10 - +++ - 10 - + ++ - 10 ++ 10 0 Dose Level: 0.03 Dosage Unit: mg 0 10	MG/DL

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	Dosag	ge Unit: mg	J/kg/day				
I05508 I05517 I05519 I05520 I05526 I05527	0 0 0 0 0	0 0 0 0 0	0 2 0 1 1	3 3 3 2 2 1	0 0 0 0	2B4D 2B4D 4B4E 4B4D 4B3D 4B3E	0 0 0 0 0 0	DK DK CL BK CK BK	- PQ - - -
Group: 2	Dose Lev	rel: 0.03	Dosag	ge Unit: mg	/kg/day				
I05514 I05515 I05516 I05521	0 0 0	0 0 0 0	1 0 0 0	3 3 3 3	0 0 0	4B2E 4B4D 4B2D 4B4D	0 4E 0 0	CK CL CK BL	-
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	/kg/day				
I05505 I05510 I05518 I05523 I05524 I05528	0 0 0 0 0	0 0 0 0 0	1 0 4 0 0	2 3 3 3 3 3	0 0 0 0 0	3B 4B4D 4B 4B2D 3B4D 4B	0 4E 0 0	BK BL DL BL CK BK	-
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	J/kg/day				
105506 105507 105509 105511 105512 105522	2 0 0 0 0	0 1 1 0 0	1 0 4 1 1	3 3 3 3 2	00000	2B2D 4B4D 4B1E 4B 2B 2B	0 0 0 0 0	CK CL BK BK BK BJ	900

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S				
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
TARROA	52.0 100.0 57.0 45.0 240.0 50.0	1 020	7.0 7.0 7.5 7.0 7.5 8.0		
MEAN S.D. N	90.7 75.84 6	.0060	.41		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05541 I05547	225.0 48.0 45.0 52.0	1.023	7.0 7.0		
MEAN S.D. N	92.5 88.38 4	1.019 .0082 4	7.1 .25 4		
-	Dose Level:		_	Unit:	mg/kg/day
105532 105538 105539 105545 105548 105552	140.0 61.0 53.0 62.0 64.0 51.0	1.012 1.023 1.026 1.018 1.020 1.025	8.0 7.5 8.0 7.0 8.0		
MEAN S.D.	71.8 33.80	1.021	7.8 .42		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Un:	it: mg/kg/day
I05533	35.0	1.026	7.5	
I05534	59.0	1.024	8.0	
I05536	64.0	1.023	7.5	
I05540	247.0	1.007	7.0	
I05542	72.0	1.019	7.0	
I05551	51.0	1.021	7.0	
MEAN	88.0	1.020	7.3	
S.D.	78.91	.0068	.41	
M	_	c	-	

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26-WEEK CAPSULE	TOXICITY	STUDY WITH	PERFLUOROOCTANE	SULFONIC ACID
POTASSIUN	I SALT (PI	FOS; T-6295) IN CYNOMOLGUS	MONKEYS

ANIMAL NUMBER	U PRO U GLU MG/DL	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level: 0	Dog	age Unit: mg	/kg/day	
I05529 I05530 I05531 I05535 I05544 I05549	0 - 10 - 0 - 0 - 0 - 0 -	++ - - ++ -	- - - - -	- + - - +	- - - -
Group: 2	Dose Level: 0.03	Dos	age Unit: mg	/kg/day	
I05537 I05541 I05547 I05550	0 - 0 - 10 - 0 -	- + -	- - - -	+++	- - -
Group: 3	Dose Level: 0.15	Dos	age Unit: mg	/kg/day	
I05532 I05538 I05539 I05545 I05548 I05552	0 - 0 - 10 - 0 - 0 - 0 -	- + - ++ +	-	- - ++ -	- - - -
Group: 4	Dose Level: 0.75	Dos	age Unit: mg	/kg/day	
105533 105534 105536 105540 105542 105551	10 - 0 - 0 - 0 - 0 - 0 -	+++ - - - - +	- - - - -	- - - -	- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
G 1	D I		D						
Group: 1	Dose Lev	Vel: 0	Dogg	ge Unit: mg	/kg/day				
I05529	0	1	1	3	1H	3B4D	0	BK	P
I05530	0	0	0	3	0	4B	0	DL	-
I05531	0	0	1	3	0	4B4D	0	CK	-
I05535	0	0	0	3	0	2B2D	0	CL	-
I05544	0	0	2	3	0	4B	0	AK	-
105549	0	0	0	1	0	4B1D	1E	BK	_
			_		(2 / 2				
Group: 2	Dose Le	vel: 0.03	Dosag	ge Unit: mg	/kg/day				
I05537	0	0	1	3	0	4B4D	0	BK	_
I05541	0	1	1	3	0	4B2D	0	DL	-
I05547	0	0	0	3	0	2B	0	DL	-
I05550	0	0	1	2	0	4B1E	0	CK	-
Group: 3	Dose Le	vel: 0.15	Dosag	ge Unit: mg	J/kg/day				
I05532	0	0	2	2	0	1D4F	0	ВJ	_
I05538	ó	Ô	1	2 2 3 2 3	ò	1B1E	1F	CK	-
I05539	0	0	1	3	0	4B	0	CK	_
I05545	0	0	1	2	0	4B	0	CK	P
I05548	0	0	0	3	0	2B	0	CL	_
I05552	0	0	2	3	0	4B	0	CL	-
Group: 4	Dose Lev	vel: 0.75	Dosag	ge Unit: mç	J/kg/day				
I05533	0	1	2	3	0	2B4D	0	DK	_
I05534	0	0	1	2	0	4B4D	0	CL	-
I05536	0	0	1	3	0	3B3D	0	CL	-
I05540	0	0	4	3	0	0	0	AK	-
I05542	0	1	1	3	0	4B1E	0	CK	-
I05551	0	0	1	3	0	4B1D	0	CK	_

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S				
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
T05517	56.0 47.0 48.0 66.0 26.0 58.0	1 025	7.0		
MEAN S.D. N	50.2 13.75 6	.0071	.45		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05515 I05516	62.0 108.0 38.0 82.0	1.017	7.5 8.0		
MEAN S.D. N	72.5 29.73 4	1.021 .0048 4	7.5 .41 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105505 105510 105518 105523 105524 105528	307.0 34.0 70.0 54.0 37.0 64.0	1.002 1.023 1.017 1.019 1.028 1.025	7.0 7.5 7.5 7.5 7.0 7.0		
MEAN S.D. N	94.3 105.16	1.019	7.2 .27		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Uni	it: mg/kg/day
105506	50.0	1.023	8.0	
105507	52.0	1.026	8.0	
T05509	36.0	1.023	8.0	
T05511	110.0	1.008	6.5	
I05512	146.0	1.007	7.0	
I05522	0.08	1.018	6.5	
MEAN	79.0	1.018	7.3	
S.D.	42.12	.0082	.75	
M	6	6	6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U PRO MG/DL	U GLU	U 	KET UB	ILI	U BLOOD	UROBILI
Group: 1	Dose Leve	el: 0		Dosage Uni	t: mg/k	g/day	
105508	0	_	+	-	-		_
I05517	0	-	++	-	-		-
I05519	0	-	-	-	-		-
I05520	0	-	+++	-	-		-
I05526	0	-	+	-	-		-
I05527	0	-	-	-	-		-
Group: 2	Dose Leve	el: 0.03		Dosage Uni	t: mg/k	g/day	
105514	0	_	-	_	_		_
I05515	0	-	-	-	-		-
I05516	0	-	-	-	-		-
105521	0	-	-	-	-		-
Group: 3	Dose Leve	el: 0.15		Dosage Uni	t: mg/k	g/day	
105505	0	_	_	_	_		_
I05510	Ó	_	-	_	_		_
I05518	0	-	+	-	-		-
I05523	0	_	-	_	_		_
I05524	Ó	_	++	_	_		_
I05528	0	-	-	-	-		-
Group: 4	Dose Leve	el: 0.75		Dosage Uni	t: mg/k	g/day	
I05506	0	_	++	_	-		_
I05507	0	_	-	-	-		_
I05509	0	_	-	-	-		_
I05511	0	_	+	_	_		_
I05512	0	_	+	_	_		_
I05522	0	-	+++	-	-		-

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Individual Clinical Urinalysis Data

Males Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	vel: 0	Dosag	ge Unit: mg	g/kg/day				
I05508 I05517 I05519 I05520 I05526 I05527	0 0 0 0 0	0 0 0 0 0	1 0 1 0 0	2 2 2 1 1	0000	4D 1D 3E3F 0 1B1D 4D	0 0 0 0	BK CK BK BJ BJ BJ	- - - P -
Group: 2	Dose Lev	vel: 0.03	Dosag	ge Unit: mg	g/kg/day				
I05514 I05515 I05516 I05521	1 0 0 0	0 0 0	1 0 1 0	2 3 2 2	0 0 0	2E 4B4D 4B1D 4B2D	0 0 0 1E	BK BK CK BL	PQ P -
Group: 3	Dose Lev	vel: 0.15	Dosag	ge Unit: mg	g/kg/day				
105505 105510 105518 105523 105524 105528	0 0 0 0 0	0 0 0 0 1	0 0 0 1 1 0	0 3 1 2 1 2	0 0 0 0 0	1B 4D 3D 2D3E 0 4B1E	0 0 0 0 0	AJ BK BK BK CK BK	Q - PQ Q -
Group: 4	Dose Lev	zel: 0.75	Dosag	ge Unit: mg	g/kg/day				
105506 105507 105509 105511 105512 105522	0 0 0 0 0	0 0 0 0	1 0 1 0 0	2 1 1 3 3 2	00000	0 3B4D 0 1B 2B 0	00000	BK BK BK BJ BJ BK	P Q Q Q - PO

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Appendix 4
Individual Clinical Urinalysis Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		U VOL ML	SP GR				
Group:	1	Dose Level:	: 0	Dosage	Unit:	mg/kg/day	
I05529 I05530 I05531 I05535 I05544 I05549		14.0 20.0 31.0 564.0 38.0 44.0	1.010 1.003 1.026 1.001 1.020	8.5 8.0 8.0 7.5 8.0			
MEAN S.D. N		118.5 218.53 6	1.014 .0103 6	8.0 .32 6			
Group:	2	Dose Level:	: 0.03	Dosage	Unit:	mg/kg/day	
I05541 I05547		170.0 46.0 76.0 55.0	1.020 1.016	8.0			
MEAN S.D. N		86.8 56.91 4	1.018 .0056 4	7.8 .29 4			
Group:	3	Dose Level:	: 0.15	Dosage	Unit:	mg/kg/day	
105532 105538 105539 105545 105548 105552		78.0 186.0 66.0 85.0 47.0 40.0	1.014 1.006 1.019 1.012 1.024 1.026	7.5			
MEAN S.D.		53.05	1.017	7.5			

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Appendix 4

Individual Clinical Urinalysis Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Uni	t: mg/kg/day
105533	38.0	1.024	8.0	
I05534	32.0	1.026	8.5	
T05536	44.0	1.028	8.0	
T05540	417.0	1.003	8.0	
I05542	34.0	1.025	7.0	
I05551	36.0	1.026	7.0	
MEAN	100.2	1,022	7.8	
S.D.	155.27	.0094	.61	
N	6	6	6	

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Individual Clinical Urinalysis Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL	U PRO	U GLU	U KE	T U BILI	U BLOOD	UROBILI
NUMBER	MG/DL					
Group: 1	Dose Lev	el: 0	Do	sage Unit: m	g/kg/day	
I05529	0	_	-	_	_	_
I05530	10	-	-	-	++	-
I05531	0	-	-	-	-	-
I05535	0	-	-	-	+++	-
I05544	0	-	+	-	-	-
I05549	0	-	-	-	-	-
Group: 2	Dose Lev	el: 0.03	Do	sage Unit: m	g/kg/day	
	_					
I05537	0	-	-	-	-	-
I05541	0	-	+	-	-	-
I05547	0	-	-	-	-	-
105550	0	-	-	-	-	-
Group: 3	Dose Lev	el: 0.15	Do	sage Unit: m	g/kg/day	
I05532	0	_	_	_	_	_
I05538	ŏ	_	_	_	_	_
I05539	ò	_	_	_	_	_
I05545	ò	_	_	_	_	_
I05548	Ó	_	+	-	-	_
I05552	0	-	-	-	-	-
Group: 4	Dose Lev	el: 0.75	Do	sage Unit: m	g/kg/day	
_						
I05533	0	-	+	-	+	-
I05534	10	-	-	-	-	-
I05536	0	-	-	-	-	-
I05540	0	-	-	-	-	-
I05542	0	-	+++	-	-	-
I05551	0	-	-	-	-	_

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Individual Clinical Urinalysis Data

Females Day 37

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	Dosag	ge Unit: mg	g/kg/day				
I05529 I05530 I05531 I05535 I05544 I05549	0 0 0 0 0	0 0 1 0 0	2 0 0 1 0	1 3 2 1 2 3	00000	1E2F 4B 3B4D 0 3B3D 1E1F	0 0 0 0 0 0	BJ BLM CL AK BK BK	P - - -
Group: 2	Dose Lev	rel: 0.03	Dosag	ge Unit: mg	g/kg/day				
I05537 I05541 I05547 I05550	0 0 0 0	0 0 0	1 0 0	2 2 1 1	0 0 0	4B 4B4D 2D 1B	0 0 0 0	BK BK BK BK	- - P -
Group: 3	Dose Lev	rel: 0.15	Dosag	ge Unit: mg	g/kg/day				
105532 105538 105539 105545 105548 105552	0 0 0 0 0	1 0 0 0 0	1 2 0 1 0	2 1 3 3 3 1	0 0 0 0 0	4B2E 3B 4B3E 4B4D 3B1D 3B1D	0 0 0 0 0 1E	BK BK BL BK BK	- - - - -
Group: 4	Dose Lev	vel: 0.75	Dosag	ge Unit: mg	g/kg/day				
105533 105534 105536 105540 105542 105551	0 0 0 0 0	1 0 0 0 1 1	1 0 1 1	3 1 1 2 1 2	00000	3B3D 2B4D 4B1D 0 3D 4B1D	1E 0 3E 0 0	BK BK BL AK BK BK	- P - - P

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Individual Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S				
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
T05517	40.0 67.0 54.0 65.0 179.0 60.0	1 017	8.0		
MEAN S.D. N	77.5 50.66 6	.0054	.32		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05515 I05516	44.0 69.0 28.0 108.0	1.020 1.028	8.0 7.5		
MEAN S.D. N	62.2 34.86 4	1.018 .0076 4	8.0 .41 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105505 105510 105518 105523 105524 105528	192.0 53.0 82.0 131.0 25.0 84.0	1.006 1.021 1.014 1.006 1.031 1.014	8.0 8.0 8.0 7.5 8.0 7.0		
MEAN S.D. N	94.5 59.43	1.015 .0095	7.8 .42		

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Appendix 4
Individual Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U 	PH		
Group: 4	Dose Level:	0.75		Dosage	Unit:	mg/kg/day
105506	50.0	1.020		7.5		
I05507	66.0	1.018		8.0		
T05509	34.0	1.023		8.0		
I05511	107.0	1.009		8.0		
I05512	89.0	1.013		7.5		
I05522	62.0	1.019		8.5		
MEAN	68.0	1.017		7.9		
S.D.	26.39	.0051		.38		
N	6	6		6		

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Appendix 4 Individual Clinical Urinalysis Data

Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U PRO U GLU MG/DL	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level: 0	Dos	age Unit: mg	/kg/day	
105508 105517 105519 105520 105526 105527	10 - 10 - 0 - 0 - 0 - 10 -	++ + - +++ +	- - - -	-	-
Group: 2	Dose Level: 0.03	Dos	age Unit: mg	/kg/day	
I05514 I05515 I05516 I05521		- ++ ++	-	- - -	- - -
Group: 3	Dose Level: 0.15	Dos	age Unit: mg	/kg/day	
105505 105510 105518 105523 105524 105528	0 - 0 - 0 - 0 - 10 - 0 -	- - + +++	- - - - -	- - - +++	- - - -
Group: 4	Dose Level: 0.75	Dos	age Unit: mg	/kg/day	
105506 105507 105509 105511 105512 105522	10 - 10 - 10 - 0 - 0 - 10 -	+++ - - - +++	- - - - -	- - - - - +++	- - - - -

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Appendix 4

Individual Clinical Urinalysis Data

Males Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Le	vel: 0	Dosa	ge Unit: mg	g/kg/day				
I05508 I05517 I05519 I05520 I05526 I05527	0 0 0 0 0	0 1 0 0 0	0 1 1 1 1	3 2 1 2 2 2 3	00000	2B3D 2B2D 2E 2B3D 2B 2B4D	0 0 0 0 0	CK CK CK BK BJ CK	Q - - - -
Group: 2	Dose Le	vel: 0.03	Dosa	ge Unit: mg	g/kg/day				
I05514 I05515 I05516 I05521	0 0 0 0	0 0 0 0	1 1 1 0	2 3 2 3	0 0 0 0	2B1E 2B4D 4D 3B1D	0 0 0 0	AJ CK CK BK	Q - P -
Group: 3	Dose Lev	vel: 0.15	Dosa	ge Unit: mg	g/kg/day				
105505 105510 105518 105523 105524 105528	0 0 0 0 0	1 0 0 1 0 0	0 0 1 1 1	3 1 3 2 2 2	0 0 0 0 0	4B1D 3B4D 4B3D 2B 2B4D 3B1E	0 1E 0 0 0	AK CK BK AK CK BK	Q - - - - p p
Group: 4	Dose Le	vel: 0.75	Dosa	ge Unit: mç	g/kg/day				
I05506 I05507 I05509 I05511 I05512 I05522	0 0 0 0 0	0 0 1 0 0	1 1 1 1 0	1 2 1 1 2 3	00000	4D 4D 0 2B1D 1D 1B3D	0 0 0 0 0 0	CK CK CK BK BJ BK	Q PQ PQ

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Appendix 4
Individual Clinical Urinalysis Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

NUMBER	U VOL 5				
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
I05529 I05530 I05531 I05535 I05544 I05549	62.0 68.0 31.0 195.0 60.0 30.0	1.020 1.022 1.024 1.005 1.016	8.0 8.0 8.0 8.0 8.5		
MEAN S.D. N	74.3 61.32 6	1.019 .0076 6	.26		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05541 I05547	97.0 18.0 50.0 49.0	1.028	8.0 7.5		
MEAN S.D. N	53.5 32.58 4	1.020 .0056 4	7.6 .48 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105532 105538 105539 105545 105548 105552	98.0 56.0 47.0 98.0 30.0 45.0	1.010 1.022 1.022 1.016 1.028 1.020	7.5 8.0 8.0 8.0 7.5 8.0		
MEAN S.D.	62.3 28.86	1.020	7.8		

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Individual Clinical Urinalysis Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Un	it: mg/kg/day
I05533	45.0	1.020	7.5	
I05534	115.0	1.011	8.0	
T05536	42.0	1.024	7.5	
T05540	158.0	1.010	8.0	
I05542	99.0	1.007	7.5	
I05551	27.0	1.030	7.0	
MEAN	81.0	1.017	7.6	
S.D.	51.27	.0091	.38	
M	_	_	-	

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Individual Clinical Urinalysis Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U PRO MG/DL	U GLU U	KET U	BILI U I	BLOOD UROBILI
Group: 1	Dose Level	: 0	Dosage Un	it: mg/kg/d	day
I05529 I05530 I05531 I05535	10 - 10 - 0 - 0 -	+++	-+ -	- +++ -	= = = = = = = = = = = = = = = = = = = =
I05544 I05549	0 - 10 -	++	-	= -	- -
Group: 2	Dose Level	: 0.03	Dosage Un	it: mg/kg/d	lay
I05537 I05541 I05547 I05550	10 - 10 - 10 - 10 -	- +++ - +++	-	-	- - -
Group: 3	Dose Level	: 0.15	Dosage Un	it: mg/kg/d	day
105532 105538 105539 105545 105548 105552	10 - 10 - 10 - 0 - 10 - 10 -	+ - +++ - +++	+ -	- - - -	- - - - -
Group: 4	Dose Level	: 0.75	Dosage Un	it: mg/kg/d	lay
105533 105534 105536 105540 105542	10 - 0 - 10 - 0 -	+ - + -	- - -	- - - -	- - - - -
I05551	10 -	+++	-	-	-

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Individual Clinical Urinalysis Data

Females Day 62

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	Dosag	ge Unit: mg	j/kg/day				
I05529 I05530 I05531 I05535 I05544 I05549	0 1 0 0 0	0 0 1 0 0	1 1 1 1 1	2 3 2 2 1 3	0 0 0 0 0	4D 4B 2B3D 0 4D1E 2B1D	0 0 0 0 0 0	CK CK BJ BK CK	P - - P -
Group: 2	Dose Lev	rel: 0.03	Dosag	ge Unit: mg	j/kg/day				
I05537 I05541 I05547 I05550	0 0 0	0 1 1 1	1 1 1 2	2 3 1 1	0 0 0	2B4D 4B4D 4B2D 2D	0 0 0	BK CK CK CK	P P P
Group: 3	Dose Lev	rel: 0.15	Dosag	ge Unit: mg	J/kg/day				
105532 105538 105539 105545 105548 105552	0 0 0 0 0	4 0 1 0 1 1	2 1 2 1 1 0	1 2 1 1 3 2	0 0 0 0 0	0 3B3D 4D 4B1D 4D 2B2D	0 0 0 0 0 0	BJ CK CK BK CK CK	P - p - p
Group: 4	Dose Lev	vel: 0.75	Dosag	ge Unit: mg	j/kg/day				
105533 105534 105536 105540 105542 105551	1 0 0 0 0	1 0 1 1 1	1 2 1 1 1	2 3 1 3 3 3	00000	4B2D 4D 3D1E 1B 2B3D 2B4D	00000	CK BK CK BK AJ CK	- P P - P

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Appendix 4
Individual Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		SP GR			
Group: 1	Dose Level:	0	Dosa	ge Unit:	mg/kg/day
I05517 I05519 I05520 I05526	60.0 43.0 52.0	1.026	6.0 8.0 7.5 7.5		
MEAN S.D. N	47.5 7.31 6	1.024 .0046 6	7.5 .7 6	7	
-	Dose Level:			_	mg/kg/day
105514 105515 105516 105521 a	29.0 66.0 46.0 122.0	1.010 1.017 1.025 1.019	8.0 8.0 7.5 7.5		
MEAN S.D. N	65.8 40.43 4	1.018 .0062 4	7.8 .2 4	9	
Group: 3	Dose Level:	0.15	Dosa	ge Unit:	mg/kg/day
105505 105510 105518 105523 105524 105528	42.0	1.005 1.010 1.017 1.010 1.021 1.018	7.5		
MEAN S.D. N	101.2 73.16 6	1.014 .0061 6	7.4 .4	9	

a Sample collected on Day 92.

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Appendix 4 Individual Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Un	it: mg/kg/day
105506	42.0	1.021	6.5	
105507	28.0	1.030	8.0	
I05509	48.0	1.021	8.0	
I05511	70.0	1.017	8.0	
I05512	82.0	1.010	6.0	
105522	54.0	1.023	7.0	
MEAN	54.0	1.020	7.2	
S.D.	19.47	.0066	.88	
N	6	6	6	

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Appendix 4
Individual Clinical Urinalysis Data

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

		LOIMDDI	OH DALI	. (IIOD)	1-02337	in cincion	IOOD HOMELI	
ANIMAL NUMBER		U PR MG/DL		JGLU	U KET	U BILI	U BLOOD	UROBILI
Group:	1	Dose	Level:	0	Dosage	e Unit: mg	j/kg/day	
I05508		10	_	_		_	_	_
105517		10	_	+	+++	_	-	_
I05519		10	-	+		-	-	-
I05520		10	-	+	+++	-	-	-
I05526		10	-	+		-	-	_
I05527		10	-	-		-	-	-
Group:	2	Dose	Level:	0.03	Dosage	e Unit: mg	ı/kg/day	
~								
I05514		0	-	-		-	-	-
I05515		10	-	-		-	-	-
I05516		10	-	-		-	-	-
105521	a	0	-	-		-	-	-
Group:	3	Dose	Level:	0.15	Dosage	e Unit: mg	j/kg/day	
I05505		0	_	_		_	_	_
I05510		ò	-	_		_	_	_
I05518		ò	-	-		-	-	-
I05523		0	-	-		_	-	-
I05524		10	-	+	+	_	_	_
I05528		0	-	-		-	-	-
Group:	4	Dose	Level:	0.75	Dosage	e Unit: mg	g/kg/day	
I05506		10	-	+	+++	_	_	_
105507		10	-	_		_	_	_
I05509		ō	-	-		_	_	_
I05511		ó	_	-		_	_	_
I05512		Ó	_	+	+	-	-	-
I05522		10	-	-		-	-	-

a Sample collected on Day 92.

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Appendix 4
Individual Clinical Urinalysis Data

Males Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Level: 0		Dosag	Dosage Unit: mg/kg/day					
105508 105517 105519 105520 105526 105527	0 0 0 0 0	0 0 0 0 0	0 2 0 0 0	3 3 3 3 2 2	0 0 0 0 0	3D2F 4B 3B1D 4B4D 1B4D 4B4D	0 0 1F 1E 0 3E	CK CK BK BK CK CL	- P - -
Group: 2	Dose Level: 0.03 Dosage Unit: mg/kg/day								
I05514 I05515 I05516 I05521 a	0 0 0	0 0 0	0 0 1 0	3 3 3	0 0 0	4B2E 4B1D 1D 4B2E	0 0 0	BK BK CK CK	Q - - Q
Group: 3	Dose Lev	rel: 0.15	Dosag	ge Unit: mg	g/kg/day				
105505 105510 105518 105523 105524 105528	0 0 0 0 0	0 1 0 1 0	1 0 0 0 1 0	2 3 3 3 2 2	0 0 0 0 0	0 3B 2B1E 4B 0 3B2E	0 0 0 0 0 1F	AJ BK BL AK CK BK	PQ PQ - PQ P Q
Group: 4	Dose Lev	vel: 0.75	Dosag	ge Unit: mg	j/kg/day				
105506 105507 105509 105511 105512 105522	0 0 0 0 0	1 0 0 0 0	1 0 0 0 0 1	2 1 3 2 2 1	0 0 0 0 0 0	0 4B4D 1B 3B1E 0 4D	0 1E 0 0 0	CK CL BJ BL BJ BJ	PQ - - Q P Q

a Sample collected on Day 92.

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Individual Clinical Urinalysis Data

Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

NUM	MAL BER		U VOL ML			GR			
Gro	up:	1 [ose Level	: ()		Dosage	Unit:	mg/kg/day
I05 I05 I05 I05	529 530 531 535 544 549		45.0 67.0 62.0 229.0 65.0 92.0	1	L. L. L.	020 019 006 018	8.0 8.0 8.0 8.0 8.0		
			93.3 68.15 6			015 0053 6	8.0 .00 6		
Gro	up:	2 [ose Level	: (٠.	03	Dosage	Unit:	mg/kg/day
I05	541 547		104.0 31.0 60.0 64.0	1	L .	021 014	7.5 7.0		
MEA S.D N			64.8 30.02 4	1	١.	018 0034 4	7.4 .48 4		
Gro	up:	3 [ose Level	: ().	15	Dosage	Unit:	mg/kg/day
105 105 105 105 105 105	532 538 539 545 548 552		102.0 74.0 56.0 48.0 61.0 38.0	1	L. L. L.	011 012 026 014 020 028	8.0 7.0 7.5 6.5 8.0		
MEA S.D			63.2 22.56	1	١.	018 0073	7.5 .63		

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Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Uni	t: mg/kg/day
I05533	30.0	1.025	8.0	
I05534	46.0	1.023	8.0	
T05536	268.0	1.005	8.0	
T05540	295.0	1.005	8.0	
I05542	38.0	1.022	7.0	
I05551	46.0	1.024	7.5	
MEAN	120.5	1.017	7.8	
S.D.	125.14	.0096	.42	
M	_	_	-	

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Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U PRO MG/DL	U GLU	U KE	T U BILI	U BLOOD	UROBILI
Group: 1	Dose Leve	:1: 0	Do	sage Unit: m	g/kg/day	
105529 105530 105531 105535 105544 105549	10 10 10 10 10	- - - - -	-	- - - - -	- +++ - - -	-
Group: 2	Dose Leve	1: 0.03	Do	sage Unit: m	g/kg/day	
I05537 I05541 I05547 I05550	0 10 0 30	- - -	+	- - -	- - - +++	- - -
Group: 3	Dose Leve	1: 0.15	Do	sage Unit: m	g/kg/day	
105532 105538 105539 105545 105548 105552	10 0 10 0 10	- - - - -	- + - + +	- - - - -	+ - - -	-
Group: 4	Dose Leve	1: 0.75	Do	sage Unit: m	g/kg/day	
105533 105534 105536 105540 105542 105551	10 10 0 0 10	- - - -	+ - - - ++	- - - -	- - - -	- - - -

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Females Day 91

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Le	vel: 0	Dosa	ge Unit: mg	g/kg/day				
I05529 I05530 I05531 I05535 I05544 I05549	0 4 0 0 0 0	0 0 0 0 0	0 0 0 1 0	3 3 3 3 3	0 0 0 0 0	3B4D 3B4D 4B2E 2B1F 2B 2B1D	0 0 0 0 0 1E	BK BL BJ BL BK	- - - - -
Group: 2	Dose Le	/el: 0.03	Dosa	ge Unit: mg	g/kg/day				
I05537 I05541 I05547 I05550	0 0 0 4	0 0 0	1 1 0	2 3 3 3	0 0 0 0	3B1D 4B4D 3B1D 3B	1E 1E1F 0 0	BK BL BL CL	- - P -
Group: 3	Dose Le	7el: 0.15	Dosa	ge Unit: mg	g/kg/day				
105532 105538 105539 105545 105548 105552	0 0 0 0	1 0 0 0 0	4 2 0 1 1	3 3 2 1 1	00000	1B4D 3D 4B2E 0 4B4D 4B1D	0 0 0 0 0 1E	BK BL BK BL CL	P - - -
Group: 4	Dose Lev	zel: 0.75	Dosa	ge Unit: mg	g/kg/day				
105533 105534 105536 105540 105542 105551	0 0 0 0 0	3 0 0 0 2 0	1 0 1 2 1	3 2 2 3 3 3	00000	4D 4B4D 3D 0 2B2D 3B1D	0 0 0 0 0	CK BL AJ AK BK BL	P - - - P

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Individual Clinical Urinalysis Data

Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S	SP GR			
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
I05508 I05517 I05519 I05520 I05526 I05527	68.0 76.0 210.0 34.0 320.0 80.0	1.017 1.013 1.004 1.019 1.005 1.021	7.5 7.0 7.5 6.5 7.5		
MEAN S.D. N	131.3 110.42 6	1.013 .0072 6	7.1 .49 6		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05515 I05516	56.0 46.0 34.0 84.0	1.020 1.028	7.0		
MEAN S.D. N	55.0 21.32 4	1.020 .0052 4	7.4 .48 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105505 105510 105518 105523 105524 105528	360.0 92.0 66.0 140.0 44.0 125.0	1.004 1.009 1.014 1.008 1.022 1.011	7.0		
MEAN S.D.	137.8 114.54	.0062	7.1		

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Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage 1	Unit: mg/kg/day
I05506 I05507	80.0	1.012	7.0	
I05509	32.0	1.026	6.0	
I05511	390.0	1.003	7.0	
I05512	280.0	1.005	7.5	
105522	98.0	1.013	7.5	
MEAN	180.0	1.011	7.1	
S.D.	136.48	.0082	.58	
N	6	6	6	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

			,,			-
ANIMAL NUMBER	U PRO MG/DL	n Grn	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Leve	el: 0	Dosag	e Unit: mg	/kg/day	
I05508	0	_	_	_	_	_
I05517	0	-	++	_	-	-
I05519	0	-	-	-	-	-
I05520	0	-	++++	-	-	-
I05526	0	-	+	-	-	-
I05527	0	-	-	-	-	-
Group: 2	Dose Leve	el: 0.03	Dosag	e Unit: mg	/kg/day	
I05514	0	_	++	_	+	_
I05515	Ö	_	++	_	-	_
I05516	0	_	_	_	_	_
I05521	0	-	-	-	-	-
Group: 3	Dose Leve	el: 0.15	Dosag	e Unit: mg	/kg/day	
I05505	0	_	_	_	_	_
I05510	ò	_	-	_	_	_
I05518	ó	-	+	_	-	-
I05523	0	-	-	-	-	-
I05524	0	_	++	_	-	_
I05528	0	-	-	_	-	-
Group: 4	Dose Leve	:1: 0.75	Dosag	e Unit: mg	/kg/day	
I05506	0	_	+++	_	_	_
I05507	Ö	-	-	-	-	-
I05509	10	-	++	-	-	_
I05511	0	-	-	-	-	-
I05512	0	-	-	-	-	-
I05522	0	-	-	-	-	-

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Males Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Le	vel: 0	Dosa	ge Unit: mg	g/kg/day				
105508 105517 105519 105520 105526 105527	0 0 0 0 0	0 0 0 0 0	1 0 1 1	3 2 2 3 3 3	0 0 0 0	4B 0 0 0 0 0 4B4D	0 0 0 0	BK BK AJ BK AK BL	Q P Q
Group: 2	Dose Le	vel: 0.03	Dosa	ge Unit: mg	g/kg/day				
I05514 I05515 I05516 I05521	0 0 0	0 0 0	0 1 1	3 3 3	0 0 0	3B1D 1B1D 4B1D 4B4D	1E 1E 0	BK BK BK BL	PQ PQ PQ -
Group: 3	Dose Le	vel: 0.15	Dosa	ge Unit: mg	g/kg/day				
105505 105510 105518 105523 105524 105528	0 0 0 0 0	0 0 0 1 0	1 0 1 1	3 3 3 3 2 3	0 0 0 0 0	0 0 4B 0 0	0 0 0 0 0	AK BK BK BK BK BK	- - Q - Q
Group: 4	Dose Le	vel: 0.75	Dosa	ge Unit: mg	g/kg/day				
105506 105507 105509 105511 105512	0 0 0 0 0	0 0 1 0 0	1 0 1 0	3 2 3 2 2	00000	2B 0 0 0	00000	BK AK BK AK AK BK	Q - P -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S				
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
T05530	44.0 36.0 36.0 145.0 100.0 150.0	1 024	7.5 8.0 7.5 7.0 7.5 7.5		
MEAN S.D. N	85.2 53.91 6	.0084	.32		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05541 I05547	110.0 40.0 26.0 66.0	1.020	7.0 6.5		
MEAN S.D. N	60.5 36.93 4	1.016 .0029 4	7.0 .41 4		
-	Dose Level:		_	Unit:	mg/kg/day
105532 105538 105539 105545 105548 105552	44.0 46.0 54.0 46.0 28.0 26.0	1.023 1.027 1.018 1.018 1.022 1.027	7.0 7.0 7.0 7.0 7.5 7.0		
MEAN S.D. N	40.7 11.15	1.022	7.1 .20		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Unit: n	ng/kg/day
105533	30.0	1.025	7.0	
I05534	52.0	1.011	8.0	
I05536	110.0	1.012	7.5	
I05540	270.0	1.005	6.0	
I05542	36.0	1.021	7.0	
I05551	36.0	1.026	7.0	
MEAN	89.0	1.017	7.1	
S.D.	93.46	.0085	.66	
M	_	_	c	

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U PRO MG/DL	U GLU	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Lev	el: 0	Dosa	ge Unit: mg	j/kg/day	
105529	10	_	+	_	+++	_
I05530	10	-	-	-	-	-
I05531	0	-	+	-	-	-
I05535	0	-	+	-	-	-
I05544	0	-	-	-	-	-
I05549	0	-	-	-	-	-
Group: 2	Dose Lev	el: 0.03	Dosa	ge Unit: mg	j/kg/day	
I05537	0	_	+	_	_	_
I05541	30	_	++	_	+++	_
I05547	10	-	++++	-	-	-
I05550	0	-	+	-	-	-
Group: 3	Dose Lev	el: 0.15	Dosa	ge Unit: mg	j/kg/day	
I05532	0	_	+	_	_	_
I05538	0	-	+++	-	-	-
I05539	0	-	+	-	-	-
I05545	0	-	++	_	-	-
I05548	10	_	+++	-	-	_
I05552	0	-	+++	-	-	-
Group: 4	Dose Lev	el: 0.75	Dosa	ge Unit: mg	j/kg/day	
I05533	0	-	+++	-	-	-
I05534	0	-	-	-	-	_
I05536	0	-	-	-	-	_
I05540	0	-	+	-	-	-
I05542	0	-	++	-	-	-
I05551	0	-	++	-	-	-

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Females Day 153

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	Dosag	ge Unit: mg	J/kg/day				
I05529 I05530 I05531 I05535 I05544 I05549	2 0 0 0 0	1 0 0 0 0	0 0 0 1 1 2	3 3 2 2 2 3 3	0 0 0 0	3B1D 4B4D 4B4D 0 4B	0 0 2 E4F 0 0	BL BL BK BL BK	- - P - -
Group: 2	Dose Lev	rel: 0.03	Dosag	ge Unit: mg	ı/kg/day				
I05537 I05541 I05547 I05550	0 4 0 0	0 1 1 0	1 1 1 2	3 3 3 3	0 0 0	2B4D 0 3B2E 0	0 0 0	BK CK BL BK	P P
Group: 3	Dose Lev	rel: 0.15	Dosag	ge Unit: mg	/kg/day				
105532 105538 105539 105545 105548 105552	0 0 0 0 0	4 0 1 0 1 0	2 1 3 2 1	2 1 3 3 3 3	0 0 0 0 0 0	0 1D 1D 4D 4B4D 4D	0 0 0 0 0	BK CK BK BL CK	P - P P - P
Group: 4	Dose Lev	vel: 0.75	Dosag	ge Unit: mg	J/kg/day				
105533 105534 105536 105540 105542 105551	0 0 0 0	1 0 1 1 2	1 1 2 1	3 3 2 1 3 3	00000	2B2D 2B4D 4B3D 0 2B4D 3B4D	0 0 1E 0 0	BK BK BL AK BK CK	- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

NU	IMAL MBER		U VOL ML							
Gr	oup:	1 I	Dose Le	vel:	0		Dosage	Unit:	mg/kg/day	
IO IO IO IO	5508 5517 5519 5520 5526 5527		184.0 49.0 62.0 102.0 242.0 58.0		1. 1. 1. 1.	006 021 012 013 006 023	8.0 7.5 8.0 8.0 8.0			
s.	AN D.		116.2 79.3	3		0072	.20			
Gr	oup:	2 I	Dose Le	vel:	٥.	03	Dosage	Unit:	mg/kg/day	
IO IO	5515 5516		94.0 52.0 54.0 102.0		1.	019 018	7.5 8.0			
ME S. N	AN D.		75.5 26.2 4	0	1.	017 0022 4	7.9 .25 4			
Gr	oup:	3 I	Dose Le	vel:	0.	15	Dosage	Unit:	mg/kg/day	
IO IO IO IO	5505 5510 5518 5523 5524 5528		368.0 122.0 78.0 21.0 49.0 96.0		1. 1. 1. 1.	003 012 016 017 015 016	8.0 8.5 6.0 6.5 6.0			
S.	AN D.		122.3 125.4	3	1.	013 0053	7.5 1.00			

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Un:	it: mg/kg/day
I05507 I05511	280.0 96.0	1.005	7.5 8.0	
I05512 I05522	36.0 72.0	1.018 1.012	6.5 7.0	
MEAN	121.0	1.013	7.2	
S.D. N	108.83 4	.0059 4	.65 4	

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26-WEEK CAPSULE	TOXICITY	STUDY WITH	PERFLUOROOCTANE SULFONIC A	CID
POTASSIUN	I SALT (PI	FOS; T-6295) IN CYNOMOLGUS MONKEYS	

ANIMAL NUMBER	U PRO MG/DL	U GLU	U	KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Leve	l: 0		Dosage	Unit: mg/	/kg/day	
I05508 I05517 I05519 I05520 I05526 I05527	10 10 10 10 10 10	- - - -	- - - - +		- - - -	- - - - -	-
Group: 2	Dose Leve	l: 0.03		Dosage	Unit: mg/	/kg/day	
I05514 I05515 I05516 I05521	10 10 10	- - -	-		-	-	-
Group: 3	Dose Leve	l: 0.15		Dosage	Unit: mg/	/kg/day	
I05505 I05510 I05518 I05523 I05524 I05528	10 10 10 10 10	- - - -	- - - ++	- - - -	- - - -	- - - -	- - - - -
Group: 4	Dose Leve	1: 0.75		Dosage	Unit: mg/	/kg/day	
I05507 I05511 I05512 I05522	10 10 10	- - -	- - - -		- - -	- - -	- - - -

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Le	vel: 0	Dosag	ge Unit: m	g/kg/day				
105508	0	0	0	3	0	2B1E	0	BK	_
I05517	0	0	0	2	0	3B3D	0	BL	-
I05519	0	0	0	3	0	4B	0	BK	-
I05520	0	0	0	3	0	3B1D	0	BL	-
I05526	0	1	0	3	0	2B	0	AK	-
105527	0	0	0	3	0	4B4D	0	BL	-
Group: 2	Dose Le	vel: 0.03	Dosa	ge Unit: m	g/kg/day				
105514	0	۵	0	2	0	2B2E	0	BK	Q
I05515	ō	Ô	Ö	3	ō	4B1E	ō	BK	-
105516	ō	Õ	i	3	ŏ	2B	ŏ	BK	_
105521	ŏ	ő	ō	3	ŏ	4B	ŏ	BL	_
Group: 3	Dose Le	vel: 0.15	Dosa	ge Unit: m	g/kg/day				
105505	0	0	0	3	0	2B	0	AK	
I05510	ŏ	ő	1	3	ŏ	2B1E	ŏ	BK	_
105518	ŏ	o o	ō	3	o o	4B4D	ŏ	BK	
105523	0	n n	Ô	1	Ô	1B	Ď.	BJ	P
105524	Ô	n n	0	3	0	0	ñ	BK	-
105528	0	ñ	0	í	ň	4B1E	ñ	BL	_
103320	•	•		-		1010			
Group: 4	Dose Lev	vel: 0.75	Dosa	ge Unit: m	g/kg/day				
I05507	0	0	0	1	0	0	0	AJ	0
I05511	Ó	0	1	2	0	4B	0	BK	Q Q P
I05512	0	0	0	2	0	0	0	BJ	P
I05522	0	0	1	2	0	2D	0	BK	PO

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL S	SP GR			
Group: 1 105529 105530 105531 105535 105544 105549	Dose Level: 50.0 62.0 57.0 159.0 86.0 100.0	0 1.020 1.015 1.023 1.009 1.017	Dosage 8.0 8.0 8.5 8.0 8.0	Unit:	mg/kg/day
MEAN S.D. N	85.7 40.59 6	1.016 .0050 6	.20		
Group: 2	Dose Level:	0.03	Dosage	Unit:	mg/kg/day
I05537 I05541 I05547 I05550	108.0 38.0 95.0 64.0	1.020	7.5 8.0		
MEAN S.D. N	76.2 31.48 4	1.016 .0054 4	7.6 .48 4		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
105532 105538 105539 105545 105548 105552	118.0 61.0 70.0 66.0 82.0 43.0	1.010 1.021 1.022 1.013 1.014 1.023	8.0 8.0 8.0 7.5 8.0 8.0		
MEAN S.D. N	73.3 25.33 6	1.017 .0055 6	7.9 .20 6		

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	U VOL ML	SP GR	U PH	
Group: 4	Dose Level	: 0.75	Dosage Ur	nit: mg/kg/day
105533	47.0	1.016	7.5	
I05534	82.0	1.015	8.0	
T05536	72.0	1.017	8.0	
I05540	450.0	1.003	7.5	
I05542	84.0	1.018	8.0	
I05551	56.0	1.018	8.0	
MEAN	131.8	1.014	7.8	
S.D.	156.54	.0058	.26	
M				

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Individual Clinical Urinalysis Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

U PRO 1	U GLU U	KET U BIL	I U BLOOD	UROBILI
MG/DL				
Dose Level:	0	Dosage Unit:	mg/kg/day	
10 -	-	-	-	-
10 -	-	-	-	-
10 -	-	-	-	-
10 -	-	-	-	-
10 -	-	-	-	_
10 -	-	-	+	-
Dose Level:	0.03	Dosage Unit:	mg/kg/day	
		-	-	-
		-	-	-
		-	-	-
10 -	-	-	-	-
B	0 7 5	T	/1 / 1	
Dose Level:	0.15	Dosage Unit:	mg/kg/day	
1.0				
	_	_	_	_
	_	_	_	_
	-	_	-	_
	_	_	-	-
	-	-	-	-
10 -	-	-	-	-
Dose Level:	0.75	Događe Ilnit.	ma/ka/day	
DODG BETGET	0.75	bodage onit.	mg, ng, dag	
30 -	+++	_	+++	_
10 -		_	+	_
10 -	-	_	-	_
10 -	_	_	_	_
10 -	-	_	-	_
10 -	-	_	-	_
	MG/DL Dose Level: 10	MG/DL Dose Level: 0 10	MG/DL Dose Level: 0 Dosage Unit: 10	MG/DL Dose Level: 0 Dosage Unit: mg/kg/day 10

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Individual Clinical Urinalysis Data

Females Day 182

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Le	vel: 0	Dosa	ge Unit: mg	j/kg/day				
105529 105530 105531 105535 105544 105549	0 0 0 0 0	0 0 0 0 0 0	1 0 1 1 1	3 3 3 3 3	0 0 1G 0 0	4B1D 4B2D 4B1E 4D 4B 2B1D	0 0 0 0 0	BL BK BK BL BL	- - - - -
Group: 2	Dose Le	vel: 0.03	Dosa	ge Unit: mg	j/kg/day				
I05537 I05541 I05547 I05550	0 0 0	1 1 0 0	1 1 1	3 3 3 3	0 0 0	3B2E 3B1E 4B 4B1E	0 0 0	BK BL BK BL	- - P
Group: 3	Dose Le	vel: 0.15	Dosa	ge Unit: mg	j/kg/day				
105532 105538 105539 105545 105548 105552	0 0 0 0	3 0 0 0 0 0	0 1 0 1 1	3 2 1 2 3 3	0 0 0 0	2B2E 4B2E 3B1E 2B2D 3B 3B3D	0 1F 0 0 0	BK BL BK BK BL	- - - - -
Group: 4	Dose Lev	zel: 0.75	Dosa	ge Unit: mg	g/kg/day				
105533 105534 105536 105540 105542 105551	2 0 0 0 0	0 1 0 0 0 0	1 1 2 1 0	3 3 2 2 2 3 3	0 0 0 0 0	0 3B 4B3D 1B 4B 3B3D	0 0 0 0 0	BK BL BL AK BK BL	- - - - -

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Individual Clinical Urinalysis Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER		U VOL ML		SP GR		U	PH			
Group:	1	Dose Le	vel:	0			Dosage	Unit:	mg/kg/day	
I05520 I05526		162.0 197.0		1.010			7.5 7.0			
MEAN S.D. N		179.5 24.7 2	5		0					
Group:	3	Dose Le	vel:	0.15			Dosage	Unit:	mg/kg/day	
I05505 I05523		296.0 183.0		1.005			7.5 7.5			
MEAN S.D. N		239.5 79.9 2	0		8					
Group:	4	Dose Le	vel:	0.75			Dosage	Unit:	mg/kg/day	
I05511 I05522		62.0 113.0					6.5 7.5			
MEAN S.D. N		87.5 36.0	6	.002	8		.71			

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Individual Clinical Urinalysis Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U PRO U GLU MG/DL	U KET U BILI	U BLOOD UROBILI
Group: 1	Dose Level: 0	Dosage Unit: mg	/kg/day
I05520 I05526	0 - 0 -	<u> </u>	: :
Group: 3	Dose Level: 0.15	Dosage Unit: mg	/kg/day
I05505 I05523	0 - 0 -	: :	
Group: 4	Dose Level: 0.75	Dosage Unit: mg	/kg/day
I05511 I05522	0 0 - -	ī ī	+ -

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Individual Clinical Urinalysis Data

Males Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1	Dose Leve	el: 0	Dosag	ge Unit: mg	r/kg/day			
I05520 I05526	0	1 0	0 1	1 2	0	4B 4B	BK BJ	- Q
Group: 3	Dose Leve	el: 0.15	Dosag	je Unit: mg	/kg/day			
I05505 I05523	0	0	0	2 2	0	2B 2B	AJ AK	- Q
Group: 4	Dose Leve	el: 0.75	Dosag	ge Unit: mg	g/kg/day			
I05511 I05522	0	0	1 0	3	0	3B 3B	BK BK	-

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Individual Clinical Urinalysis Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL SP GR ML	U PH
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05529 I05549	88.0 1.020 198.0 1.009	8.0 7.5
MEAN S.D. N	143.0 1.014 77.78 .0078 2 2	
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05539 I05552	178.0 1.015 64.0 1.015	
MEAN S.D. N	$\begin{array}{ccc} 121.0 & 1.015 \\ 80.61 & .0000 \\ & 2 & 2 \end{array}$	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05533 I05542	63.0 1.015 115.0 1.015	7.0 8.0
MEAN S.D. N	89.0 1.015 36.77 .0000 2 2	

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Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

			-				
ANIMAL NUMBER	U PRO MG/DL	U GLU	U	KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level	.: 0		Dosage	Unit: mg,	/kg/day	
I05529 I05549	0 -		-		-	- +	-
Group: 3	Dose Level	: 0.15		Dosage	Unit: mg,	/kg/day	
I05539 I05552	10 10		- +		-	+++	-
Group: 4	Dose Level	.: 0.75		Dosage	Unit: mg,	/kg/day	
I05533 I05542	0 -		+		-	-	-

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Individual Clinical Urinalysis Data

Females Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1 Dose Level: 0 Dosage Unit: mg/kg/day								
I05529 I05549	0	0	1 0	3 3	0	4B 3B	CK AK	-
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	/kg/day			
I05539 I05552	4 0	0	1	3 3	0	4B3E 4B	BK BK	-
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	/kg/day			
I05533 I05542	0	0	1	3	0	4B 3B	BK BK	P -

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Individual Clinical Urinalysis Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER		U РН
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05520 I05526	202.0 1.008 189.0 1.010	7.5 8.0
MEAN S.D. N	195.5 1.009 9.19 .0014 2 2	
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05505 I05523	290.0 1.005 102.0 1.014	7.5 7.5
MEAN S.D. N	196.0 1.010 132.94 .0064 2 2	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05511 I05522	62.0 1.014 104.0 1.020	
MEAN S.D.	83.0 1.017 29.70 .0042	.35

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Individual Clinical Urinalysis Data

Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U PRO MG/DL	U GLU	U 	KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level	l: 0		Dosage	Unit: mg/	/kg/day	
I05520 I05526	0 .	-	-		-	-	-
Group: 3	Dose Leve	1: 0.15		Dosage	Unit: mg/	kg/day	
I05505 I05523	0 0	-	-		-	-	-
Group: 4	Dose Level	l: 0.75		Dosage	Unit: mg/	kg/day	
I05511 I05522	0	- -	-		-	-	-

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Males Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	e Unit: mg	ı/kg/day				
I05520 I05526	0	0	1 0	3	0	0 1D	0	AJ AJ	Q -
Group: 3	Dose Lev	el: 0.15	Dosag	e Unit: mg	/kg/day				
I05505 I05523	0	0 1	0 1	3 2	0 1H	0 2B2F	0	AJ AJ	- PQ
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	J/kg/day				
I05511 I05522	0	0	1 0	2 3	0	3D 4B	0	BJ BL	-

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Individual Clinical Urinalysis Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER			L 	SP	GR	U 	PH			
Group:	1	Dose :	Level:	0			Dosage	Unit:	mg/kg/day	
I05529 I05549		46 188	. 0	1.	026 010		8.0 8.0			
MEAN S.D. N					018 0113 2					
Group:	3	Dose :	Level:	0.	15		Dosage	Unit:	mg/kg/day	
I05539 I05552					015 018		7.0 7.5			
MEAN S.D. N			.93		016 0021 2		7.2 .35 2			
Group:	4	Dose :	Level:	٥.	75		Dosage	Unit:	mg/kg/day	
I05533 I05542					014 019		7.5 8.0			
MEAN S.D. N		48	.79		016 0035 2		7.8 .35			

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Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U PRO MG/DL	n Grn	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level	.: 0	Dosage	Unit: mg/	kg/day	
I05529 I05549	10 -	-		-	-	-
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day	
I05539 I05552	0 -	-		-	-	-
Group: 4	Dose Level	.: 0.75	Dosage	Unit: mg/	kg/day	
I05533 I05542	10 -	+	÷ -	-	-	-

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Individual Clinical Urinalysis Data

Females Day 245

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	ge Unit: mg	ı/kg/day				
I05529 I05549	0	0	0	3	0	3B1D 2B	1E 0	BK BJ	-
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	/kg/day				
I05539 I05552	0	0	1	3 1	0	1B 4B1E	0	BJ BL	-
Group: 4	Dose Lev	rel: 0.75	Dosag	ge Unit: mg	/kg/day				
I05533 I05542	0	1 0	1 1	3 2	0	2B1D 3B2E	0 2 F	BK BL	-

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Individual Clinical Urinalysis Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL SP GR ML	U PH
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05520 I05526	248.0 1.004 320.0 1.003	6.5 7.0
MEAN S.D. N	284.0 1.004 50.91 .0007 2 2	
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05505 I05523	354.0 1.004 114.0 1.010	7.5 7.0
MEAN S.D. N	234.0 1.007 169.71 .0042 2 2	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05511 I05522	32.0 1.026 103.0 1.011	
MEAN S.D. N	67.5 1.018 50.20 .0106 2 2	7.0 .71 2

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Individual Clinical Urinalysis Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTAME SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

			-				
ANIMAL NUMBER	U PRO MG/DL	U GLU	U	KET	U BILI	U BLOOD	URCBILI
Group: 1	Dose Level	.: 0		Dosage	Unit: mg	/kg/day	
I05520 I05526	0 -		-		_	-	-
Group: 3	Dose Level	: 0.15		Dosage	Unit: mg	/kg/day	
I05505 I05523	0 10		-		-	- +++	-
Group: 4	Dose Level	.: 0.75		Dosage	Unit: mg	/kg/day	
I05511 I05522	10 -		+		-	-	-

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Individual Clinical Urinalysis Data

Males Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	ge Unit: mg	g/kg/day			
I05520 I05526	0	0	0	3 2	0	0	AJ AJ	Ī
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	g/kg/day			
I05505 I05523	0	0	0	3 3	0	0	AJ BJ	- PQ
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	g/kg/day			
I05511 I05522	0	0	0	2 3	0	1B4E 1B	BJ BJ	-

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Individual Clinical Urinalysis Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL SP GR ML	U РН
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05529 I05549	118.0 1.007 165.0 1.005	7.5 8.0
MEAN S.D. N	141.5 1.006 33.23 .0014 2 2	
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05539 I05552	90.0 1.016 37.0 1.023	7.5 7.5
MEAN S.D. N	63.5 1.020 37.48 .0050 2 2	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05533 I05542	23.0 1.011 106.0 1.010	
MEAN S.D. N	64.5 1.010 58.69 .0007 2 2	

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Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

			-			
ANIMAL NUMBER	U PRO MG/DL	U GLU	U KET	U BILI	U BLOOD	UROBILI
Group: 1	Dose Level	: 0	Dosage	Unit: mg/	'kg/day	
I05529 I05549	0 - 0 -		_	-	-	-
Group: 3	Dose Level	: 0.15	Dosage	Unit: mg/	kg/day	
I05539 I05552	10 - 10 -		- ++	-	-	-
Group: 4	Dose Level	: 0.75	Dosage	Unit: mg/	kg/day	
I05533 I05542	10 -		- ++	- -	-	_

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Individual Clinical Urinalysis Data

Females Day 274

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	ge Unit: mg	g/kg/day			
I05529 I05549	0	0	1	3	0	0 1D	AJ AJ	P -
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	g/kg/day			
I05539 I05552	0	1 0	1	3 3	0	1B2E 4B	BJ BL	-
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	g/kg/day			
I05533 I05542	0	0	0 1	3	0	4B 1B	BL BJ	- P

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Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL SP GR ML	U PH
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05520 I05526	116.0 1.015 476.0 1.002	
MEAN S.D. N	296.0 1.008 254.56 .0092 2 2	6.8 .35 2
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05505 I05523	166.0 1.009 33.0 1.023	
MEAN S.D. N	99.5 1.016 94.05 .0099 2 2	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05511 I05522	51.0 1.013 44.0 1.026	
MEAN S.D. N	47.5 1.020 4.95 .0092 2 2	

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Individual Clinical Urinalysis Data

Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U PRO U GLU MG/DL	U KET U BILI	U BLOOD UROBILI
Group: 1	Dose Level: 0	Dosage Unit: mg	/kg/day
I05520 I05526	0 - 0 -	+++ -	
Group: 3	Dose Level: 0.15	Dosage Unit: mg	/kg/day
I05505 I05523	0 - 0 -	- +++ -	<u>-</u> <u>-</u> -
Group: 4	Dose Level: 0.75	Dosage Unit: mg	/kg/day
I05511 I05522	0 - 0 -	++++ -	: :

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Males Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	Dosag	ge Unit: mg	g/kg/day			
I05520 I05526	0	0	1	1	0	1B 0	BJ AJ	- Q
Group: 3	Dose Lev	rel: 0.15	Dosag	ge Unit: mg	g/kg/day			
I05505 I05523	0 0	1 0	1	3 3	0	3B 2B	BJ BJ	-
Group: 4	Dose Lev	rel: 0.75	Dosag	ge Unit: mg	g/kg/day			
I05511 I05522	0	1 0	1 0	2 2	0	2B 0	BJ BJ	Q Q

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Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL SP GR ML	U PH
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05529 I05549	87.0 1.010 354.0 1.003	8.0 8.0
MEAN S.D. N	220.5 1.006 188.80 .0050 2 2	
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05539 I05552	76.0 1.015 42.0 1.021	
MEAN S.D. N	59.0 1.018 24.04 .0042 2 2	6.5 .71 .2
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05533 I05542	71.0 1.017 113.0 1.012	
MEAN S.D. N	92.0 1.014 29.70 .0035 2 2	6.8 .35 2

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Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U PRO U MG/DL	GLU U	KET U BIL	U BLOOD	UROBILI
Group: 1	Dose Level:	U	Dosage Unit:	mg/kg/day	
I05529 I05549	0 - 10 -	-		- ++	-
Group: 3	Dose Level:	0.15	Dosage Unit:	mg/kg/day	
I05539 I05552	0 -	++		-	-
Group: 4	Dose Level:	0.75	Dosage Unit:	mg/kg/day	
I05533 I05542	10 -	+++	-	++	-

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Females Day 322

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	ge Unit: mg	g/kg/day			
I05529 I05549	0	1 0	1	2 3	0	2B 0	BJ AJ	-
Group: 3	Dose Lev	el: 0.15	Dosag	ge Unit: mg	g/kg/day			
I05539 I05552	0	1 0	1	3 3	0	1D 1B	BK CJ	-
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	g/kg/day			
I05533 I05542	0	1 1	1 1	2 1	0	0	BJ BJ	-

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APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 364

26-WEEK	CAPSULE	TOXICITY	STUDY W	ITH PERF	LUOROOCTANE	SULFONIC	ACID
	POTA:	SSTUM SAL	T (PEOS:	T-6295)	IN CYNOMOLO	TIS	

ANIMAL NUMBER	U VOL SP GR ML	U PH
Group: 1	Dose Level: 0	Dosage Unit: mg/kg/day
I05520	149.0 1.019	8.0
I05526	264.0 1.015	7.5
MEAN	206.5 1.017	7.8
S.D.	81.32 .0028	.35
N	2 2	.2
Group: 3	Dose Level: 0.15	Dosage Unit: mg/kg/day
I05505	82.0 1.018	8.0
I05523	67.0 1.018	7.0
MEAN	74.5 1.018	7.5
S.D.	10.61 .0000	.71
N	2 2	.2
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05511	100.0 1.015	7.5
I05522	80.0 1.022	6.0
MEAN	90.0 1.018	6.8
S.D.	14.14 .0050	1.06
N	2	2

800

APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 364

				-		
26-WEEK				TH PERFLUOROO T-6295) IN CYI		NIC ACID
ANIMAL NUMBER	U PRO MG/DL	U GLU	υ к	ET UBILI	U BLOOD	UROBILI
Group: 1	Dose Lev	el: 0	De	osage Unit: m	g/kg/day	
I05520 I05526	10 10	++++	-	-	++	-
Group: 3	Dose Lev	el: 0.15	De	osage Unit: m	g/kg/day	
I05505 I05523	0 10	+	++	-	+ +++	Ī
Group: 4	Dose Lev	el: 0.75	Do	osage Unit: m	g/kg/day	
I05511 I05522	10 10	- +	-	-	++	-

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APPENDIX 4

Individual Clinical Urinalysis Data

Males Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	e Unit: mg	/kg/day				
I05520 I05526	0	1 0	1	3 3	0	3B1E 3B1K	1K 0	BL BL	_ Q
Group: 3	Dose Lev	el: 0.15	Dosag	e Unit: mg	/kg/day				
I05505 I05523	0	0 1	1	2 3	0	3B3D 3B3D	0	BL CK	Ī
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	/kg/day				
I05511 I05522	0	0	0 1	3 3	0	4B3D 3B	0	BK BL	-

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APPENDIX 4 Individual Clinical Urinalysis Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL 8	SP GR	U PH		
Group: 1	Dose Level:	0	Dosage	: Unit:	mg/kg/day
I05529 I05549	166.0 150.0	1.011	8.0 8.0		
MEAN S.D. N	$\substack{158.0\\11.31\\2}$	1.011 0000	8.0 .00 2		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
I05539 I05552	78.0 59.0	1.020	7.0 7.0		
MEAN S.D. N	68.5 13.44 2	1.021 .0014 2	7.0 .00 2		
Group: 4	Dose Level:	0.75	Dosage	Unit:	mg/kg/day
I05533 I05542	43.0 109.0	1.018	6.5 7.5		
MEAN S.D. N	76.0 46.67 2	1.018 .0007	7.0 .71 2		

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APPENDIX 4 Individual Clinical Urinalysis Data Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

		E O LEA	DOTOR DALL (ELOD,	1-0233/ IN C	THOMOLIGOS	
ANIMAL NUMBER		U PRO MG/DL	U GLU	U :	KET U BILI	U BLOOD	UROBILI
Group:	1	Dose Le	evel: 0	1	Dosage Unit:	mg/kg/day	
I05529 I05549		0	+ +	-	-	++	-
Group:	3	Dose Le	evel: 0.15	1	Dosage Unit:	mg/kg/day	
I05539 I05552		10 10	+	+++	-	+++	-
Group:	4	Dose Le	evel: 0.75	1	Dosage Unit:	mg/kg/day	
I05533 I05542		10 10	- +	++	=	++	_

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APPENDIX 4

Individual Clinical Urinalysis Data

Females Day 364

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	rel: 0	ge Unit: mg						
I05529 I05549	0	0	0	3 3	0	4B2D 4B1D	3 K 0	BL BL	-
Group: 3	Dose Lev	el: 0.15	Dosag	re Unit: mg	/kg/day				
I05539 I05552	0	0	1	3 3	0	4K 3B1D	0	BK BL	Ī
Group: 4	Dose Lev	el: 0.75	Dosag	ge Unit: mg	/kg/day				
I05533 I05542	0	0	1 0	3	0	2B 3B3K	0	BK BL	-

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APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL 8	SP GR	U PH		
Group: 1	Dose Level:	0	Dosage	Unit:	mg/kg/day
I05520 I05526	100.0 270.0	1.012 1.008	8.0		
MEAN S.D. N	185.0 120.21 2	1.010	8.0 .00 2		
Group: 3	Dose Level:	0.15	Dosage	Unit:	mg/kg/day
I05505 I05523		1.004	8.0 8.0		
MEAN S.D. N	182.0 147.08 2	1.008	8.0 .00 2		
Group: 4	Dose Level:	0.75	Dosage	Unit:	mg/kg/day
I05511 I05522	90.0 78.0	1.008 1.015	8.0 8.0		
MEAN S.D. N	84.0 8.49 2	1.012	8.0 .00 2		

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APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 456

			•		
26-WEEK			VITH PERFLUOROC T-6295) IN CY		NIC ACID
ANIMAL NUMBER	U PRO 1 MG/DL	n Grn n	KET U BILI	U BLOOD	UROBILI
Group: 1	Dose Level:	0	Dosage Unit: W	g/kg/day	
I05520 I05526	0 -	_	-	-	-
Group: 3	Dose Level:	0.15	Dosage Unit: π	g/kg/day	
I05505 I05523	0 10 -	Ξ	-	Ī	-
Group: 4	Dose Level:	0.75	Dosage Unit: W	g/kg/day	
I05511 I05522	0 - 0 -	-	=	-	_

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APPENDIX 4

Individual Clinical Urinalysis Data

Males Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF P	EPITH ER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Leve	1: 0	Dosage	: Unit: mg/	kg/day				
I05520 I05526		0 0	-	3 3	0	1B1D 0	0	BK AJ	-
Group: 3	Dose Leve	1: 0.15	Dosage	: Unit: mg/	kg/day				
I05505 I05523	0	0 0		2 3	0	0 4B1D	0	AJ BK	ō
Group: 4	Dose Leve	1: 0.75	Dosage	: Unit: mg/	kg/day				
I05511 I05522	0	0 1	i	3	0	0 2B4D	0	BJ BJ	Q.

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APPENDIX 4 Individual Clinical Urinalysis Data

Females Day 456

			JOROOCTANE SULFONIC ACID	
POTA.	SSIUM SALT (PF	OS; T-6295) I	N CYNOMOLGUS	

ANIMAL NUMBER	U VOL SE	GR	U PH		
Group: 1	Dose Level: 0)	Dosa	ge Unit:	mg/kg/day
I05529 I05549		.013	8.0 8.0		
MEAN S.D. N	214.0 1 164.05 2	.009 .0057 2	8.0 .0 2	0	
Group: 3	Dose Level: 0	.15	Dosa	ge Unit:	mg/kg/day
I05539 I05552		008	7.5 8.0		
MEAN S.D. N	145.0 1 74.95 2	.011	7.8 .3 2	5	
Group: 4	Dose Level: 0	.75	Dosa	ge Unit:	mg/kg/day
I05533 I05542		002	8.0 8.0		
MEAN S.D. N	118.0 1 82.02	.005	8.0	0	

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APPENDIX 4 Individual Clinical Urinalysis Data Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

		E O LEG	STOR SALL (ELOD,	1-029.	1) THE CTIME	NUCLIGOR	
ANIMAL NUMBER		U PRO MG/DL	U GLU	U 	KET	U BILI	U BLOOD	UROBILI
Group:	1	Dose Le	evel: 0		Dosage	Unit: mg,	/kg/day	
I05529 I05549		0 10	-	-		-	- +++	_
Group:	3	Dose Le	evel: 0.15		Dosage	Unit: mg,	/kg/day	
I05539 I05552		0	Ī	-	:	-	-	-
Group:	4	Dose Le	evel: 0.75		Dosage	Unit: mg,	/kg/day	
I05533 I05542		0	-	-		-	- +	-

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APPENDIX 4

Individual Clinical Urinalysis Data

Females Day 456

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	e Unit: mg	/kg/day				
I05529 I05549	0	0	1	3	0	2B4D	0	BK AJ	-
105549	U	1	1	3	U	U	u	AU	-
Group: 3	Dose Lev	el: 0.15	Dosag	e Unit: mg	/kg/day				
I05539	0	1	1	3	9	0 3B	9	AJ BK	-
I05552	Ü	U	1	3	U	3B	U	BK	-
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	/kg/day				
I05533	0	0	1	3	0	2B	0	AK	_
I05542	0	0	0	3	0	4B	0	AL	-

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APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

	MAL		VOL ML	SP GR	U 	PH		
Gro	up:	1 Dos	se Leve	1: 0		Dosage	Unit:	mg/kg/day
	520 526		480.0 380.0	1.00		8.0		
MEZ S.I N			430.0 70.71 2			8.0 .00 2		
Gro	up:	3 Dos	se Leve	1: 0.15		Dosage	Unit:	mg/kg/day
	505 523		405.0 195.0	1.00		7.5 8.0		
MEA S.I N			300.0 148.49 2	.00		7.8 .35 2		
Gro	up:	4 Dos	se Leve	1: 0.75		Dosage	Unit:	mg/kg/day
	511 522		345.0 100.0	1.00		8.0		
MEA S.I N			222.5 173.24 2	1.01		8.0 .00 2		

812

APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 546

			-		
26-WEEK			TTH PERFLUOROOC T-6295) IN CYN		IIC ACID
ANIMAL NUMBER	U PRO U MG/DL	GLU U	KET U BILI	U BLOOD	UROBILI
Group: 1	Dose Level:	0	Dosage Unit: mg,	/kg/day	
I05520 I05526	0 -	_	-	-	_
Group: 3	Dose Level:	0.15	Dosage Unit: mg,	/kg/day	
I05505 I05523	0 -	-	Ξ.	-	-
Group: 4	Dose Level:	0.75	Dosage Unit: mg,	/kg/day	
I05511 I05522	0 -	=	-	_	-

813

APPENDIX 4 Individual Clinical Urinalysis Data

Males Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Level: 0 Dosage Unit: mg/kg/day								
I05520 I05526	0	0	1 0	1 3	0	1B 1B	0	AJ AJ	_ Q
Group: 3	Dose Lev	el: 0.15	Dosag	e Unit: mg	/kg/day				
I05505 I05523	0	0	0	2 1	0	0 2B	0	AJ AJ	ō.
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	/kg/day				
I05511 I05522	0	0	0	1 1	0	1B 2B1D	0 2E	AJ BK	Q

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APPENDIX 4 Individual Clinical Urinalysis Data Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	U VOL	SP GR	U PH	
Group: 1	Dose Level:	0	Dosage Unit: mg/kg/d	ay
I05529 I05549	105.0 160.0		8.0 8.0	
MEAN S.D. N	132.5 38.89 2	1.011 .0057 2	8.0 .00 2	
Group: 3	Dose Level:	0.15	Dosage Unit: mg/kg/d	ay
I05539 I05552	85.0 50.0	1.017 1.019	8.0 8.0	
MEAN S.D. N	67.5 24.75 2	1.018 .0014 2	8.0 .00 2	
Group: 4	Dose Level:	0.75	Dosage Unit: mg/kg/d	ay
I05533 I05542	42.0 156.0	1.017 1.010	8.0 8.0	
MEAN S.D. N	99.0 80.61	1.014 .0050	8.0 .00 .2	

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APPENDIX 4 Individual Clinical Urinalysis Data Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

		EOIM	BBICH BALL	(FFOD,	1-023	2) III CIII	NIOTIGO?	
ANIMAL NUMBER		U PRO MG/DL	n grn	U 	KET	U BILI	U BLOOD	UROBILI
Group:	1	Dose L	evel: 0		Dosage	Unit: mg	/kg/day	
I05529 I05549		0	-	-		_	-	-
Group:	3	Dose L	evel: 0.15		Dosage	Unit: mg	/kg/day	
I05539 I05552		10 10	-	-		-	-	-
Group:	4	Dose L	evel: 0.75		Dosage	Unit: mg	/kg/day	
I05533 I05542		0	-	-		_	-+++	_

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APPENDIX 4

Individual Clinical Urinalysis Data

Females Day 546

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS

ANIMAL NUMBER	RBC PER HPF	WBC PER HPF	EPITH PER HPF	BACT PER HPF	CASTS PER LPF	CRYSTALS PER LPF1	CRYSTALS PER LPF2	URINE APP1	COMMENTS
Group: 1	Dose Lev	el: 0	Dosag	e Unit: mg	/kg/day				
I05529 I05549	0	1 0	0	2 2	0	2B2D 2B	1F	BJ BJ	-
Group: 3	Dose Lev	el: 0.15	Dosag	e Unit: mg	/kg/day				
I05539 I05552	0	0	0	2 2	0	3B1E 2B2E	0	BK BL	Ī
Group: 4	Dose Lev	el: 0.75	Dosag	e Unit: mg	/kg/day				
I05533 I05542	0	0 1	0 1	2 1	0	3B3D 3B	0	BL AL	-

817

APPENDIX 5

Individual Palmitoyl CoA Oxidase Determinations
Individual Anatomic Pathology Data

Individual Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Malac

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	-	PCOZ IU/C					
Group:	1	Dose	Level:	0	Dosage	Unit:	mg/kg/day
I05508 I05517 I05519 I05527			4 4 6 7				
MEAN S.D. N			5 1.5 4				
Group:	2	Dose	Level:	0.03	Dosage	Unit:	mg/kg/day
I05514 I05515 I05516 I05521			4 5 4 6				
MEAN S.D. N			5 1.0 4				
Group:	3	Dose	Level:	0.15	Dosage	Unit:	mg/kg/day
I05510 I05518 I05524 I05528			6 5 5				
MEAN S.D. N			6 .6 4				

819

Individual Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Males

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	PCOAO IU/G	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05507 I05512	8 6	
MEAN S.D. N	$\begin{smallmatrix}7\\1.4\\2\end{smallmatrix}$	

820

Individual Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Females

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		PCO#	3					
Group:	1	Dose	Level:	0	Dosage	Unit:	mg/kg/day	
I05530 I05531 I05535 I05544			3 4 4 5					
MEAN S.D. N			4 .8 4					
Group:	2	Dose	Level:	0.03	Dosage	Unit:	mg/kg/day	
I05537 I05541 I05547 I05550			4 4 2 5					
MEAN S.D. N			4 1.3 4					
Group:	3	Dose	Level:	0.15	Dosage	Unit:	mg/kg/day	
I05532 I05538 I05545 I05548			5 5 6 7					
MEAN S.D.			6 1.0					

821

Individual Palmitoyl CoA Oxidase Determinations

Terminal Sacrifice

Females

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULPONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	PCOAO IU/G	
Group: 4	Dose Level: 0.75	Dosage Unit: mg/kg/day
I05534	6	
I05536	7	
I05540	6	
I05551	5	
MEAN	6	
S.D.	.8	
N .	4	

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Covance 6329-223 3M T-6295.7 APPENDIX 5

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Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 1
26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105506 S DATE OF DEATH: 02/20/99 S DATE AND TIME OF NECROESY: 02/2 POST-FIX WEIGHER: NOT AVAILABLE	THEY DAY OF DEATH: 179	STUDY WEEK OF DEATH, 26	TERMINAL BODY WE	IGHT: 3625.0 GRAMS NCY DIEDRICH CY DIEDRICH				
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)						
LP BFIDIDMIS (EPO) RT BFIDIDMIS (EP1) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA) LF THYBOLOPAPA (TT0)	1.2760 1.2520 6.1230 5.9240 88.6340 7.0730 7.0020 6.7010	.1689 % .1634 % 2.4451 % .1951 % .1932 % .1849 %	.0194 .0190 .0929 .0838 1.3443 .1073 .1062 .1016	WEIGHT TAKEN				
NEC	ROPSY	OBSERVATIONS	HISTOPATHOLO	GY				
	BONE, FEMUR (FE):							

BONE, FEMUR (FE):
-GROWTH FLATE OPEN,-MODERATELY SEVERE
BRAIN (BR):
-INFILTRATE, LYMPHOHISTICCYTIC, PERIVASCULAR,-MINIMAL
-INFILTRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR,-MINIMAL
-INFILTRATE, LYMPHOHISTICCYTIC, MENINGEAL,-SLIGHT
KIDNEY (KD):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL
-CAST, PROTEINACEOUS,-SLIGHT

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PAGE: 2

Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 2
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105506 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (M)
DATE OF DEATH: 02/20/99 STUDY DAY OF DEATH: 179 STUDY WESK OF DEATH: 26
DATE AND TIME OF NECROPSY: 02/20/99 12:40 PROSECTOR: DAVID SCHUETTE RECORDER: NAMCY DIEDRICH
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: NAMCY DIEDRICH

O B S E R V A T I O N S (CONTINUED)

NECROPSY

NECROPSY

HISTOPATHOLOGY

O N S (CONTINUED)

HISTOPATHOLOGY

LIVER (LI):
-IMPILTRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL
-HYPERTROPHY, HEPATOCELLULAR, -MODERATE, DIFFUSE
-STASIS, BILE, -SLIGHT, MULTI-FOCAL
THYMUS (TI):
-CYST, -PRESENT
-ATROPHY, -MODERATELY SEVERE
TRACHEA (TR):
-IMPILTRATE, LYMPHOHISTICCYTIC, -MINIMAL
ESOPHAGUS (ES):
-IMPILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
THYROID (TY):
-IMPILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
-CYST, ULTIMOBRANCHIAL, -PRESENT
ADREMAL, CORTEX (AC):
-MINERALIZATION, VASCULAR, -MINIMAL
SALIV GL, MANDIB (SG):
-IMPILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
SPINAL CORD (SC):
-IMPILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
SPINAL CORD (SC):
-IMPILTRATIC, LYMPHOHISTICCYTIC MENINGEAL/PERIVASCULAR, SSLIGHT
DUODENUM (DU):

-INFILTRATION, LYMPHOHISTICCTIC MEASURES., SLIGHT DUODENUM (DU):
-INFILTRATE, MACROPHAGE, PIGMENTED, -MODERATE JEJUNUM (JE):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT ILEUM (IL):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT URINARY BLADDER (UB):
-INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT

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Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 3
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105506 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (M)
DATE OF DEATH: 02/20/99 STUDY DAY OF DEATH: 179 STUDY WEEK OF DEATH: 26 TERMINAL BODY WEIGHT: 3625.0 GRAMS
DATE AND TIME OF NECROPSY: 02/20/99 12:40 PROSECTOR: DAVID SCHUETTE RECORDER: NANCY DIEDRICH
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: NANCY DIEDRICH

OBSERVATIONS (CONTINUED)

CAUSE OF DEATH (CD) : -UNDETERMINED,-PRESENT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS

THE FOLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:
BONE, PEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADBENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (FA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (FR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLORING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), LUNG (LU), HEART (HT), GALLBLADDER (GB),
SPLEEN (SP), LN, MESENTERIC (MS), PARATHYROID (PT), ADRENAL, MEDULLA (MA), AGRTA (AO), PITUITARY (PI),
MUSCLE, SKELETAL (SM), NERVE, SCIATIC (SN), STOMACH, GL (ST), PANCREAS (FA), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), PROSTATE (FR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 4
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105509 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 01/27/99 STUDY DAY OF DEATH: 155 STUDY WEEK OF DEATH: 23 TERMINAL BODY WEIGHT: NOT ENTERED
DATE AND TIME OF NECROPSY: 01/27/99 10:21 PROSECTOR: NANCY DIEDRICH RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEBDLE WEIGHER: NOT AVAILABLE

*** ORGAN WEIGHTS WERE NOT RECORDED ***

OBSERVATIONS

NECROPSY HISTOPATHOLOGY

BONE, FEMUR (FE):

-GROWTH PLATE OPEN,-MODERATELY SEVERE
MARROW, FEMUR (FM):

SECTION EXAMINED; TISSUE NOT PRESENT
KIDNEY (KD):

-MINERALIZATION, PAPILLARY,-MODERATE

-MINERALIZATION, FAPILLARY, FOUDERATE
LUNG (LU):
-FIBROSIS, PLEURAL/SUBPLEURAL, -MODERATE
-INFILITRATE, MACROPHAGE, ALVEOLAR, -MODERATE
-NECROSIS, SEVERE
-INFLAMMATION, ACUTE, -SEVERE
-FIBRIN, PLEURAL, -MODERATELY SEVERE

LUNG (LU):

-ADHESION(S); ALL LOBES TO EACH OTHER AND PLEURA: MULTIPLE INDISTINCT ADMESIONS; CANNOT DISTINGUISH LOBES FROM ONE ANOTHER; COLLECTED

-MOTTLED; ALL RIGHT LOBES: RED, DARK RED, AND TAN; LOBES APPEAR PIRM

-RECSION(S)/ULCERATION(S); APPEARS TO BE RIGHT CAUDAL LOBE: SINGLE ULCERATED AREA, 2.5 X 1.5 CM; ULCERATED AREA EXTENDS DEEP INTO LUNG TISSUE; WALLS OF ULCERATION APPEAR GREEN, TAN, GRAY AND MOIST; COLLECTED INTACT

LIVER (LI):

-MOTTLED; ALL LOBES: DARK BROWN AND TAN

-LARGE; ALL LOBES: THICKENED LIVER (LI):
-HYPERTROPHY, HEPATOCELLULAR, -SLIGHT, DIFFUSE
-VACUOLARION, HEPATOCELLULAR, CENTRILOBULAR, -MODERATE
THYMMS (TH):
-ATROPHY, MODERATE
TRACHEA (TR):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL
SALIV GL, MANDIB (SG):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL

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Covance 6329-223 3M T-6295.7 APPENDIX 5

Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 5 26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTAME SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105509 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 01/27/99 STUDY DAY OF DEATH: 155 STUDY WEEK OF DEATH: 23 TERMINAL BODY WEIGHT: NOT ENTERED
DATE AND TIME OF NECROPSY: 01/27/99 10:21 PROSECTOR: NANCY DIEDRICH RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: NOT AVAILABLE

NECROPSY

PATHOLOGIST: ROBERT LEEDLE WEIGHER: NOT AVAILABLE

O B S E R V A T I O N S (CONTINUED)

HISTOPATHOLOGY

JEJUNUM (JE):
- INFILTRATE, MACROPHAGE, PIGMENTED, MODERATE
ILEUM (IL):
- INFILTRATE, MACROPHAGE, PIGMENTED, SLIGHT
COLON (CO):

JEDARK BROWN SUNREMARKABLE
TION COLON (CO):
-DARK FOCUS(I)/AREA(S); WITHIN MUCOSA: SINGLE DARK BROWN AREA, 0.3 X 0.2 CM; COLLECTED ON ROUTINE SECTION

CAUSE OF DEATH (CD):
-NECROSIS, PULMONARY,-PRESENT
LN, TRACHEOBRON (TE):
-INFLAMMATION, ACUTE,-MODERATE LN, TRACHEOBRON (TB):
-LARGE; UP TO 1.0 X 0.9 X 0.5 CM (CAP 29)

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Individual Anatomic Pathology Data

Unscheduled Deaths

PAGE: 6 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105509 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: UNSCHEDULED (D)
DATE OF DEATH: 01/27/99 STUDY DAY OF DEATH: 155 STUDY WEEK OF DEATH: 23 TERMINAL BODY WEIGHT: NOT ENTERED
DATE AND TIME OF NECROPSY: 01/27/99 10:21 PROSECTOR: NANCY DIEDRICH RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: NOT AVAILABLE

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), GALLBLIADDER (GB), SPLEEN (SP), THYMUS (TH), LM, MESENTERIC (MS), TRACHER (TR), ESOPHAGUS (ES),
THYROID (TY), PARATHYROID (TY), PARATHYROID (TY), PARATHYROID (TY), PARATHYROID (TY), PARATHYROID (TY), PARATHYROID (SC), NEWER, SCIATIC (SN), STOMACH, GL (ST),
DUODENUM (DU), PARORRAS (PA), JEJUNUM (JE), LIEUM (LL), CECUM (CB), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM),
URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT),
GENERAL COMMENT (GC), LN, ANT MES/FANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:

MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), HEART (HT), GALLBLADDER (GB), SPLEEN (SP),

LN, MESENTERIC (MS), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADREMAL, CORTEX (AC), ADREMAL, MEDULLA (MA),

AORTA (AC), PITUITARY (FI), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),

DUODENUM (DU), PANCREAS (PA), CECUM (CE), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB),

PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 1
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105508 DATE OF DEATH: 02/25/99 DATE AND TIME OF NECROPSY: 02/ POST-FIX WEIGHER: NOT AVAILABI	(25/99 10:24 PROSECTOR PATHOLOGI	R: KEVIN BILLINGS IST: ROBERT LEEDLE	RECORDER: MI WEIGHER: MIC	CHELE ZIMA HELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF EPIDIDYMIS (EP0) RT EPIDIDYMIS (EP1) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCERAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	ABSOLUTE ORGAN WEIGHT (GRAMS)2650 -2010 62.3670 .8310 1.0370 5.8660 5.4930 59.3880 5.5360 5.1190 4.3000 .1520 .1390	.0081 % .0061 % .0985 % .0253 % .0316 % .1786 % .1672 % .1672 % .1685 % .1558 % .1309 % .0046 %	.0042 .0032 1.0000 .0133 .0166 .0941 .0881 .9522 .0888 .0821 .0689	WEIGHT TAKEN
		BSERVATIONS	HISTOPATHOLO	
BONE, FEMUR (FE): -GROWTH PLATE OPEN, -MODERATELY SEVERE KIDNEY (KD): -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT -GLOMERULOSCLEROSIS, -MINIMAL LUNG (LU): -RED FOCUS(1)/AREA(S); ALL LOBES: MULTIPLE DARK RED PINPOINT FOCI SPLEEN (SP): -LARGE; 7.0 X 4.0 X 3.0 CM BONE, FEMUR (FE): -GROWTH PLATE OPEN, -MODERATELY SEVERE KIDNEY (KD): -INFILTRATE, LYMPHOHISTICCYTIC, PERIBRONCHIOLAR/PERIVASCULAR, SLIGHT LIVER (LI): -INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL SPLEEN (SP): -UNREMARKABLE			GHT CHIOLAR/PERIVASCULAR,-	

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 2
26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105508 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 3285.0 GRAMS PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECCOPSY

HISTOPATHOLOGY

HISTOPATHOLOGY

HISTOPATHOLOGY

LN, MESENTERIC (MS):
-HEMORRHAGE, -SLIGHT

TRACEBA (TR):
-INPILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
SALIV GL, MANDIB (SG):
-INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
COLON (CO):
-INFILTRATE, EOSINOPHILIC, -SLIGHT
MAMMARY, MALE (MM):
>SECTION EXAMINED; TISSUE NOT PRESENT
PROSTATE (PR):
-INFLAMMATION, LYMPHOHISTICCYTIC, -MINIMAL

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.4890 GRAMS BILE VOLUME IS
1.6000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 3 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105508 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3285.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 10:24 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA WEIGHER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA WEIGHE

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:

MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), HEART (HT), GALLBLADDER (GB),
THYMUS (TH), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADREMAL, CORTEX (AC), ADREMAL, MEDULLA (MA),
AORTA (AO), PITUTITARY (FI), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), LLEUM (IL), CECUM (CE), RECTUM (RE), SKIN (SK), URINARY BLADDER (UB),
SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 4

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105517 SEX: DATE OF DEATH: 02/25/99 STUDY DATE AND TIME OF NECROPSY: 02/25/99 POST-FIX WEIGHER: NOT AVAILABLE	MALE DOSE GI DAY OF DEATH: 184 8:11 PROSECTOI PATHOLOG	ROUP: 1 SACRIFICE STA STUDY WEEK OF DEATH: 27 R: KEVIN BILLINGS IST: ROBERT LEEDLE	TUS: SCHEDULED, TERMII) TERMINAL BODY WE RECORDER: MI WEIGHER: MIC	NAL SACRIFICE IGHT: 3055.0 GRAMS CHELE ZIMA HELE ZIMA
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)		ORGAN STATUS
RIGHT ADRENAL (AD1) BRAIN (BR) LF EPIDIDYMIS (EP0) RT BEIDIDYMIS (EP1) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA)	.1430 62.4920 1.0930 1.2250 5.9980 5.7530 44.2710 8.0310 8.1650 5.8790 .14400	2.0456 % 0.358 % 0.401 % 1.963 % 1.883 % 1.4491 % 2.629 % 2.674 % 1.924 %	.0045 .0023 1.0020 .0175 .0196 .0960 .0921 .7084 .1285 .1307 .0941 .0024	WEIGHT TAKEN
NECROPS		BSERVATIONS	HISTOPATHOLO	ЭY
		BONE, FEMUR (FE		

BONE, FEMUR (PE):

-GROWTH PLATE OPEN,-MODERATE
MARROW, FEMUR (PM):

>SECTION EXAMINED; TISSUE NOT PRESENT
LUNG (LU):

-HYPERPLASIA, LYMPHOCYTIC, PERIBRONCHIOLAR/PERIVASCULAR,MINIMAL
LIVER (LI):

-INPILITRATE, LYMPHOHISTICCYTIC,-MINIMAL, MULTI-POCAL
LN, MESENTERIC (MS):

-INFILITRATE, MACROPHAGE, PIGMENTED,-MODERATE

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105517 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 3055.0 GRAMS PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECCOPSY

HISTOPATHOLOGY HISTOPATHOLOGY

TRACHEA (TR):
-IMPILITRATE, LYMPHOHISTICCYTIC, -SLIGHT
ADREMAL CORTEX (AC):
-HYPERTROPHY CORTICAL CELL, -MINIMAL
SALIV GL, MANDIB (SG):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL
PANCRES (PA):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL
COLON (CO):
-PARASITISM, INTRAMUSCULAR, -PRESENT GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-BYES - DAVIDSONS
-NO MACROSCOPIC LESIONS
GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.6330 GRAMS BILE VOLUME IS
1.6000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

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Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105517 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3055.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 8:11 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

X WEIGHER: NOT AVAILABLE

FATHOLOGIST: ROBERT LEEDLE

GROAMS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (PE), MARROW, FEMUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SF), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESCHEMAGUS (ES), THYROID (TY), PARAPHYROID (TF), ADRENAL, MCDULA (MA), AORTHA (ACO),
PITUITARY (PI), SALIV GL MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), DEJUNUM (JE), ILEUM (LI), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), HEART (HT), GALLBLADDER (GB),
SPLEEN (SP), THYMUS (TH), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (FT), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), BERFE, SCLAITIC (SN), STOMACH, GL (ST), DUDDENUM (DU),
JEJUNUM (JE), ILEUM (IL), CECUM (CE), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB),
PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105519 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME OF NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	UDY DAY OF DEATH: 184 /99 6:57 PROSECTOR	STUDY WEEK OF DEATH: 27 : STEVE VAN ADESTINE	TERMINAL BODY WE RECORDER: TO	IGHT: 3140.0 GRAMS DD ACKER
	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)		STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (ER) LF BEIDIDYMIS (EF0) RT BEIDIDYMIS (EF1) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA) LF THYROID/PARA (TT0)	.2820 .2330 62.8980 .7730 .8270 5.5490 5.3860 53.1740 2.7780 2.9990 5.5570	.0090 % .0074 % 2.0031 % .0246 % .0246 % .1755 % 1.6934 % .0885 % .0985 %		WEIGHT TAKEN
NECR		BSERVATIONS	HISTOPATHOLO	 gy
		BONE, FEMUR (FE) : OPEN -MODERATELY SEVE	PF

BONE, FEMUR (FE):
-GROWTH FLATE OPEN,-MODERATELY SEVERE
MARROW, FEMUR (FM):
>SECTION EXAMINED; TISSUE NOT FRESENT
BRAIN (BR):
-INFILTRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR,-MINIMAL
KIDNEY (KD):
-INFILTRATE, LYMPHOHISTIOCYTIC,-MINIMAL
LUNG (LU):
-HYPEPLASIA, LYMPHOCYTIC, PERIBRONCHIOLAR/PERIVASCULAR,SLIGHT

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105519 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3140.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 6:57 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEBELE WEIGHER: TODD ACKER

O B S E R V A T I O N S (CONTINUED)

NECROPSY HISTOPATHOLOGY

HISTOPATHOLOGY

LIVER (LI):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL GALDELADDER (GB):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL TRACHEA (TR):
-INFILITRATE, LYMPHOHISTICCYTIC, -SLIGHT PARATHYROID (PT):
-CYST, -PRESENT
ADRENAL, CORTEX (AC):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL SALIV GL, MANDIB (SG):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL JUJUNUM (JE):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL JUJUNUM (JE):
-INFILITRATE, LYMPHOHISTICCYTIC, -MODERATE ILEUM (IL):

-- INPILTRATE, MACROPHAGE, PIGNENED, TODAY
ILEUM (IL):
-INPILTRATE, MACROPHAGE, PIGMENTED, -MODERATE
CECUM (CE):
-INPILTRATE, MACROPHAGE, PIGMENTED, -MODERATE
MAMMARY, MALE (MM):
-SSECTION EXAMINED; TISSUE NOT PRESENT
PROSTATE (PR):
-INPILAMMATION, LYMPHOHISTICCYTIC, -MINIMAL
BPIDIDYMIDES (EP):
-HYPOSPERNIA, -MODERATE
TESTIS (TE):
-IMMATURE, -PRESENT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS

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APPENDIX 5 Covance 6329-223
3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY NITH PERPLUOROCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS,T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105519 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3140.0 GRAMS POST-FIX WEIGHER: NOT AVAILABLE PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER

NECROPSY OB SER VATIONS (CONTINUED)

HISTOPATHOLOGY

GENERAL COMMENT (GC):
NO MACROSCOPIC LESIONS
GENERAL INFORMATION (XX):
NOTE: SQALLBLADDER WEIGHT IS 0.7260 GRAMS BILE VOLUME IS
1.2000 ML

THE POLLOGING ORGANS WERE UNREMARKABLE AT NECROPSY:
BOME, FENUR (FE). MARROW, FENUR (FM). MARROW, STERNUM (SE). BONE, STERNUM (SB), EYE (EY). BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HF). LIVER (LI), GALUBLADDER (BB), SPLEEN (SP), THYNUS (TH), LM MESENTERIC (MS), TRACHEA (TR), PITUTITARY (PI). SALIV GL, MARMARY MALE (MM), UNLINARY BLADDER (UE), PROSTATE (RE), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TE), LN, ANT MESSPONACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEUNINATION:
THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
SOPHAGUS (ES). THYROID (TY), ADRENAL, COPTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), SESTINAL (SE), MAMMARY MALE (MM), UNLINARY BLADDER (UE), PROSTATE (FR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TE), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
SOPHAGUS (ES). THYROID (TY), ADRENAL, MEDULLA (MA), AORTA (AO), PITUTTARY (PI), MUSCLE, SKELETAL (SM), SEPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH (BC), STEWNIM (SE), BONE, STERNUM (SB), STEWNIM (SB), BONE, STERNUM (SB), STOMACH (DB), PROSTATE (FR), SEMINAL VESICLES (SV), PIDIDYMIDES (PI), MUSCLE, SKELETAL (SM), SEPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH (AO), PITUTTARY (PI), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH (AO), AORTA (AO), PITUTTARY (PI), MUSCLE, SKE

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105527 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME 0F NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	UDY DAY OF DEATH: 184 /99 11:00 PROSECTO	STUDY WEEK OF DEATH: 27 R: KEVIN BILLINGS	TUS: SCHEDULED, TERMIN TERMINAL BODY WE: RECORDER: MIC WEIGHER: MICE	IGHT: 4680.0 GRAMS CHELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1)	.3120 .2600	.0067 % .0056 %	.0048	WEIGHT TAKEN WEIGHT TAKEN
BRAIN (BR)	64.8130	1.3849 %	1.0000	WEIGHT TAKEN
LF EPIDIDYMIS (EPO) RT EPIDIDYMIS (EP1)	1.8660 1.7750	.0399 % .0379 %	.0288 .0274	WEIGHT TAKEN WEIGHT TAKEN
LF KIDNEY (KD0) RT KIDNEY (KD1)	7.5090 7.3890	.1604 % .1579 %	.1159 .1140	WEIGHT TAKEN WEIGHT TAKEN
LIVER (LI)	62.8470	1.3429 %	.9697	WEIGHT TAKEN
LF TESTIS (TE0) RT TESTIS (TE1)	11.5730 10.6940	.2473 % .2285 %	.1786 .1650	WEIGHT TAKEN WEIGHT TAKEN
PANCREAS (PA) LF THYROID/PARA (TT0)	6.0920 .2380	.1302 %	.0940	WEIGHT TAKEN WEIGHT TAKEN
RT THYROID/PARA (110)	.2750	.0059 %	.0042	WEIGHT TAKEN
NECR		BSERVATIONS	HISTOPATHOLO	3Y

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULPONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN COMMONGUS MONEES

ANIMAL NUMBER: 105527 SEK: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY MEIGHT: 4880.0 GRAMS DATE AND TIME OF NECROPS: 02/25/99 11:00 PROSECTOR: KEVIN BILLINGS RECORDER: MICKELE ZIMA

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY HISTOPATHOLOGY

THYMUS (TH):
-ATROPHY,-SEVERE SALIV GL, MANDIS (S):
-INFILIPRATE, LYMPHOHISTICCYTIC,-MINIMAL HISTOPATHOLOGY

SKIN (SK):
-ARRASION(S)/ULCERATION(S); 2.0 CM FROM TIP OF TAIL: SINGLE RED, MOIST ABRADED AREA, 0.8 CM IN DIAMETER; COLLECTED

SKIN (SK):
-ARRASION(S)/ULCERATION(S); 2.0 CM FROM TIP OF TAIL: SINGLE RED, MOIST ABRADED AREA, 0.8 CM IN DIAMETER; COLLECTED

GENERAL COMMENT (GC):
-BODNE MARRON SMEAR TAKEN
-EVES - DAVIDSONS
GENERAL INFORMATION (XX):
-NOTE:>CALLBEADER WEIGHT IS 0.6430 GRAMS BILE VOLUME IS

2.4000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

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Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105527 SEX: MALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 4680.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 11:00 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

FACHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LL), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (FR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES KERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, STERNUM (SE), BONE, STERNUM (SB), BYE (EY), KIDNEY (KD), HEART (HT), GALLBLADDER (GB), SPLEEN (SP),
LN, MESENTERIC (MS), TRACHER (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC),
ADRENAL, MEDULLA (MA), AORTA (AO), PITUTARY (PI), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
PANCREAS (PA), JEJUNUM (JE), CECUM (CE), COLON (CO), RECTUM (RE), MAMMARY, MALE (MM), PROSTATE (PR),
SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105514 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME OF NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	UDY DAY OF DEATH: 184 /99 9:21 PROSECTOR	OUP: 2 SACRIFICE STA STUDY WEEK OF DEATH: 27 : KEVIN BILLINGS ST: ROBERT LEEDLE	TERMINAL BODY WE RECORDER: MI	IGHT: 3495.0 GRAMS CHELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1)	.3620 .2420	.0104 % .0069 %	.0058 .0039	WEIGHT TAKEN WEIGHT TAKEN
BRAIN (BR) LF EPIDIDYMIS (EPO)	62.4280 1.1580	1.7862 % .0331 %	1.0000	WEIGHT TAKEN WEIGHT TAKEN
RT EPIDIDYMIS (EP1) LF KIDNEY (KD0) RT KIDNEY (KD1)	1.0010 6.0230 6.1700	.0286 % .1723 % .1765 %	.0160 .0965 .0988	WEIGHT TAKEN WEIGHT TAKEN WEIGHT TAKEN
LIVER (LI) LF TESTIS (TE0)	64.2170 6.7090	1.8374 % .1920 %	1.0287 .1075	WEIGHT TAKEN WEIGHT TAKEN
RT TESTIS (TE1) PANCREAS (PA) LF THYROID/PARA (TT0)	5.1600 4.7970 .3130	.1476 % .1373 % .0090 %	.0827 .0768 .0050	WEIGHT TAKEN WEIGHT TAKEN WEIGHT TAKEN
RT THYROID/PARA (TT1)	.3200	.0090 %	.0051	WEIGHT TAKEN
NECR	OPSY	BSERVATIONS	HISTOPATHOLO	GY

NECROPSY

LUNG (LU):
-ADHESION(S); ALL LOBES TO EACH OTHER, PLEURA, PERICARDIAL
SAC, AND CAUDAL LOBES TO DIAPHRAGM: MULTIPLE RED, TAN,
FIBROUS ADHESIONS; COLLECTED INTACT

LUNG (LU):
>NOT REQUIRED TO BE EXAMINED FOR ANIMAL

LIVER (LI):
-INFILITRATE, LYMPHOHISTIOCYTIC,-MINIMAL, MULTI-FOCAL
THYMUS (TH):
-ATROPHY,-MODERATE

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLOGIS MONKEYS

ANIMAL NUMBER: 105514 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY MEIGHT: 3495.0 GRAMS
DATE AND TIME OF NECROPSY: 02/25/99 9:21 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEBELE WEIGHER: MICHELE ZIMA

OBSERVATIONS (CONTINUED)

NECROPSY

OBSERVATIONS (CONTINUED)

NECROPSY

OBSERVATIONS (CONTINUED)

HISTOPATHOLOGY

HISTOPATHOLOGY

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FERMIN (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADDRENAL (CORTEX (AC), ADRRAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENIUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (LI), CECUM (CE), CCLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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Individual Anatomic Pathology Data

Terminal Sacrifice

		TUDY WITH PERFLUOROOCTANE SULFONIC POS;T-6295) IN CYNOMOLGUS MONKEYS	PAGE: IS
ANIMAL NUMBER: 105515	SEX: MALE DOSE GROUP:	2 SACRIFICE STATUS: SCHEDULED,	TERMINAL SACRIFICE

	JDY DAY OF DEATH: 185 /99 6:45 PROSECTOR	STUDY WEEK OF DEATH: 27 STEVE VAN ADESTINE	RECORDER: JO	INAL SACRIFICE BIGHT: 3475.0 GRAMS DHN S. HALFORD IN S. HALFORD
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	
LEFT ADRENAL (AD0)	.2770	.0080 %	.0043	WEIGHT TAKEN
RIGHT ADRENAL (AD1)	.1900	.0055 %	.0030	WEIGHT TAKEN
BRAIN (BR)	63.7670	1.8350 %	1.0000	WEIGHT TAKEN
LF EPIDIDYMIS (EP0)	.7590	.0218 %	.0119	WEIGHT TAKEN
RT EPIDIDYMIS (EP1)	.8690	.0250 %	.0136	WEIGHT TAKEN
LF KIDNEY (KD0)	6.4220	.1848 %	.1007	WEIGHT TAKEN
RT KIDNEY (KD1)	6.2010	.1784 %	.0972	WEIGHT TAKEN
LIVER (LI)	55.8260	1.6065 %	.8755	WEIGHT TAKEN
LF TESTIS (TE0)	2.7190	.0782 %	.0426	WEIGHT TAKEN
RT TESTIS (TE1)	3.3300	.0958 %	.0522	WEIGHT TAKEN
PANCREAS (PA)	5.0260	.1446 %	.0788	WEIGHT TAKEN
LF THYROID/PARA (TT0)	.1340	.0039 %	.0021	WEIGHT TAKEN
RT THYROID/PARA (TT1)	.1240	.0036 %	.0019	WEIGHT TAKEN
NECRO		BSERVATIONS	HISTOPATHOLO	XGY
		LIVER (LT) ·		

LIVER (LI):
-INFILTRATE, LYMPHOHISTIOCYTIC,-MINIMAL, MULTI-FOCAL GENERAL COMMENT (GC):

-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS
GENERAL INFORMATION (XX):
>NOTE:>GALLELADDER WEIGHT IS 0.4620 GRAMS BILE VOLUME IS
1.2000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105515 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3475.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 6:45 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD PSCT-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

THE POLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:
BONE, PEMUR (FE), MARROW, FEMUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROTO (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENALM, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENIM (DU), PANCREAS (FA), JEJUNDUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UE), PROSTATE (FR), SEMIMAL VESICLES (SV), EPIDIDIMIDES (EP),
TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION: THYMUS (TH)

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Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105516 S DATE OF DEATH: 02/26/99 S DATE AND TIME OF NECROPSY: 02/2 POST-FIX WEIGHER: NOT AVAILABLE	6/99 7:15 PROSECTOR PATHOLOGI	R: KEVIN BILLINGS IST: ROBERT LEEDLE	RECORDER: MIC	CHELE ZIMA HELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF BEIDIDYMIS (BP0) RT BEIDIDYMIS (BP1) LF KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	ABSOLUTE ORGAN WEIGHT (GRAMS)	.0093 % .0076 % 2.1143 % .0278 % .0239 % .2157 % .2216 % 2.1484 % .1059 % .1618 % .0962 % .0064 %	.0044 .0036 1.0000 .0122 .0113 .1020 .1048 1.0161 .0501 .0765 .0455 .0030	WEIGHT TAKEN
NEC	ROPSY	BSERVATIONS	HISTOPATHOLO	
SPLEEN (SP): -LARGE; 7.0 X 5.0 X 3.0 CM TESTIS (TE): -LARGE; RIGHT: 2.5 X 1.5 X 1		SPLEEN (SP): >NOT REQUIRED THYMUS (TH): - CYSTPRESEN	TT	
2.0 X 1.5 X 1.0 CM) GENERAL COMMENT (GC): -BONE MARROW SMEAR TAKEN -EYES - DAVIDSONS	. I d. (rok comparison, in	. 15 MOI REGULAD	TO DE MILITADO POR AR	A. W. A.

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Individual Anatomic Pathology Data

APPENDIX 5

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PROS.T-6295) IN CYNOMOLOGY MONKEYS

ANIMAL NUMBER: 105516 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3170.0 GRAMS
DATE AND TIME OF NECROPSY: 02/26/99 7:15 PROSECTOR: KEVIN BILLINGS
ENCORPER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECROPSY

O B S E R V A T I O N S (CONTINUED)

NECROPSY

HISTOPATHOLOGY

GENERAL INFORMATION (XX):
>NOTE: SCALLBLADDER WEIGHT IS 0.6300 GRAMS BILE VOLUME IS
1.4000 ML

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (PE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALV GL, MANDIS (SG), MUSCLE, SKELETAL (SM), SFINAL CORD (SC), NEWLE, SCIATIC (SN),
STONACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
LIVER (LI)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105521 DATE OF DEATH: 02/26/99 DATE AND TIME OF NECROPSY: 02/ POST-FIX WEIGHER: NOT AVAILABL	26/99 10:48 PROSECTOR	COUP: 2 SACRIFICE STA STUDY WEEK OF DEATH: 27 R: KEVIN BILLINGS ST: ROBERT LEEDLE	RECORDER: MIC	CHELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)		
RIGHT ADRENAL (AD1) BRAIN (BR)	.3090 .2230 53.9580 2.8840 2.7980 7.1230 7.6030 60.2000 18.7540 18.8730 6.3800 .4490	.0070 % .0051 % .0051 % .0658 % .0638 % .1624 % .1734 % 1.3729 % .4277 % .4304 % .1455 % .0102 %	.0057 .0041 1.0000 .0534 .0519 .1320 .1409 1.1157 .3476 .3498 .1182 .0083	WEIGHT TAKEN
NE	CROPSY	BSERVATIONS	HISTOPATHOLO	GY

HISTOPATHOLOGY

LIVER (LI):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL
-VACUOLATION, HEPATOCELLULAR, -MINIMAL, MULTI-FOCAL
-STASIS, BILE, -MODERATE, MULTI-FOCAL
THYMUS (TH):
-ATROPHY, -MODERATELY SEVERE

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105521 SEX: MALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 4385.0 GRAMS
DATE AND TIME OF NECKOPSY: 02/26/99 10:48 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA OBSERVATIONS (CONTINUED) GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.4810 GRAMS BILE VOLUME IS
1.4000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BOME, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BOME, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SFINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUDOBDUM (DU), PANCREAS (PA), JEJUNUM (JE), LIEUM (LI), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105510 SE DATE OF DEATH: 02/26/99 ST DATE AND TIME OF NECROPSY: 02/26 POST-FIX WEIGHER: NOT AVAILABLE	X: MALE DOSE GR UDY DAY OF DEATH: 185 /99 9:48 PROSECTOR PATHOLOGI	OUP: 3 SACRIFICE STA STUDY WEEK OF DEATH: 27 : KEVIN BILLINGS ST: ROBERT LEEDLE	TUS: SCHEDULED, TERMI TERMINAL BODY WE RECORDER: MI WEIGHER: MIC	NAL SACRIFICE IGHT: 3180.0 GRAMS CHELE ZIMA HELE ZIMA
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	WEIGHT RATIO	STATIS
RT BETIDIOWHIS (EPO) RT EDIDIOWHIS (EPI) LF KIDNEY (KDO) RT KIDNEY (KDI) LIVER (LI) LF TESTIS (TEO) RT TESTIS (TEI) PANCERAS (PA)	1.0910 1.0750 6.4950 6.1190 54.2060 6.0950 5.8860 3.8800	.0050 % 1.7849 % .0342 % .0338 % .2042 % .1924 % 1.7046 % .1917 % .1851 % .1220 %	.0192 .0189 .1144 .1078 .9550 .1074 .1037	WEIGHT TAKEN
OBSERVATIONS NECROPSY HISTOPATHOLOGY				
LUNG (LU) : -ADHESION(S); BILATERAL CAUDA	L LOBES TO PLEURA AND	LUNG (LU) : >NOT REQUIRED	TO BE EXAMINED FOR AN	IMAL

-ADHESION(S); BILATERAL CAUDAL LOBES TO PLEURA AND DIAPHRAGM: MULTIPLE TAN, FIBROUS ADHESIONS; COLLECTED INTACT ADIPOSE TISSUE (AT):
-RAISED POCUS(I)/AREA(S); DIFFUSE, THROUGHOUT MESENTERY AND THORACIC CAVITY: MULTIPLE, TAN, FIRM NODULES, UP TO 0.3 CM IN DIAMETER WITHIN MESENTERY (CAP 29), UP TO 0.3 CM IN DIAMETER WITHIN THORACIC CAVITY (CAP 30) AND COLLECTED INTACT WITH LUNG ADHESIONS
GENERAL COMMENT (GC):
-BONE MARROW SHEAR TAKEN
-EYES - DAVIDSONS

ADIPOSE TISSUE (AT) : >NOT REQUIRED TO BE EXAMINED FOR ANIMAL

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105510 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3180.0 GRAMS PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA

PATHOLOGIST: ROBERT LEEDLE RECORDER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECROPSY

HISTOPATHOLOGY

HISTOPATHOLOGY

GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.6690 GRAMS BILE VOLUME IS 2.4000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BOME, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALBELADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHER (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (FT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AC),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP),
TESTIS (TE), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
LIVER (LI), THYMUS (TH)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105518 SEX DATE OF DEATH: 02/26/99 STU DATE AND TIME OF NECROPSY: 02/26/ POST-FIX WEIGHER: NOT AVAILABLE	JDY DAY OF DEATH: 185	STUDY WEEK OF DEATH: 27	TERMINAL BODY WE	IGHT: 3070.0 GRAMS CHELE ZIMA
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)		
BRAIN (BR) LP BEIDIDYMIS (EP0) RT BEIDIDYMIS (EP1) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA)	62.8420 .8790 1.0970 5.6790 5.6110 57.5930 4.5720 4.6220 3.1580	2.0470 % .0286 % .0357 % .1850 % .1828 % .18489 % .1489 % .1506 % .1029 %	.0044 .0039 1.0000 .0140 .0175 .0904 .0893 .9165 .0728 .0735 .0503 .0039	WEIGHT TAKEN
NECRO		BSERVATIONS	HISTOPATHOLO	GY
GENERAL COMMENT (GC) :		THYMUS (TH) : -ATROPHY,-MINI	MAL	

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS
GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.5320 GRAMS BILE VOLUME IS
1.3000 ML

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105518 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WBEK OF DEATH: 27 TERMINAL BODY WBIGHT: 3070.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 9:20 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA FOST-FIX WBIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESEMTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDILLA (MA), AORTA (AO), PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SFINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENIUM (DU), PANCREAS (FA), JEJUNUM (JE), LIEUM (IL), CECUM (CC), CCLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION: LIVER (LI)

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105524 DATE OF DEATH: 02/26/99 DATE AND TIME OF NECROPSY: 02/2 POST-FIX WEIGHER: NOT AVAILABLE	ETUDY DAY OF DEATH: 185 26/99 7:42 PROSECTO PATHOLOG	STUDY WEEK OF DEATH: 27	TERMINAL BODY WE	IGHT: 3035.0 GRAMS
ORGAN NAME	ABSOLUTE ORGAN WEIGHT	ORGAN WEIGHT RELATIVE		
LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA)	5.0370 4.8440 52.5550 4.6940 4.2750	TO BODY WEIGHT (%)	.0788 .0758 .8220 .0734	WEIGHT TAKEN WEIGHT TAKEN WEIGHT TAKEN WEIGHT TAKEN WEIGHT TAKEN
NEC	ropsy	OBSERVATIONS	HISTOPATHOLO	GY
GENERAL COMMENT (GC): -BONE MARROW SMEAR TAKEN		THYMUS (TH): -ATROPHY,-MIN	IIMAL	

-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS
GENERAL IMPORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.9610 GRAMS BILE VOLUME IS
0.8000 ML

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105524 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3035.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 7:42 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD FOST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD WEIGHER: JOHN S. HALFORD THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:

BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESEMTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDILLA (MA), AORTA (AO), PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SFINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENIUM (DU), PANCREAS (FA), JEJUNUM (JE), LIEUM (IL), CECUM (CC), CCLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UE), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TE), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION: LIVER (LI)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105528 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3475.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 10:19 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA FOST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA				
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)		ORGAN TO BRAIN WEIGHT RATIO	
LEFT ADRENAL (AD0)	.3070	.0088 %	.0044	WEIGHT TAKEN
RIGHT ADRENAL (AD1)	.2620	.0075 %	.0037	WEIGHT TAKEN
BRAIN (BR)	69.8730	2.0107 %	1.0000	WEIGHT TAKEN
LF EPIDIDYMIS (EPO)	.9990	.0287 %	.0143	WEIGHT TAKEN
RT EPIDIDYMIS (EP1)	.9290	.0267 %	.0133	WEIGHT TAKEN
LF KIDNEY (KD0)	6.3390	.1824 %	.0907	WEIGHT TAKEN
RT KIDNEY (KD1)	6.3690	.1833 %	.0912	WEIGHT TAKEN
LIVER (LI)	64.9760	1.8698 %	.9299	WEIGHT TAKEN
LF TESTIS (TE0)	5.0300	.1447 %	.0720	WEIGHT TAKEN
RT TESTIS (TE1)	5.2350	.1506 %	.0749	WEIGHT TAKEN
PANCREAS (PA)	5.8230	.1676 %	.0833	WEIGHT TAKEN
LF THYROID/PARA (TT0)	.2980	.0086 %	.0043	WEIGHT TAKEN
RT THYROID/PARA (TT1)	.3900	.0112 %	.0056	WEIGHT TAKEN
OBSERVATIONS				

NECROPSY

HISTOPATHOLOGY

LIVER (LI):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL, MULTI-FOCAL
-HYPETROPHY, HEPATOCELLULAR,-SLIGHT, DIFFUSE
THYMUS (TH):
-ATROPHY,-SLIGHT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS
GENERAL INFORMATION (XX):
>NOTE:SGALLBLADDER WEIGHT IS 0.5220 GRAMS BILE VOLUME IS
1.8000 ML

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105528 SEX: MALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3475.0 GRAMS DATE AND TIME OF NECOCPSY: 02/26/99 10:19 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA WEIGHER: NOT AVAILABLE AT NECROPSY:

BONE, PEMUR (FE), MARROW, PEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), LUYER (LI), GALIBLADDER (GB), SFLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AC), PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (MS), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PARCREAS (PA), JEJUNUM (JE), ILEUM (LL), CECUM (CE), CCLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), USINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOGRON (TB), LN, ANT MES/PANC (AP)

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ACID FORASSIB MART (PROS)T-6295) IN CYNOMOLIGUS MONKEYS					
ANIMAL NUMBER: 105507 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME OF NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	5/99 8:11 PROSECTOR PATHOLOGI	: STEVE VAN ADESTINE ST: ROBERT LEEDLE	RECORDER: TO WEIGHER: TOD	DD ACKER D ACKER	
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)			
CRGAN NAME LEFT ADRENAL (ADO) RIGHT ADRENAL (ADI) BERAIN (BR) LP EPIDIDYMIS (EPO) RT EPIDIDYMIS (EPO) RT KIDNEY (KDO) RT KIDNEY (KDI) LIVER (LI) LF TESTIS (TEO) RT TESTIS (TEI) PANCREAS (PA) LF THYROID/PARA (TTI)	.4540 .3210 71.7900 2.0740 2.3260 6.5150 6.2950 112.4190 12.6370 12.5000 5.2280 .2850	.0117 % .0083 % 1.8550 % .0536 % .0501 % .1683 % .1627 % 2.9049 % .3265 % .3230 % .1351 % .0089 %	.0063 .0045 1.0000 .0289 .0324 .0908 .0877 1.5559 .1760 .1741 .0728 .0040	WEIGHT TAKEN	
OBSERVATIONS NECROPSY HISTOPATHOLOGY					
LIVER (LI) : -MOTTLED; ALL LOBES: BROWN AND TAN		-GROWTH PLATE MARROW, FEMUR >SECTION EXAM. BRAIN (BR): -INFILURATE, I -INFILURATE, I KIDNEY (KD): -INFILTRATE, I -INFILTRATE, I -MINERALIZATI(LIVER (LI):	BONE, PEMUR (PE): -GROWTH PLATE OPEN, -SLIGHT MARROW, FEMUR (PM): >SECTION EXAMINED; TISSUE NOT PRESENT BRAIN (BR): -INFILITRATE, LYMPHOHISTICCYTIC, PERIVASCULAR, -MINIMAL -INFILITRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR, -SLIGHT KIDMEY (KD): -INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL -MINERALIZATION, CORTEX, -MINIMAL		

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULPONIC
ACID FOTASSIUM SALT (PFOS.T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105507 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WHEN OF DEATH: 27 TERMINAL BOOW MEIGHT: 3870.0 GRAMS DATE AND TIME OF NECROESY: 02/25/99 8:11 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEDLE WEIGHER: TODD ACKER PATHOLOGY

NECROPSY

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105507 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3870.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 8:11 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, PEMUR (FE), MARROW, PEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (FT), ADRENAL, MEDULLA (MA), AORTA (AO), PITUTIARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILBUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (PR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EF), TESTIS (TE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AF)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, STERNUM (SE), BONE, STERRUM (SB), EYE (EY), LUNG (LU), HEART (HT), GALLBLADDER (GB), SPLEEN (SP),
ESOPHAGUS (ES), THYROID (TT), PARATHYROID (PT), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI),
SALIV GL, MANDIE (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
DUODENUM (DU), PANCREAS (PA), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, MALE (MM),
URINARY BLADDER (UB), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE)

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3M T-6295.7

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Terminal Sacrifice

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ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS					
ANIMAL NUMBER: 105512 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2285.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 9:21 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER					
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)			ORGAN STATUS	
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF BEIDIDYMIS (EP0) RT BEIDIDYMIS (EP1) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF TESTIS (TE0) RT TESTIS (TE1) PANCREAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	ABSOLUTE ORGAN WEIGHT (GRAMS)	.0122 % .0098 % 2.6581 % .0239 % .0190 % .1990 % .1975 % 2.5446 % .0626 % .0582 % .1332 % .00555 %	.0046 .0037 1.0000 .0090 .0072 .0749 .0743 .9573 .0236 .0219 .0501	WEIGHT TAKEN	
NE	BSERVATIONS	'ATIONS HISTOPATHOLOGY			
LIVER (LI) : -MOTTLED; ALL LOBES: BROWN AND TAN		-GROWTH PLATE MARROW, FEMUR >SECTION EXAM BRAIN (BR): -INFILTRATE; LIVER (LI): -HYPERTROPHY, GALLBLADDER (G -INFILTRATE, THYMUS (TH):	-HYPERTROPHY, HEPATOCELLULAR, CENTRILOBULAR,-SLIGHT GALLBLADDER (GB): -INFILTRATE, LYMPHOHISTICCYTIC,-SLIGHT		

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105512 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 2285.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 9:21 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER

O B S E R V A T I O N S (CONTINUED)

NECROPSY

NECROPSY

HISTOPATHOLOGY

HISTOPATHOLOGY

ADRENAL, CORTEX (AC):
-DIFFUSELY DARK; BILATERAL: BROWN

HISTOPATHOLOGY

LN, MESENTERIC (MS):
-HEMORRHAGE, MINIMAL
TRACHEA (TR):
-INFLITRATE, LYMPHOHISTICCYTIC, -SLIGHT
-INFLITRATE, LYMPHOHISTICCYTIC, -SLIGHT
-INFLAMMATION, ACUTE, -MINIMAL
ADREMAL, CORTEX (AC):
-UNCHAMRATRABLE
SALIV GL, MANDIB (SG):
-INFLITRATE, LYMPHOHISTICCYTIC, -MINIMAL
JEJUNUM (JE):
-INFLITRATE, MACROPHAGE, PIGMENTED, -SLIGHT
MAMMARY, MALE (MM):
-SECTION EXAMINED; TISSUE NOT FRESENT
PROSTATE (PR):
-INFLAMMATION, LYMPHOHISTICCYTIC, -MINIMAL
BEIDIDYMIDES (EP):
-HYPCSPERNIA, -SEVERE
TESTIS (TE):
-IMMATURE, -PRESENT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE:>GALBLADDER WEIGHT IS 0.3100 GRAMS BILE VOLUME IS

1.2000 ML

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105512 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2285.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 9:21 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER

X WEIGHER: NOT AVAILABLE

FOLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (PE), MARROW, FEMUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI),
SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
DUODENDM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK),
MAMMARY, MALE (MM), URINARY BLADDER (UB), PROSTATE (FR), SEMINAL VESICLES (SV), EPIDIDYMIDES (EP), TESTIS (TE),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, STERNUM (SE), BONE, STERNUM (SB), EVE (EY), KIDNEY (KD), LUNG (LU), HEART (HT), SPLEEN (SP),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADREMAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI),
MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA),
ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK), URINARY BLADDER (UB), SEMINAL VESICLES (SV)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ACID FORESTON DEBT (FFCS), I-0235) IN CINCHOLOGIS MONRESTO				
ANIMAL NUMBER: 105530 DATE OF DEATH: 02/25/99 DATE AND TIME OF NECROPSY: 02/ POST-FIX WEIGHER: NOT AVAILABL	STUDY DAY OF DEATH: 184	STUDY WEEK OF DEATH: 27	TERMINAL BODY WE	IGHT: 2755.0 GRAMS
ORGAN NAME	(GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (ADO) RIGHT ADRENAL (AD1) BRAIN (BR) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LP OVARY (OV0) RT OVARY (OV1) PANCREAS (PA)	.2480	.0090 % .0060 % 2.1978 % .2052 % .1988 % 1.7851 % .0044 % .1042 %	.0041 .0027 1.0000 .0933 .0905 .8122 .0020 .0021 .0701	WEIGHT TAKEN
OBSERVATIONS NECROPSY HISTOPATHOLOGY				
LUNG (LU) : -ADHESION(S); ALL LOBES TO SAC, AND CAUDAL LOBES TO DI FIBROUS ADHESIONS; COLLECTE	-GROWTH PLATE BRAIN (BR): -INFILTRATE, KIDNEY (KD): -GLOMERULOSCI, LUNG (LU): RDIAL -HYPERPLASIA, MINIMAL -FIBROSIS, PL LIVER (LI): -INFILTRATE, TRACHEA (TR):	-INPILITRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR, -MODERATE KIDNEY (KD): -GLOMERULOSCLEROSIS, -MINIMAL LUNG (LU): -HYPERPLASIA, LYMPHOCYTIC, PERIBRONCHIOLAR/PERIVASCULAR, -MINIMAL -FIBROSIS, PLEURAL/SUBPLEURAL, -SLIGHT		

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105530 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 2755.0 GRAMS PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECCOPSY

HISTOPATHOLOGY THYROID (TY):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL
SALIV GL, MANDIB (SG):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL
MISCLE, SKELETAL (SM):
-DEGENERATION,-SLIGHT
-INFLAMMATION, GRANULOMATOUS,-MODERATE
-REGENERATION, MYOFIBER,-MODERATELY SEVERE
URINARY BLADDER (UB):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL GENERAL COMMENT (GC):
--BONE MARROW SMEAR TAKEN
--EYES - DAVIDSON S
GENERAL INFORMATION (XX):
>NOTE:-GALLBLADDER WEIGHT IS 0.5970 GRAMS BILE VOLUME IS
1.2000 ML

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Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105530 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2755.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 11:29 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

Y WEIGHER: NOT AVAILABLE

FOLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (PE), MARROW, FEMUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AC),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILBUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, PEMALE (MF), URINARY BLADDER (UB), UTEROS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, FEMUR (FM), MARROW, STERNUM (SE), BOME, STERNUM (SB), EYE (EY), HEART (HT), GALLBLADDER (GB), SPLEEN (SP),
THYMUS (TH), LIN, MESENTERIC (MS), ESOPHAGUS (ES), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA),
AORTA (AO), PITUTIARY (FI), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUCDENUM (DU), PANCREAS (PA),
JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, FEMALE (MF), UTERUS (UT),
OVARY (OV), VAGINA (VA), CERVIX (CV)

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105531 DATE OF DEATH: 02/26/99 DATE AND TIME OF NECROPSY: 02 POST-FIX WEIGHER: NOT AVAILAB	SEX: FEMALE DOSE GROSTUDY DAY OF DEATH: 185/26/99 7:15 PROSECTOR PATHOLOGI	OUP: 1 SACRIFICE ST STUDY WEEK OF DEATH: 27 : STEVE VAN ADESTINE ST: ROBERT LEEDLE	ATUS: SCHEDULED, TERMI TERMINAL BODY WE RECORDER: JO WEIGHER: JOH	NAL SACRIFICE NIGHT: 2625.0 GRAMS WHN S. HALFORD NN S. HALFORD
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) PANCREAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	.2360 .1480 54.3050 4.3520 4.2910 42.1310 .0990 .0930 3.9080 .1970	.0090 % .0056 % 2.0688 % .1658 % .1635 % .0038 % .0035 % .1489 % .0075 %	.0043 .0027 1.0000 .0801 .0790 .7758 .0018 .0017 .0720 .0036	WEIGHT TAKEN
N	O :	BSERVATIONS	HISTOPATHOLO	OGY
MARROW, FEMUR (FM): SECTION EXAMINED; TISSUE NOT PRESENT BRAIN (BR): - INPILITRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR, -SLIGHT KINNEY (KD): - INPILITRATE, LYMPHOHISTICCYTIC, -SLIGHT LIVER (LI): - INPILITRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-POCAL ADRENAL, CORTEX (AC): - HYPERTROPHY, CORTICAL CELL, -MINIMAL SPINAL CORD (SC): - PIGMENT, NEURONAL, -SLIGHT JEUNUM (JE): - INPILITRATE, MACROPHAGE, PIGMENTED, -MODERATE				

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Individual Anatomic Pathology Data

Terminal Sacrifice

	DDY WITH PERFLUOROOCTANE SULFONIC S;T-6295) IN CYNOMOLGUS MONKEYS
	Y WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2625.0 GRAMS VE VAN ADESTINE RECORDER: JOHN S. HALFORD
OBSERV NECROPSY	r i o n s (continued) Histopathology
	ILEUM (IL): -INFILTRATE, MACROPHAGE, PIGMENTED,-MINIMAL UTERUS (UT): -AMYLOID,-SLIGHT
GENERAL COMMENT (GC): -BONE MARROW SMEAR TAKEN -EYES - DAVIDSONS -NO MACROSCOPIC LESIONS GENERAL INFORMATION (XX):	
>NOTE:>GALUBLADDER WEIGHT IS 0.7250 GRAMS BILE VOLUME IS 1.8000 ML	

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105531 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2625.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 7:15 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

THE FOLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:

BONE, PEMUR (PE), MARROW, FENUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILBUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BONE, FEMUR (FE), MARROW, STERRUM (SE), BONE, STERRUM (SB), EYE (EY), LUNG (LU), HEART (HT), GALLBLADDER (GB),
SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT),
ADREMAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM),
NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, FEMALE (MF), URINARY BLADDER (UB), OVARY (OV), VAGINA (VA), CERVIX (CV)

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Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 41 26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

	ACID POTASSIUM SAL	r (Pros; T-6295)	IN CYNOMOLGUS MONKEYS			
ANIMAL NUMBER: 105535 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3270.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 8:13 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA FOST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA						
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT R TO BODY WEIGH	ELATIVE ORGAN TO BR T (%) WEIGHT RAT	AIN ORGAN IO STATUS		
LEFT ADRENAL (ADO) RIGHT ADRENAL (ADI) BRAIN (BR) LF KIDNEY (KDO) RT KIDNEY (KDI) LIVER (LI) LF OVARY (OVO) RT OVARY (OVI) PANCREAS (PA) LF THYROID/PARA (TTO) RT THYROID/PARA (TTI)	ABSOLUTE ORGAN WEIGHT (GRAMS)	.0115 .0096 1.5892 .2047 .1891 1.9694 .0070 .0064 .1543 .0143	\$.0073 \$.0061 \$ 1.0000 \$ 1.288 \$.1150 \$ 1.2392 \$.0044 \$.0971 \$.0990 \$.0090	WEIGHT TAKEN		
	PROPSY	BSERVATI	ONS	OPATHOLOGY		
LUNG (LU): -ADHESION(S); ALL LOBES TO EACH OTHER, PLEURA, AND PERICARDIAL SAC: MULTIPLE RED, TAN, FIBROUS ADHESIONS; COLLECTED INTACT			MARROW, FEMUR (FM): SECTION EXAMINED; TISSUE NOT PRESENT LUNG (LU): -FIBROSIS, PLEURAL/SUBPLEURAL, -SEVERE -FIBROSIS, INTERSTITIAL, -MODERATELY SEVERE LIVER (LI): -INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL -VACUOLATION, HEPATOCELLULAR, -MINIMAL, MULTI-FOCAL			
SALIV GI, MANDIB (SG): STOMACH, GL (ST): -RED FOCUS(I)/AREA(S); MUCOSA, FUNDIC: SINGLE RED FOCUS, 0.3 MM IN DIAMETER; FOCUS HAS A STELLATE PATTERN SALIV GI, MANDIB (SG): -INFILITRATE, LYMPHOHISTIOCYTIC,-SLIGHT STOMACH, GL (ST): SUNREMARKABLE SALIV GI, MANDIB (SG): -INFILITRATE, LYMPHOHISTIOCYTIC,-SLIGHT STOMACH, GL (ST): SUNREMARKABLE						

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PROS;7-6295) IN CYNCHOLGUS MONKEYS

ANIMAL NUMBER: 105535 SEX: FEMALE DOSE GROUP: 1 SACKIFICE STATUS: SCHEDULED, TERMINAL SACKIFICE DATE OF DEATH: 02/26/99 STUDY DAM OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL SACKIFICE STATUS: SCHEDULED, TERMINAL SACKIFICE DATE OF DEATH: 02/26/99 S:13 PROSECTOR: KEVIN BILLINGS EXCORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA PATHOLOGY

STOMACH, GL (ST):
>NOTE:>FUNDIC MUCOSA, ALONG GREATER CURVATURE: SINGLE APPARENT HOOK WORM EMBEDDED INTO MUCOSA, 3.0 X 0.1 X
0.1 CM

OLOMBRICAN OF THE ORDER OF THE ORD

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105535 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3270.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 8:13 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA X WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

FOLLOWING CRGANS WERE UNREMARRABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TE), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), DUODENUM (DU),
PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SXIN (SK), MAMMARY, FEMALE (MF),
URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB),
LN, ANT MES/PANC (AP) THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BONE, FEMUR (FE), MARROW, STERNUM (SE), BONE, STERNUM (SE), EVE (EY), BRAIN (BR), KIDNEY (KD), HEART (HT),
GALLBLADDER (GB), SPLEEN (SF), THYMUS (TH), LIN, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY),
PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI), MUSCLE, SKELETAL (SM),
SPINAL CORD (SC), NERVE, SCIATIC (SN), PANCREAS (FA), COLON (CO), RECTUM (RE), SKIN (SK), OVARY (OV), VAGINA (VA),
CERVIX (CV)

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105544 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME OF NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	UDY DAY OF DEATH: 184	STUDY WEEK OF DEATH: 27	TERMINAL BODY WE	TGHT: 2635.0 GRAMS
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)			
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF KIDNEY (KD0)	.3120 .2440 59.7410 5.3110 5.2470 48.6600	.0118 % .0093 % 2.2672 % .2016 % .1991 % 1.8467 % .0086 % .0052 % .1711 % .0059 %	.0052 .0041 1.0000 .0889 .0878 .8145 .0038 .0023 .0755 .0026	WEIGHT TAKEN
		BSERVATIONS	HISTOPATHOLO	
MARROW, STERNUM (SE): -HYPOCCELLULAR, MARROW, -SLIGHT BRAIN (BR): -INFILTRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR, -MODERATE LIVER (LI): -LIGHT FOCUS(I)/AREA(S); TRIM COMMENT: DIAPHRAGMATIC SURFACE OF LEFT LATERAL LOBE: SINGLE TAN AREA, 1.0 CM IN DIAMSTER:				

OF LEFT LATERAL LOSE: SINGLE TAN AREA, 1.0 CM IN DIAMETER, SUBMITTED ON ROUTINE SECTION

GALLBLADDER (GB):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL
LM, MESENTERIC (MS):
-INFILTRATE, MACROPHAGE, PIGMENTED,-MODERATE
TRACHEA (TR):
-INFILTRATE, LYMPHOHISTICCYTIC,-SLIGHT

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APPENDIX 5

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105544 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 2635.0 GRAMS PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECCOPSY

HISTOPATHOLOGY HISTOPATHOLOGY

ESOPHAGUS (ES):
-INFILTRATE, LYMPHOHISTICCYTIC, -MINIMAL
PARAHYROID (PT):
-SECTION EXAMINED; TISSUE NOT PRESENT
MUSCLE, SKELETAL (SM):
-PARASITES, CYST, -PRESENT
NOTE:-SHEAVY BURDEN, SARCOCYST-LIKE.
DUODENUM (DU):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT
JUJUNUM (JE):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT
LIEUM (IL):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT
MAMMARY, FEMALE (MF):
-INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
URINARY BLADDER (UB):
-INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
OVARY (OV):
-MINERALIZATION, -MODERATE HISTOPATHOLOGY

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE:>GALBLADDER WEIGHT IS 0.3810 GRAMS BILE VOLUME IS

2.2000 ML

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Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105544 SEX: FEMALE DOSE GROUP: 1 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2635.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 9:55 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PROST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEBELE WEIGHER: MICHELE ZIMA

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), GALBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), PITUITARY (PI), SALV GL, MANDIS (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NEWE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), LIEUM (LL), CECUM (CE), COLON (CO), RECTUM (RE), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BONE, FEMUR (FE), MARROW, FEMUR (FM), BONE, STERNUM (SB), EYE (BY), KIDNEY (KD), LUNG (LU), HEART (HT),
SPLEEN (SP), THYMUS (TH), THYRCID (TY), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI),
SALIV GL, MANDIB (SG), SPINAL CORD (SC), NEEVE, SCIATIC (SN), STOMACH, GL (ST), PANCREAS (PA), CECUM (CE),
COLON (CO), RECTUM (RE), SKIN (SK), UTERUS (UT), VAGINA (VA), CERVIX (CV)

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS					
ANIMAL NUMBER: 105537 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 4055.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 7:31 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER					
ORGAN NAME	(CDRMC)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	LIDITOUR DARLED	ORGAN STATUS	
LEFT ADRENAL (ADO) RIGHT ADRENAL (ADI) BRAIN (BR) LF KIDNEY (KDO) RT KIDNEY (KDI) LIVER (LI) LF OVARY (OVO) RT OVARY (OVI) PANCREAS (PA) LF THYROID/PARA (TTO) RT THYROID/PARA (TTI)	.3730 .3030 61.3750 7.0240 6.6650 75.2140 .2790 .2280 6.1370 .3200	.0092 % .0075 % 1.5136 % .1732 % .1644 % 1.8548 % .0056 % .1513 % .0079 % .0084 %	.0061 .0049 1.0000 .1144 .1086 1.2255 .0045 .0037 .1000 .0052	WEIGHT IAREN	
NECR		BSERVATIONS	HISTOPATHOLO	GY	
LIVER (LI): -INFILITEATE, LYMPHOHISTICCYTIC,-MINIMAL, MULTI-FOCAL THYMUS (TH): -ATROPHY,-MINIMAL SPINAL CORD (SC): -BONE MARROW SMEAR TAKEN -BYES - DAVIDSONS -ANIMAL OBESE GENERAL INFORMATION (XX): >NOTE:>GALUBLADDER WEIGHT IS 0.5100 GRAMS BILE VOLUME IS 3.000 MIR.					

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105537 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 4055.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 7:31 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, PEMUR (FE), MARROW, PEMUR (FM), MARROW, STENNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), LUYER (LI), GALLBLADDER (GB) SFLEEN (SP), THYMUS (TI), LN, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), UDODENUM (DU), PARCREAS (PA), JEUNUM (JE), ILEUM (IL), CECUM (CE), CCLON (CO), RETUM (RE), SKIN (SK), MAMMARY, PEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105541 SEX: FEMALE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 1 DATE AND TIME OF NECROPSY: 02/26/99 9:47 PRC POST-FIX WEIGHER: NOT AVAILABLE PAT	OSE GROUP: 2 SACRIFICE STR 85 STUDY WEEK OF DEATH: 27 SECTOR: STEVE VAN ADESTINE HOLOGIST: ROBERT LEEDLE	ATUS: SCHEDULED, TERMII TERMINAL BODY WE RECORDER: JOH WEIGHER: JOH	NAL SACRIFICE IGHT: 2510.0 GRAMS HN S. HALFORD N S. HALFORD
ABSOLUTE ORGAN WE ORGAN NAME (GRAMS)	IGHT ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
ORGAN NAME (GRAMS) LEFT ADRENAL (AD0) .4170 RIGHT ADRENAL (AD1) .3060 BRAIN (BR) .63.2760 LP KIDNEY (KD0) .4.9450 RT KIDNEY (KD1) .4.6800 LIVER (LI) .47.6610 LF OVARY (CV1) .1240 RT OVARY (CV1) .1570 PANCREAS (PA) .5.0750 LF THYROID/PARA (TT0) .2130 RT THYROID/PARA (TT1) .2300	.0166 % .0122 % 2.5210 % .1970 % .1868 % 1.8988 % .0049 % .0063 % .2022 % .0085 %	.0066 .0048 1.0000 .0781 .0741 .7532 .0020 .0025 .0802 .0034	WEIGHT TAKEN
	OBSERVATIONS		
NECROPSY LUNG (LU): -ADHESION(S); RIGHT AND LEFT CAUDAL LOBES AND LE INTERMEDIATE LOBE TO DIAPHRAGM: MULTIPLE TAN, FI ADHESIONS; COLLECTED INTACT -DARK POCUS(I)/AREA(S); ALL LOBES: MULTIPLE DARK AREAS, PINFOINT AND UP TO 0.7 X 0.4 CM LIVER (LI): -ADHESION(S); DIAPHRAGMATIC SURFACE OF RIGHT LAT SURROUNDING MESENTERY, ALONG MARGIN: MULTIPLE TA ADHESIONS (CAP 29)	BROUS BROWN LIVER (LI): ERAL LOBE TO -INFILTRATE, I	HISTOPATHOLO	IMAL

THYMUS (TH):
-ATROPHY.
-SPINAL CORD (SC):
-PIGMENT, NEURONAL,-MODERATE

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PPOS,T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105541 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2510.0 GRAMS
DATE AND TIME OF NECROPSY: 02/26/99 9:47 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

O B S E R V A T I O N S (CONTINUED)

NECROPSY HISTOPATHOLOGY

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-BYES - DAYLDSONS
GENERAL INFORMATION (XX):
-NOTE: SGALLELADDER WEIGHT IS 0.5260 GRAMS BILE VOLUME IS
1.0000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FENUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), GALLELADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACKEA (TR), ESOPHAGUS (ES),
THYROID (TY), PARATYROID (PT), ADRENAL, CORTEX (AC), DEARNAL, MEDULLA (MA), AORTA (AC), PITUTARY (PI),
SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SFINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
DUODENUM (DU), PARACEAS (FA), JEJURUM (JE), LIEUM (LI), CECUM (CE), COLON (CO), REZTUM (CY), ADIPOSE TISSUE (AT),
LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105547 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2570.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 9:20 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD FATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD CORGAN NAME

ORGAN NAME

ABSOLUTE ORGAN WEIGHT ORGAN WEIGHT TO BODY WEIGHT (%) ORGAN TO BRAIN WEIGHT RATIO

ORGAN NAME

LEFT ADRENAL (ADO)
RIGHT ADRENAL (CRGAN NAME

LEFT ADRENAL (AD0)
RIGHT ADRENAL (AD1)
BRAIN (BR)
LF KIDNEY (KD0)
RT KIDNEY (KD1)
LIVER (LI)
LF OVARY (OV0)
RT OVARY (CV1)
PANCREAS (FA)
LF THYROID/PARA (TT0)
RT THYROID/PARA (TT1) S T A T U S
WEIGHT TAKEN
WEIGHT TAKEN .3130 .2300 60.8690 5.4180 5.5840 49.9520 .1590 .0051 .0038 1.0000 .0890 .0917 .8206 .0026 .2030 5.1480 .2003 % .0060 % .0055 % .0846 .1410 .0023 OBSERVATIONS NECROPSY HISTOPATHOLOGY HISTOPATHOLOGY

ING (LU):
>NOT REQUIRED TO BE EXAMINED FOR ANIMAL LUNG

NG (LU):
-ADHESION(S); LEFT CAUDAL LOBE TO DIAPHRAGM: MULTIPLE TAN,
FIBROUS ADHESIONS; COLLECTED INTACT
-DARK FOCUS(I)/AREA(S); ALL LOBES: MULTIPLE DARK BROWN
AREAS, PINPOINT AND UP TO 0.5 X 0.3 CM

LIVER (LI):
-INFILTRATE, LYMPHOHISTIOCYTIC,-MINIMAL, MULTI-FOCAL
THYMUS (TH):
-CYST,-PRESENT -ATROPHY, -SLIGHT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS

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Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PPOS;T-6295) IN CYNOMOLOUS MONKEYS

ANIMAL NUMBER: 105547 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2570.0 GRAMS
DATE AND TIME OF NECROPSY: 02/26/99 9:20 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

O B S E R V A T I O N S (CONTINUED)

NECROPSY

GENERAL INFORMATION (XX):
>NOTE: SCALLBLADDER WEIGHT IS 0.5380 GRAMS BILE VOLUME IS
1.2000 ML

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, PEMUR (PE), MARROW, PEMUR (PM), MARROW, STERNUM (SE), BONE, STERNUM (SE), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (II), GALBLADDER (GB), SPILEEN (SF), THYMUS (TH), LN, MESENTERIC (MS), TRACHERA (TR),
ESOPHAGUS (ES), THYROLD (TY), PARATHYROLD (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITULTARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JECUNUM (JE), ILEUM (IL), OECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, FEMALE (MF), URLNARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIFOSE TISSUE (AT), LN, TRACHEDSRON (TB), LM, ANT MESPARNC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
SPINAL CORD (SC)

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105550 SEX DATE OF DEATH: 02/26/99 STU DATE AND TIME 0F NECROESY: 02/26/ POST-FIX WEIGHER: NOT AVAILABLE	DY DAY OF DEATH: 185	STUDY WEEK OF DEATH: 27	TERMINAL BODY WE:	IGHT: 2820.0 GRAMS
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)		
BRAIN (BR) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) PANCREAS (PA) LF THYROID/PARA (TT0)	. 4230 2680 56.9130 6.9900 6.1500 54.4840 .1270 .1270 7.2830	.0150 % .0095 % 2.0182 % .2160 % .2181 % .0045 % .0045 % .2583 %		WEIGHT TAKEN
OBSERVATIONS NECROPSY HISTOPATHOLOGY				
LUNG (LU): -ADHESION(S); ALL LOBES TO EACH OTHER, PLEURA, PERICARDIAL SOC CAUDAL LOBES TO DIABUBACH. MILETIPLE DED. TAN EDECUS SOC CAUDAL LOBES TO DIABUBACH. MILETIPLE DED. TAN EDECUS				

SAC, CAUDAL LOBES TO DIAPHRAGM: MULTIPLE RED, TAN, FIBROUS ADHESIONS; COLLECTED INTACT

LIVER (LI):
-INFILTRATE, LYMPHOHISTIOCYTIC,-MINIMAL, MULTI-FOCAL
-VACUOLATION, HEPATOCELLULAR,-SLIGHT, MULTI-FOCAL
THYMUS (TH):
-ATROPHY,-MINIMAL
SPINAL CORD (SC):
-PIGMENT, NEURONAL,-SLIGHT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLOGIS MONKEYS

ANIMAL NUMBER: 105550 SEX: FEMALE DOSE GROUP: 2 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE
DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2820.0 GRAMS
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE RECORDER: MICHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECROPSY

GENERAL INFORMATION (XX):
>NOTE: GALLBLADDER WEIGHT IS 0.6200 GRAMS BILE VOLUME IS
1.2000 ML

THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (PE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (XD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SF), THYMUS (TH), LIN, MESENTERIC (MS), TRACHBEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADDRAND, CONTEX (AC), ADDRAND, ADORTA (AC),
PITULTARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PARATHYROID (DF), JUTENUM (JE), LIUM (LIU) (CECUM (CG), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, PEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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PAGE: 55 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC

ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS				
ANIMAL NUMBER: 105532 SE DATE OF DEATH: 02/25/99 ST DATE AND TIME OF NECROPSY: 02/25 POST-FIX WEIGHER: NOT AVAILABLE	/99 6:47 PROSECTO PATHOLOG	ROUP: 3 SACRIFICE ST. STUDY WEEK OF DEATH: 27 R: KEVIN BILLINGS IST: ROBERT LEEDLE	RECORDER: MI WEIGHER: MIC	CHELE ZIMA HELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT	ORGAN WEIGHT RELATIVE	ORGAN TO BRAIN	ORGAN
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1)	.3230 .2160	.0127 % .0085 % 2.3622 % .1973 % .1958 % 2.2870 % .0025 % .0034 % .1758 % .0040 %	.0054	WEIGHT TAKEN WEIGHT TAKEN
NECR	OPSY	BSERVATIONS	HISTOPATHOLO	GY
LUNG (LU): -RED FOCUS(I)/AREA(S); ALL LOBES: MULTIPLE DARK RED PINPOINT SNOT REQUIRED TO BE EXAMINED FOR ANIMAL THYMUS (TH): -ATROPHY,-SEVERE SPINAL CORD (SC):				
GENERAL COMMENT (GC): -BONE MARROW SMEAR TAKEN -EYES - DAVIDSONS GENERAL INFORMATION (XX): >NOTE:SGALLBLADDER WEIGHT IS 0	.4650 GRAMS BILE VOLUME		RONAL,-MODERATE	

SEMERAL INFORMATION (AAC):
>NOTE:SCALLBLADDER WEIGHT IS 0.4650 GRAMS BILE VOLUME IS
1.2000 ML

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105532 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2550.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 6:47 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LIN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADERNAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AC),
PITUITARY (PI), SALIV GL, MANDIE (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PARNCERSE (PA), JEJUNDM (JE), ILEUM (IL), CECUM (CE), CCLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AF)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION: LIVER (LI)

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APPENDIX 5 Covance 6329-223 3M T-6295.7 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105538 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3200.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 10:25 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER ABSOLUTE ORGAN WEIGHT ORGAN WEIGHT ORGAN WEIGHT RELATIVE ORGAN TO BRAIN O R G A N				
ORGAN NAME		ORGAN WEIGHT RELATIVE	ORGAN TO BRAIN	ORGAN
LEFT ADRENAL (ADD) RIGHT ADRENAL (AD1) BRAIN (BR) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (CV1) PANCREAS (PA) LF THYROID/PARA (TT0)	.3850 .2630	.0120 % .0082 % 1.7403 % .1625 % .1671 % 1.8618 %	.0069 .0047 1.0000 .1048 .0960 1.0698 .0043 .0030 .0863 .0024	WEIGHT TAKEN
NE	CROPSY	BSERVATIONS	HISTOPATHOLO	OGY
LUNG (LU): -DARK FOCUS(I)/AREA(S); ALL PINPOINT FOCI	LOBES, DIFFUSE: MULTIPLE E	LIVER (LI) :		
SPLEEN (SP): -LIGHT FOCUS(I)/AREA(S); DI: 1.2 X 0.7 CM	FFUSE: MULTIPLE GRAY AREAS,	SPLEEN (SP) :	LYMPHOHISTIOCYTIC,-MIN TO BE EXAMINED FOR AN	,
-1		CECUM (CE) :		NIMAL

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105538 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3200.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 10:25 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEEDLE RECORDER: TODD ACKER WEIGHER: TODD ACKER

O B S E R V A T I O N S (CONTINUED)

NECROPSY

NECROPSY

HISTOPATHOLOGY

CECUM (CE):
-RED FOCUS(I)/AREA(S); SEROSAL SURFACE: MULTIPLE DARK RED FOCI, UP TO 0.5 CM IN DIAMETER; COLLECTED ON ROUTINE SECTION GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
GENERAL INPORMATION (XX):
>NOTE:>CALLBLADDER WEIGHT IS 0.5060 GRAMS BILE VOLUME IS 1.6000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BOME, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALDELADDER (GB), THYMUS (TH), LM, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES),
THYROID (TY), PARATHYROID (FP), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (FI),
SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST),
DUODENUM (DU), PANCREAS (FA), JEJUNUM (JE), ILEUM (IL), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, FEMALE (MF),
URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB),
LN, ANT MES/PANC (AP)

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105545 SEX DATE OF DEATH: 02/25/99 STU DATE AND TIME OF NECROPSY: 02/25/ POST-FIX WEIGHER: NOT AVAILABLE	DY DAY OF DEATH: 184 99 7:31 PROSECTO		TERMINAL BODY WE RECORDER: MI	IGHT: 2460.0 GRAMS CHELE ZIMA
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)		ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BP) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LP GVARY (OV0) RT OVARY (OV1) PANCREAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	.2640 .2060 55.6590 5.4870 5.2040 52.4930 .2040 .1400 4.1150 .2030 .1190	.0107 % .0084 % 2.2626 % .2230 % .2115 % 2.1339 % .0057 % .1073 % .0083 % .0084 %	.0047 .0037 1.0000 .0986 .0935 .9431 .0037 .0025 .0739	WEIGHT TAKEN
OBSERVATIONS NECROPSY HISTOPATHOLOGY				
		TITVER (LT) :		

LIVER (LI):
-INFILITATE, LYMPHOHISTICCYTIC, -MINIMAL, MULTI-FOCAL
-DEGENERATION/NECROSIS, HEPATOCELLULAR, -MINIMAL, MULTI-FOCAL
THYMUS (TH):
-CYST, -PRESENT
-ATROPHY, -MINIMAL
SPINAL CORD (SC):
-PIGMENT, NEURONAL, -MINIMAL

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
-NO MACROSCOPIC LESIONS

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105545 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2460.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 7:31 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA PATHOLOGIST: ROBERT LEBELE WEIGHER: MICHELE ZIMA

OBSERVATIONS (CONTINUED) HISTOPATHOLOGY

GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.7210 GRAMS BILE VOLUME IS
1.4000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:

BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
LUNG (LU), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SEINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PARCREAS (PA), JEJUNUM (JE), LIEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
SKIN (SK), MAMMARY, PEMALE (MP), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),
ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ACID POTASSIUM SALT (PFCS;T-6295) IN CYNOMOLGUS MONKEYS					
ANIMAL NUMBER: 105548 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2885.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 11:00 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER					
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) PANCREAS (PA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	.3880 .2850 61.9790 6.0250 6.0670 57.7670 .2400 .1510 5.0690 .1640	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%) .0135 % .0099 % 2.1633 % .2103 % .2118 % .20163 % .0053 % .1769 % .0057 %	.0063 .0046 1.0000 .0972 .0979 .9320 .0039 .0024 .0818 .0026	WEIGHT TAKEN	
OBSERVATI NECROPSY			HISTOPATHOLO	юGУ	
LUNG (LU): -ADHESION(S); ADHERED TO PLE EACH OTHER: MULTIPLE GRAY, F INTACT	LUNG (LU) : JM, AND >NOT REQUIRED	TO BE EXAMINED FOR AN	IIMAL		
LIVER (LI): -INFLITATE, LYMPHOHISTICCYTIC,-MODERATE, FOCAL THYMUS (TH): -ATROPHY,-MODERATELY SEVERE SPINAL CORD (SC): -PIGMENT, NEURONAL,-SLIGHT CECUM (CE): -RED FOCUS(I)/AREA(S); DIFFUSE: MULTIPLE DARK RED FOCI, UP TO 0.5 CM IN DIAMETER; COLLECTED ON ROUTINE SECTION LIVER (LI): -INFLITATE, LYMPHOHISTICCYTIC,-MODERATE, FOCAL THYMUS (TH): -ATROPHY,-MODERATELY SEVERE SPINAL CORD (SC): -PIGMENT, NEURONAL,-SLIGHT CECUM (CE): -NOT REQUIRED TO BE EXAMINED FOR ANIMAL				,	

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PPCS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105548 SEX: FEMALE DOSE GROUP: 3 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2855.0 GRAMS DATE AND TIME OF NECKOPSY: 02/25/99 11:00 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEEDLE WEIGHER: TODD ACKER

O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY O B S E R V A T I O N S (CONTINUED)

NECROPSY HISTOPATHOLOGY

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE: GALLBLADDER WEIGHT IS 0.7810 GRAMS BILE VOLUME IS 2.6000 ML

THE FOLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE). MARROW, FEMUR (FM). MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEZ (TR), ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PT), SALVU GL, MANDIE (SG), MUSCLE SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SM), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, PEMALDE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

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Covance 6329-223 3M T-6295.7 APPENDIX 5

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105534 DATE OF DEATH: 02/26/99 DATE AND TIME OF NECROPSY: 02/ POST-FIX WEIGHER: NOT AVAILABL	STUDY DAY OF DEATH: 185 26/99 8:14 PROSECTO	STUDY WEEK OF DEATH: 27 OR: STEVE VAN ADESTINE		IGHT: 2500.0 GRAMS HN S. HALFORD
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)		ORGAN TO BRAIN WEIGHT RATIO	STATUS
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LF KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) FANCREAS (FA) LF THYROID/PARA (TT0) RT THYROID/PARA (TT11)	.3290 .2270 54.3510 4.8280 4.9920 75.5500 .1600 .1480 4.4740 .1370	.012 % .001 % 2.1740 % .1931 % .1997 % 3.0220 % .0064 % .0059 % .1790 % .0055 %	.0061 .0042 1.0000 .0888 .0918 1.3900 .0029 .0027 .0823 .0025	WEIGHT TAKEN
NE	CROPSY	BSERVATIONS	HISTOPATHOLO	GY
		KIDNEY (KD) :	E): OPEN,-MODERATE ON, MEDULLA,-MINIMAL	

LUNG (LU):
-DARK FOCUS(I)/AREA(S); ALL LOBES: MULTIPLE DARK BROWN PINPOINT FOCI
-LIGHT FOCUS(I)/AREA(S); RIGHT AND LEFT CAUDAL LOBES: MULTIPLE TAN AREAS, UP TO 0.2 X 0.1 CM

-MINERALIZATION, MEDULLA,-MINIMAL LUNG (LU): -HYPERPLASIA, LYMPHOCYTIC, PERIBRONCHIOLAR/PERIVASCULAR,-MINIMAL -INFILTRATE, MACROPHAGE, ALVEOLAR,-MINIMAL

LIVER (LI):
-INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL, MULTI-POCAL
-HYPERTROPHY, HEPATOCELLULAR,-SLIGHT, DIFFUSE
-VACUOLATION, HEPATOCELLULAR,-SLIGHT, DIFFUSE

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105534 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2500.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 8:14 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD WEIGHER: JOHN S. HALFORD

O B S E R V A T I O N S (CONTINUED)

NECROPSY

NECROPSY

HISTOPATHOLOGY

ADRENAL, CORTEX (AC):
-DIFFUSELY DARK; BILATERAL: BROWN

HISTOPATHOLOGY

THYMUS (TH):
-ATROPHY, MODERATE
TRACHEA (TR):
-INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT
ADRENAL, CORTEX (AC):
-UNNEMARKABLE
DUODENUM (DU):
-INFILTRATE, MACROPHAGE, PIGMENTED, -MODERATE
JEJUNUM (JE):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT
ILEUM (IL):
-INFILTRATE, MACROPHAGE, PIGMENTED, -SLIGHT
CECUM (CE):
-NORTHER MACROPHAGE, PIGMENTED, -SLIGHT
CECUM (CE): CECUM (CE) : -PARASITISM, -PRESENT

CECUM (CE):
-DARK FOCUS(I)/AREA(S); SEROSAL SURFACE AND LUMEN, DIFFUSE:
MULTIPLE DARK BROWN, SLIGHTLY RAISED AREAS, UP TO 0.5 X 0.2
CM; COLLECTED ON ROUTINE SECTION
COLON (CO):
-DARK FOCUS(I)/AREA(S); SEROSAL SURFACE AND LUMEN, DIFFUSE:
MULTIPLE DARK BROWN, SLIGHTLY RAISED FOCI, UP TO 0.3 CM IN
DIAMETER; COLLECTED ON ROUTINE SECTION

COLON (CO):
-PARASITISM, INTRAMUSCULAR,-PRESENT

URINARY BLADDER (UB):
-INFILTRATE, LYMPHOHISTIOCYTIC,-MINIMAL
OVARY (OV):
-MINERALIZATION,-MINIMAL ADIPOSE TISSUE (AT) : -LYMPHOID TISSUE, -PRESENT

ADIPOSE TISSUE (AT):
-RAISED FOCUS(I)/ARRA(S); MESENTERY, DIFFUSE: MULTIPLE TAN
FOCI, UP TO 0.3 CM IN DIAMETER (CAP 29)
GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN

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APPENDIX 5 Covance 6329-223
3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTAME SULFONIC
ACID FOTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105514 SEX: FEMALE DCG GROUP: 4 SACRIFICE STATUS: SCHEDULED. TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2500.0 GRAMS POST-FIX WEIGHER: NOT AVAILABLE PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD PATHOLOGIST: ROBERT LEBELE WEIGHER: JOHN S. HALFORD WEIGHER: JOHN S. HALFORD PATHOLOGIST: ROBERT LEBELE WEIGHER: JOHN S. HALFORD WEIGHER: JOHN S. HALFORD PATHOLOGY

GENERAL COMMENT (GC):
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE: SQLILELADDER WEIGHT IS 0.5260 GRAMS BILE VOLUME IS
2.0000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BOOKE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), HEART (HT), LIVER (LI), GALUBLADDER (GB), SPLEEN (SF), THYMUS (TH), IN, MESENTERIC (MS), TRACHEA (TR), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NEVER, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCHESS (FA), JEUNNUM (JE), ILEUM (IL), RECTOM (RE), SKIN (SK), MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VACINA (VA), CERVIX (CV), LN, TRACHEOBRON (TE), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
MARROW, FEWUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SE), EYE (EY), BRAIN (BR), HEART (HT), GALUBLADDER (GB), SPLEEN (SP), LN, MESENTERIC (MS), SPINAL CORD (SC), NERVE, SCIATIC (SN), SPINAL CORD (SC), NERVE, SKIN (SK), ANAMORAY, FEMALE (MF), ORATA (AO), PITULTARY (FI), ANDID (SG), MOSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GC), FERVE, SCIATIC (SN), STOMACH, GC), FERVE, SCIATIC (SN), STOMACH, GC), FINDITARY (FI), ANDID (SG), MOSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GC), FINDITARY (FI), ANDID (SG), MOSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GC), FINDITARY (FI), ANDID (SG)

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Individual Anatomic Pathology Data

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUORCOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS					
ANIMAL NUMBER: 105536 S. DATE OF DEATH: 02/25/99 S. DATE AND TIME OF NECROPSY: 02/2 POST-FIX WEIGHER: NOT AVAILABLE	SEX: FEMALE DOSE GRO STUDY DAY OF DEATH: 184 25/99 9:56 PROSECTOR PATHOLOGIS	DUP: 4 SACRIFICE S' STUDY WEEK OF DEATH: 27 : STEVE VAN ADESTINE ST: ROBERT LEEDLE	SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE SEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3185.0 GRAMS VAN ADESTINE RECORDER: TODD ACKER TILEBULE WEIGHER: TODD ACKER		
ORGAN NAME	ABSOLUTE ORGAN WEIGHT (GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	ORGAN TO BRAIN WEIGHT RATIO	ORGAN STATUS	
LEFT ADRENAL (ADO) RIGHT ADRENAL (ADI) BRAIN (BR) LF KIDNEY (KDO) RT KIDNEY (KDI) LIVER (LI) LF OVARY (OVO) RT OVARY (OVI) PANCREAS (PA) LF THYROID/PARA (TTO) RT THYROID/PARA (TTI)	ABSOLUTE ORGAN WEIGHT (GRAMS)3290 -2260 58.3990 6.9900 7.4110 93.8600 .1010 .1360 4.7990 .1910 .2400	.0103 % .0074 % 1.8336 % .2195 % .2327 % 2.9469 % .0032 % .0043 % .1504 % .0060 %	.0056 .0040 1.0000 .1197 .1269 1.6072 .0017 .0023 .0820 .0033	WEIGHT TAKEN	
NEC	BSERVATIONS	'ATIONS HISTOPATHOLOGY			
LUNG (LU): -DARK FOCUS(I)/AREA(S); ALL LOBES, DIFFUSE: MULTIPLE PINPOINT BLACK FOCI		SECTION EXA BRAIN (BR): -INFILTRATE, LUNG (LU): -UNREMARKABL LIVER (LI): -HYPERTROPHY -VACUOLATION SEVERE GALLBLADDER (MARROW, FEMUR (FM): SECTION EXAMINED; TISSUE NOT PRESENT BRAIN (BR): -INFILTRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR,-MINIMAL LUNG (LU): SUNREMARKABLE LIVER (LI): -HYPERTROPHY, HEPATOCELLULAR, CENTRILOBULAR, MODERATE -VACUOLATION, HEPATOCELLULAR, CENTRILOBULAR, MODERATELY		

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APPENDIX 5 Covance 6329-223 3M T-6295.7

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105536 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WESK OF DEATH: 27 TERMINAL BODY WEIGHT: 3185.0 GRAMS POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE RECORDER: TODD ACKER

O B S E R V A T I O N S (CONTINUED)

HISTOPATHOLOGY

HISTOPATHOLOGY

HISTOPATHOLOGY

THYMUS (TH):
 -CYST, -PRESENT
 -ATROPHY, -MODERATELY SEVERE

TRACHEA (TR):
 -INPILITRATE, LYMPHOHISTICCYTIC, -SLIGHT

THYROID (TY):
 -CYST, ULTIMOBRANCHIAL, -PRESENT

ADRENAL, CORTEX (AC):
 -HYPERTROPHY, CORTICAL CELL, -MINIMAL
 -PIGMENT, -SLIGHT

SALIV GL, MANDIB (SG):
 -INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL
SPINAL CORD (SC):
 -PIGMENT, NEURONAL, -MODERATE

DUODENUM (DU):
 -INFILITRATE, MACROPHAGE, PIGMENTED, -SLIGHT
 JEJUNUM (JE):
 -INFILITRATE, MACROPHAGE, PIGMENTED, -SLIGHT
 ILEUM (LL):
 -MACROPHAGE, PIGMENTED, -SLIGHT

ADRENAL, CORTEX (AC):
-DIFFUSELY DARK; BILATERAL: BROWN

-INFILITATE, MACROPHAGE, PIGMENTED, -SLIGHT -INFILITATE, MACROPHAGE, PIGMENTED, -SLIGHT

-- INFILTRATE, MACAULTERUS (UT):
-AMYLOID, -MODERATE
OVARY (OV):
-AMYLOID, -MODERATE
-ONE EXAMINED, -PRESENT

GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105536 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/25/99 STUDY DAY OF DEATH: 184 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 3185.0 GRAMS DATE AND TIME OF NECROPSY: 02/25/99 9:56 PROSECTOR: STEVE VAN ADESTINE RECORDER: TODD ACKER PATHOLOGIST: ROBERT LEBELE WEIGHER: TODD ACKER OBSERVATIONS (CONTINUED)

GENERAL COMMENT (GC):
-EYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.6650 GRAMS BILE VOLUME IS 2.6000 ML

THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMOR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), ESOPHAGUS (ES),
THYROID (TY), PARATHYROID (PT), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI), SALIV GL, MANDIB (SG),
MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA),
JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RG), SKIN (SK), MAMMARY, FEMALE (MF), URINARY BLADDER (UB),
UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT), LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BONE, FEMUR (FE), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), KIDNEY (KD), HEART (HT), SPLEEN (SP),
LN, MESENTERIC (MS), ESOPHAGUS (ES), PARATHYROID (PT), ADRENAL, MEDULLA (MA), AORTA (AO), PITUITARY (PI),
MUSCLE, SKELETAL (SM), NERVE, SCIATIC (SN), STOMACH, GL (ST), PANCREAS (PA), COLON (CO), RECTUM (RE), SKIN (SK),
MAMMARY, FEMALE (MP), URINARY BLADDER (UB), VAGINA (VA), CERVIX (CV)

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Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105540 SE DATE OF DEATH: 02/26/99 ST DATE AND TIME OF NECROPSY: 02/26 POST-FIX WEIGHER: NOT AVAILABLE	FUDY DAY OF DEATH: 185 5/99 10:20 PROSECT	STUDY WEEK OF DEATH: 27 FOR: STEVE VAN ADESTINE	TERMINAL BODY WE	HIGHT: 2700.0 GRAMS DHN S. HALFORD	
ORGAN NAME		ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)			
BRAIN (BR) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) PANCRES (PA)	.2550 56.3190 5.2090 4.8440 63.0760 .1400 .1410 4.4510	.0094 % 2.0859 % .1929 % .1794 % 2.3361 % .0052 % .0052 %	.0045 1.0000 .0925 .0860 1.1200 .0025 .0025	WEIGHT TAKEN	
LF THYROID/PARA (TT0) RT THYROID/PARA (TT1)	.2480 .2540	.0092 % .0094 %	.0044 .0045	WEIGHT TAKEN WEIGHT TAKEN	
OBSERVATIONS NECROPSY HISTOPATHOLOGY					
	MARROW, FEMUR (PM): SECTION EXAMINED; TISSUE NOT PRESENT				

LUNG (LU):
-RED FOCUS(I)/AREA(S); RIGHT CAUDAL AND APICAL LOBES:
MULTIPLE DARK RED INDISTINCT AREAS

>>SECTION BARRINGS, ALBOS BRAIN (BR): -INFILITRATE, MACROPHAGES, PIGMENTED, PERIVASCULAR,-SLIGHT LUNG (LU): -HEMORRHAGE,-MODERATE

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APPENDIX 5 Individual Anatomic Pathology Data

Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULFONIC
ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS ANIMAL NUMBER: 105540 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2700.0 GRAMS DATE AND TIME OF NECROPSY: 02/26/99 10:20 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD WEIGHER: JOHN S. HALFORD

O B S E R V A T I O N S (CONTINUED)

NECROPSY

NECROPSY

HISTOPATHOLOGY HISTOPATHOLOGY HISTOPATHOLOGY

TRACHEA (TR):
-IMPILITRATE, LYMPHOHISTICCYTIC, -MINIMAL
THYROID (TY):
-CYST, ULTIMOBRANCHIAL, -PRESENT
AORTA (AO):
-PROLIFERATION, INTIMAL, -MODERATE
MUSCLE, SKELETAL (SM):
-INFILITRATE, LYMPHOHISTICCYTIC, -MINIMAL
DUODBNUM (DU):
-INFILITRATE, MACROPHAGE, PIGMENTED, -SLIGHT
SKIN (SK):
-HAIR FOLLICLES, DECREASED, -MODERATE SKIN (SK):
-ALOPECIA-FOCAL; RIGHT DORSAL THORACIC REGION: 0.3 X 2.5 CM (CAP 29)
GENERAL COMMENT (GC):
-BONE MARROW SMEAR TAKEN
-BYES - DAVIDSONS
GENERAL INFORMATION (XX):
>NOTE:>GALLBLADDER WEIGHT IS 0.5650 GRAMS BILE VOLUME IS
1.6000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105540 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2700.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 10:20 PROSECTOR: STEVE VAN ADESTINE RECORDER: JOHN S. HALFORD POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

X WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: JOHN S. HALFORD

FOLLOWING CRGANS WERE UNREMARRABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TE), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (FT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT),
LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BONE, FEMUR (FE), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), KIDNEY (KD), HEART (HT), GALLBLADDER (GB),
SPLEEN (SP), LN, MESENTERIC (MS), ESOPHAGUS (ES), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA),
PITUITARY (PI), SALIV GL, MANDIB (SG), SPINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), PANCREAS (PA),
JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), MAMMARY, FEMALE (MP), URINARY BLADDER (UB),
UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV)

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Terminal Sacrifice

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105551 DATE OF DEATH: 02/26/99 DATE AND TIME OF NECROPSY: 02/ POST-FIX WEIGHER: NOT AVAILABL	SEX: FEMALE DOSE G STUDY DAY OF DEATH: 185 26/99 7:43 PROSECTO E PATHOLOG	ROUP: 4 SACRIFICE ST STUDY WEEK OF DEATH: 27 R: KEVIN BILLINGS IST: ROBERT LEEDLE	ATUS: SCHEDULED, TERMI TERMINAL BODY WE RECORDER: MI WEIGHER: MIC	NAL SACRIFICE !IGHT: 2230.0 GRAMS CHELE ZIMA :HELE ZIMA	
ORGAN NAME	(GRAMS)	ORGAN WEIGHT RELATIVE TO BODY WEIGHT (%)	WEIGHT RATIO	STATUS	
LEFT ADRENAL (AD0) RIGHT ADRENAL (AD1) BRAIN (BR) LP KIDNEY (KD0) RT KIDNEY (KD1) LIVER (LI) LF OVARY (OV0) RT OVARY (OV1) PANCERSE (PA)	.3850 2960 59.3140 6.0280 5.9040 68.7130 .2350 .1740	.0173 % .0133 % 2.6598 % .2703 % .2648 % 3.0813 % .0105 % .1093 % .0078 % .0073 %	.0065 .0050 1.0000 .1016 .0995 1.1585 .0040	WEIGHT TAKEN	
OBSERVATIONS NECROPSY			HISTOPATHOLOGY		
MARROW, FEMUR (FM): SECTION EXAMINED; TISSUE NOT PRESENT BRAIN (BR): -INPLAMMATION, LYMPHOHISTICCYTIC, -MINIMAL KIDNEY (KD): -MINERALIZATION, MEDULLA, -MINIMAL LUNG (LU): -RED FOCUS(I)/AREA(S); ALL LOBES: MULTIPLE DARK RED FOCI, PINPOINT AND UP TO 1 MM IN DIAMETER					

LUNG (LU); $-\text{RED FOCUS}(I)/\text{AREA}(S)\,; \quad \text{ALL LOBES: MULTIPLE DARK RED FOCI, PINPOINT AND UP TO 1 MM IN DIAMETER}$

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Individual Anatomic Pathology Data

Terminal Sacrifice

APPENDIX 5

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROCCTANE SULPONIC
ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105551 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2230.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 7:43 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA
POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MCHELE ZIMA

O B S E R V A T I O N S (CONTINUED)

NECROPSY

TRACHERA (TR):
INFLITABLE, LYMPHOHISTICCYTIC, -MINIMAL THREE LYMPHOHISTICCYTIC, -MINIMAL SALIV GL, MANDIB (SG):
INFLITABLE, LYMPHOHISTICCYTIC, -MINIMAL MUSCLE, SKELETAL (SM):
-PARASITES, CYST, -PRESENT
SPINAL CORD (SC):
-PIGMENT, NEURONAL, -MODERATE
JEJUNUM (JE):
-NOTE:-SANIMAL APPEARS TO BE IN ESTROUS GALLBLADDER WEIGHT IS
0.6040 GRAMS BILE VOLUME IS 1.8000 ML

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APPENDIX 5 Covance 6329-223 3M T-6295.7

Individual Anatomic Pathology Data

Terminal Sacrifice

PAGE: 74 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER: 105551 SEX: FEMALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, TERMINAL SACRIFICE DATE OF DEATH: 02/26/99 STUDY DAY OF DEATH: 185 STUDY WEEK OF DEATH: 27 TERMINAL BODY WEIGHT: 2230.0 GRAMS DATE AND TIME OF NECKOPSY: 02/26/99 7:43 PROSECTOR: KEVIN BILLINGS RECORDER: MICHELE ZIMA POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

X WEIGHER: NOT AVAILABLE PATHOLOGIST: ROBERT LEEDLE WEIGHER: MICHELE ZIMA

FOLLOWING CRGANS WERE UNREMARRABLE AT NECROPSY:
BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD),
HEART (HT), LIVER (LI), GALLBLADDER (GB), SPLEEN (SP), THYMUS (TE), LN, MESENTERIC (MS), TRACHEA (TR),
ESOPHAGUS (ES), THYROID (TY), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELETAL (SM), SPINAL CORD (SC), NERVE, SCIATIC (SN),
STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNUM (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE),
MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV), ADIPOSE TISSUE (AT),
LN, TRACHEOBRON (TB), LN, ANT MES/PANC (AP)

THE POLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION:
BOME, FEMUR (FE), MARROW, STERNUM (SE), BOME, STERNUM (SB), EYE (EY), HEART (HT), SPLEEN (SF), THYMUS (TH),
LN, MESENTERIC (MS), ESOPHAGUS (ES), PARATHYROID (PT), ADRENAL, CORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AO),
PITUITARY (PI), MERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), ILEUM (IL), CECUM (CE),
COLON (CC), RECTUM (RE), MAMMARY, FEMALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA),
CERVIX (CV)

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APPENDIX 5 Individual Anatomic Pathology Data

Recovery Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS	PAGE: 1						
ANIMAL NUMBER: 105511 SEX: MALE DOSE GROUP: 4 SACRIFICE STATUS: SCHEDULED, F DATE OF DEATH: 02/25/00 STUDY DAY OF DEATH: 549 STUDY WEEK OF DEATH: 79 TERMINAL BOI DATE AND TIME OF NECROPSY: 02/25/00 7:56 PROSECTOR: KEVIN BILLINGS RECORDER POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: AS ASSIGNED WEIGHER:	FIRST POST-RECOV SAC DY WEIGHT: 4240.0 GRAMS R: MICHELE ZIMA : MICHELE ZIMA						
*** ORGAN WEIGHTS WERE NOT RECORDED ***							
NECROPSY OBSERVATIONS HISTOPAT	THOLOGY						
LIVER (LI): -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: LIVER (LI) BODNE, FEMUR (FE) MARROW, FEMUR (FM) MARROW, STERNIM (SE), RONE, STERNUM (SB), RYE (RY), BRAIN (BR), LIVER (LI) BODNE, FEMUR (FE) MARROW, FEMUR (FM) MARROW, STERNIM (SE), RONE, STERNUM (SB), RYE (RY), BRAIN (BR), LIVER (LI): -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT TIVER (LI): -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SLIGHT THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -INFILTRATE, LYMPHOHISTICCYTIC, -SEMIJAL ORGANS -INFILTRATE, LYMPHOHISTICCYTIC, -SEMIJAL ORGANS -INFILTRATE, LYMPHOHISTICCYTIC, -SEMIJAL ORGANS -INFILTRATE, LYMPHOHISTICCYTIC, -SEMIJAL ORGANS -INFILTRATE, LYMPHOH							
TESTIS (TĒ), CAVITY, THORĀCIC (TA) THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATION: LIVER, BIOPEY (LIO)							

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APPENDIX 5 Individual Anatomic Pathology Data

Recovery Sacrifice

26-WEEK CAPSULE TOXICITY STUDY ACID POTASSIUM SALT (PPOS)T	WITH PERPLUOROOCTANE SULPONIC PAGE: 2 -6295) IN CYNOMOLGUS MONKEYS
ANIMAL NUMBER: 105522 SEX: MALE DOSE GROUP: 4 DATE OF DEATH: 02/25/00 STUDY DAY OF DEATH: 549 STUDY WE DATE AND TIME OF NECKOPSY: 02/25/00 8:35 PROSECTOR: KEVIN B POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: AS AS:	SACRIFICE STATUS: SCHEDULED, FIRST FOST-RECOV SAC EK OF DEATH: 79 TERMINAL BODY WEIGHT: 4350.0 GRAMS ILLINGS RECORDER: MICHELE ZIMA SIGNED WEIGHER: MICHELE ZIMA
*** ORGAN WEIGHTS WERE NOT RECORDED ***	
NECROPSY	ATIONS HISTOPATHOLOGY
LUNG (LU); -ADMESION(S); ALL LOBES TO EACH OTHER PLEURA, PERICARDIAL SAC AND CAUDAL LOBES TO DIAPHRAGM: MULTIPLE TAN FIBROUS ADMESIONS CAVITY, THORACIC (TA); -AODULE(S); WITHIN ADHESIONS: MULTIPLE TAN AND FIRM NODULES, UP TO 0.3 CM IN DIAMSTER	LIVER, BIOPSY (LI0): -PIGMENT, HEPATOCCELLULAR, -SLIGHT LIVER (LI): -INFILITATE, LYMPHOHISTICCYTIC, -MODERATE -PIGMENT, HEPATOCCELLULAR, -SLIGHT -HYPERFLÄSIA, BILE DUCT, -MODERATE -INFILAMMATION, EOSINOPHILIC, PERI-BILE DUCT, -MODERATE LUNG (LU): -NOT REQUIRED TO BE EXAMINED FOR ANIMAL
THE POLLOWING CRGANS WERE UNREMARKABLE AT NECROPSY: LIVER (LI), BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, KIDNEY (KD), HEART (HT), GALLBLADDER (GB), SPLEEN (SP), TH ESOPHAGUS (ES), THYROID (TY), PARATHYROID (FT), ADRENAL, C PITUITARY (PI), SALIV GL, MANDIB (SG), MUSCLE, SKELTAL (SI STOMACH, GL (ST), DUDDENNUM (DU), PANCREAS (PA), JEJUNUM (JI SKIN (SK), MAMMARY, MALE (MM), URINARY BLADDER (UB), PROST, TESTIS (TB), GENERAL COMMENT (GC)	YMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), ORTEX (AC), ADRENAL, MEDULLA (MA), AORTA (AC), M) SPINAL CORD (SC) NERVE SCIATIC (SN)

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APPENDIX 5 Individual Anatomic Pathology Data

Recovery Sacrifice

26-WEEK CAPSULE TOXICITY STUDY ACID POTASSIUM SALT (PPOS;T	WITH PERFLUOROOCTANE SULFONIC -6295) IN CYNOMOLGUS MONKEYS	PAGE: 3
ANIMAL NUMBER: 105533 SEX: FEMALE DOSE GROUP: 4 DATE OF DEATH: 02/25/00 STUDY DAY OF DEATH: 549 STUDY DATE AND TIME OF NECKOPSY: 02/25/00 8:58 PROSECTOR: KEVIN B POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: AS AS	SACRIFICE STATUS: SCHEDULED, FIRST POST-RECOVER OF DEATH: 79 TERMINAL BODY WEIGHT: 2535. ILLINGS RECORDER: MICHELE ZIMA SIGNED WEIGHER: MICHELE ZIMA	/ SAC 0 GRAMS
*** ORGAN WEIGHTS WERE NOT RECORDED ***		
NECROPSY OBSERV	ATIONS HISTOPATHOLOGY	
LIVER (LI): -ADHESION(S): -DIAPHRAGMATIC SURFACE OF RIGHT MEDIAN LOBE TO DIAPHRAGM: SINGLE TAM, FIBROUS LINEAR AREA, 2.0 CM IN LENGTH GALBELADDER (GB): -NOTEL'S NO BILE AVAILABLE FOR SPECIAL PROCEDURE THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -THE FOLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: -DIVING (LU): -D	GALLBLADDER (GB): SNOT REQUIRED TO BE EXAMINED FOR ANIMAL BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY US (TH) LN, MESENTERIC (MS), TRACHEA (TR) ORTEX (AC), ADPENAL, MEDULIA (MA), AORTA (AO), M) SPINAL CORD (SC), NERVE, SCIATIC (SN), E1, LIEUM (IL), CECUM (CE), COLON (CO), RETUM (RE	
THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINA LIVER, BIOPSY (LIO)	TION:	

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APPENDIX 5 Individual Anatomic Pathology Data

Recovery Sacrifice

26-WEEK CAPSULE TOXICITY STUDY W ACID FOTASSIUM SALT (PFOS)T-6								
ANIMAL NUMBER: 105542 SEX: FEMALE DOSE GROUP: 4 DATE OF DEATH: 02/25/00 STUDY DAY OF DEATH: 549 STUDY WEEL DATE AND TIME OF NECROESY: 02/25/00 9:23 PROSECTOR: KEVIN BII POST-FIX WEIGHER: NOT AVAILABLE PATHOLOGIST: AS ASSI	SACRIFICE STATUS: SCHEDULED, FIRST POST-RECOV SAC (OF DEATH: 79 TERMINAL BODY WEIGHT: 3705.0 GRAMS LINGS RECORDER: MICHELE ZIMA GNED WEIGHER: MICHELE ZIMA							
*** ORGAN WEIGHTS WERE NOT RECORDED ***								
NECROPSY OBSERVI	ATIONS HISTOPATHOLOGY							
LIVER (LI): -INFILTRATE, LYMPHOHISTICCYTIC,-MINIMAL -NO MACROSCOPIC LESIONS								
THE POLLOWING ORGANS WERE UNREMARKABLE AT NECROPSY: LIVER (LI), BONE, FEMUR (FE), MARROW, FEMUR (FM), MARROW, STERNUM (SE), BONE, STERNUM (SB), EYE (EY), BRAIN (BR), KIDNEY (KD), LUNG (LU), HEART (HT), GALLBLADDER (GB), SPLEEN (SF), THYMUS (TH), LN, MESENTERIC (MS), TRACHEA (TR), ESOFHAGUS (SS), THYROID (TY), PARATHYROID (FT), ADERNAL, CORTEX (AC), ADERNAL, MEDULLA (MA), AORTA (AO), PITULTARY (PI), SALIV GL, MANNIB (SG), MUSCLE, SRELETAL (SM), SFINAL CORD (SC), NERVE, SCIATIC (SN), STOMACH, GL (ST), DUODENUM (DU), PANCREAS (PA), JEJUNNA (JE), ILEUM (IL), CECUM (CE), COLON (CO), RECTUM (RE), SKIN (SK), MAMMARY, FEMBALE (MF), URINARY BLADDER (UB), UTERUS (UT), OVARY (OV), VAGINA (VA), CERVIX (CV),								
THE FOLLOWING TISSUES WERE UNREMARKABLE AT MICROSCOPIC EXAMINATI LIVER, BIOPSY (LIO)	ON:							

906

APPENDIX 6

AniLytics Inc. Quality Assurance Statements Summary and Individual Blood Hormone Determination

Note: This appendix contains information supplied and audited by AniLytics Inc.



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The reports listed below was reviewed for compliance with the FDA Good Laboratory Practices and with the EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory

Franklin B. Newman

OA Auditor

SPONSOR: COVANCE LABS

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE:

REPORT TO MGMT:

AUDIT #:

CORT, EI, EZ, E3, TSH

TESTOS, T3, T4

9-6-98

9-8-98

98-681

MANAGEMENT 9/8/98



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

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The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

SPONSOR: COVANCE LABS INC

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE: REPORT TO MGMT:

AUDIT #:

CORT, TEST, EI, FZ

月,79,74,15H

11-29-98



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The reports listed below was reviewed for compliance with the FDA Good Laboratory Practices and with the EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

Franklin B. Newman

QA Auditor

SPONSOR: COVANCE LABS

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE:

REPORT TO MGMT:

AUDIT #:

TESTOS, CORT, EI, EX

E3, T3, T4, T5H

12-27-98

12-28-98

98-99

MANAGEMENT 12/28/48



200 Girard Street, Suite 200, Gaithersburg, MD 20877

The reports listed below was reviewed for compliance with the FDA Good Laboratory Practices and with the EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

SPONSOR: COVANCE LABS

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE:

REPORT TO MGMT:

AUDIT #:

CORT, TEST, EI, EZ, E3

T3, T4, T5H

3-21-98

3-22-89

99-229



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The reports listed below was reviewed for compliance with the FDA Good Laboratory Practices and with the EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

OA Auditor

SPONSOR: COVANCE LABS

-STUDY: 6329-223

REPORT TYPE:

AUDIT DATE:

REPORT TO MGMT:

AUDIT #:

CORT, TESTOS, El,

E2, E3, T3, T4, TSH

99-336



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The reports listed below was reviewed for compliance with the FDA Good Laboratory Practices and with EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

Franklin B. Newman

QA Auditor

SPONSOR: COVANCE LABS INC

STUDY: 6329-223

REPORT TYPE: AUDIT DATE: REPORT TO MANAGEMENT: AUDIT #:

CORTISOL, TESTOS, EI

E2, E3, T3, T4, T317 7-4-99 7-5-97 99-564

MANAGEMENT 5/12/99



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The report listed below was reviewed for compliance with the FDA Good Laboratory Practices and with EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

QA Auditor

SPONSOR: COVANCE LABS INC

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE: REPORT TO MANAGEMENT: AUDIT #:

CORTISON, TESTOS, EI E2, E3, T3, T4, T3H, FT3, FT4

11-21-99

99-987

MANAGEMENT 11/22/99



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The report listed below was reviewed for compliance with the FDA Good Laboratory Practices and with EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

SPONSOR: COVANCE LABS INC

STUDY: 6329-223

REPORT TYPE: AUDIT DATE:

REPORT TO MANAGEMENT:

AUDIT #:

13, 74, 15H, EI, EZ,

E3, CORT, TESTOS

4-2-00

4-3-00

00-229



200 Girard Street, Suite 200, Gaithersburg, MD 20877 301-921-0168 800-237-2815

The report listed below was reviewed for compliance with the FDA Good Laboratory Practices and with EPA Good Laboratory Practices. The final report and all associated raw data were reviewed for accuracy and consistency and the findings were reported to management.

The methods used were the methods described and the report accurately reflects the data. Therefore, these studies were done in compliance with the FDA and EPA Good Laboratory Practices.

QA Auditor

SPONSOR: COVANCE LABS INC

STUDY: 6329-223

REPORT TYPE:

AUDIT DATE: REPORT TO MANAGEMENT:

AUDIT #:

FT3, FT4

4-16-00

4-17-00

00-299

MANAGEMENT 4/17/00

Appendix 6
Summary and Individual Blood Hormone Determination
Day -50

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
Group: N	Male 1 Dos	e Level: 0	Dosage '	Unit: mg/kg	g/day			
I05519 I05520 I05526	49.55 64.74 47.30	14.54 3.04 6.12 10.74 0.09 6.48	31.21 30.92 31.69	20.01 54.86 17.51 39.76 27.63 24.47	0.00 0.00 0.00 0.00	0.44 0.98 0.92 2.11 0.86 3.34	89.59 125.67 82.21 122.59 132.25 102.72	4.96 3.25 5.11 3.13 3.80 3.52
MEAN S.D. N	54.56 6.785 6	6.84 5.199 6	36.41 9.077 6	30.71 14.158 6	0.000	1.44 1.084 6	109.17 20.673 6	3.96 0.8 64 6
Group: N	Male 2 Dos	e Level: 0.03	Dosage	Unit: mg/kg	g/day			
I05515 I05516	38.63 58.36	1.18 9.81 0.34 14.26	27.91 32.30	51.37 17.75 29.41 62.35	0.00	1.44 1.04 1.13 1.45	133.26 83.16 138.37 130.08	6.14 3.32 8.91 4.56
MEAN S.D. N	56.52 13.374 4	6.40 6.767 4	39.72 14.114 4	40.22 20.296 4	0.00 0.000 4	1.27 0.211 4	121.22 25.600 4	5.73 2.412 4
Group: N	Male 3 Dos	e Level: 0.15	Dosage '	Unit: mg/k	g/day			
	38.05 50.92 56.98 62.46	3.04 0.41 3.77 4.38 1.02 0.97	23.74 53.56 43.26 30.26	30.43 26.96 28.80 39.35 26.55 18.67	0.00 0.00 0.00 0.00 0.00	1.20 0.60 1.67 0.00 0.62 1.04	122.64 115.95 124.80 162.12 117.52 113.68	5.60 3.48 4.29 6.48 4.28 4.49
MEAN S.D. N	53.27 9.606 6	2.27 1.674 6	36.76 11.692 6	28.46 6.698 6	0.00 0.000 6	0.86 0.578 6	126.12 18.122 6	4.77 1.079 6

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 $\begin{array}{c} {\tt Appendix} \ \ 6 \\ \\ {\tt Summary} \ \ {\tt and} \ \ {\tt Individual} \ \ {\tt Blood} \ \ {\tt Hormone} \ \ {\tt Determination} \\ \\ {\tt Day} \ \ -50 \\ \end{array}$

ANIMAL NUMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: M	Male 4 Dose	Level: 0.75	Dosage '	Unit: mg/kg	g/day			
I05511	41.20 65.60 48.27 49.15	18.86 0.29	26.45 49.83 30.80 32.75 38.12 49.93	46.01 22.90	0.00 0.00 0.00 0.00 0.00	0.08 1.45 1.81 0.42 0.60 1.66	148.18 113.67 112.11 152.20 162.79 151.90	4.90 4.66 5.14 4.13 4.63 3.36
S.D.	49.33 8.464 6	9.78 9.117 6	9.951	34.19 10.950 6		1.00 0.726 6	140.14 21.669 6	
Group: F	'emale 1 Dose	Level: 0	Dosage '	Unit: mg/k	g/day			
	64.90 55.89 51.86 55.61	0.03 0.36 0.38	48.75 48.53 53.05 50.13 37.23 50.33	32.43 61.53 31.55	0.00 0.00 0.00 0.00 0.00	0.75 0.74 0.30 1.14 2.67 0.69	91.26 153.02 45.26 128.93 96.13 87.95	4.13
MEAN S.D. N		0.28 0.195 6		12.984		1.05 0.838 6	100.43 37.095 6	7.17 4.963 6
Group: F	'emale 2 Dose	Level: 0.03	Dosage '	Unit: mg/kg	g/day			
I05537 I05541 I05547 I05550	82.66 71.82	0.19 0.66 0.16 0.29	91.05 60.36 55.87 50.49	42.73	0.00 0.00 0.00 0.00	0.00 0.65 0.79 0.88	158.33 140.97 115.35 107.01	6.80 6.99 4.66 4.27
MEAN S.D. N	68.66 15.280 4	0.33 0.230 4	64.44 18.191 4	64.50 43.219 4	0.00 0.000 4	0.58 0.398 4	130.42 23.561 4	5.68 1.414 4

918

Appendix 6
Summary and Individual Blood Hormone Determination
Day -50

ANIMAL NUMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{G}/dL
Group: Fe	emale 3 Dos	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
I05532 I05538 I05539 I05545 I05548 I05552	56.59 51.32 66.59 63.69 65.26 49.09	0.13 0.23 0.34 0.25 0.45 0.33	51.67 52.69 129.12 176.45 63.53 23.32	35.53 35.81 82.62 132.50 47.80 15.96	0.00 0.00 0.00 0.00 0.00 0.00	4.46 0.00 1.48 0.67 0.00 1.52	64.50 137.04 117.92 135.57 104.23 71.94	5.49 3.21 5.68 5.05 4.24 6.35
MEAN S.D. N	58.76 7.502 6	0.29 0.110 6	82.80 57.794 6	58.37 42.484 6	0.00 0.000 6	1.36 1.663 6	105.20 31.182 6	5.00 1.123 6
Group: Fe	emale 4 Dos	e Level: 0.75	Dosage	Unit: mg/k	g/day			
I05533 I05534 I05536 I05540 I05542 I05551	58.99 59.49 51.68 46.17 87.39 67.04	0.35 0.05 0.29 0.15 0.63 0.38	96.99 42.90 47.76 54.58 39.07 86.86	64.39 34.98 46.31 88.38 31.81	0.00 0.00 0.00 0.00 0.00	2.10 0.98 0.17 1.51 0.32 0.21	101.63 97.38 124.27 126.16 109.29 95.16	4.25 4.94 5.78 5.23 6.44 5.78
MEAN S.D.	61.79 14.438	0.31 0.201	61.36 24.447	62.31 30.672	0.00 0.000	0.88 0.795	108.98 13.480	5.40 0.766

919

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL			THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Ma	le 1 Dose	e Level: 0	Dosage 1	Unit: mg/kg	g/day			
I05519 I05520 I05526	43.65 71.52 52.42 84.79	3.30 2.35 0.37 11.10 0.21 5.72	42.46 32.19 46.29 26.36	19.63 35.48 20.87	0.00 0.00 0.00 0.00 0.00	0.26 0.50 0.56 0.34 1.13 0.95	113.08 104.32 122.61 137.32 154.19 99.03	4.24 2.99 5.26 3.54 3.86 4.72
MEAN S.D. N	64.86 16.197 6	3.84 4.098 6	34.20 8.780 6	25.31 9.507 6	0.00 0.000 6	0.62 0.345 6	121.76 20.932 6	4.10 0.819 6
Group: Ma	le 2 Dose	e Level: 0.03	Dosage 1	Unit: mg/kg	g/day			
105516	79.55 67.38 87.16 62.83	1.10 5.86 0.19 9.82	21.00 23.13	4.64 28.82 23.58 49.29	0.00	1.16 0.21 0.94 1.12	140.65 97.32 127.13 120.13	6.28 4.57 5.92 6.34
MEAN S.D. N	74.23 11.141 4	4.24 4.473 4	35.86 19.695 4	26.58 18.359 4	0.00 0.000 4	0.86 0.442 4	121.31 18.118 4	5.78 0.826 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage 1	Unit: mg/k	g/day			
105505 105510 105518 105523 105524 105528	77.83 67.52 61.48	4.07 0.53 0.93 1.81 0.68 6.04	31.51 45.46 34.64	18.34 17.29 25.93 27.49 16.37 13.10	0.00 0.00 0.00 0.00 0.00	0.85 0.69 1.87 0.00 0.75 0.00	130.66 104.25 145.93 136.56 107.44 111.71	3.94 4.76 5.13
MEAN S.D. N		2.34 2.235 6	36.20 7.651 6	19.75 5.688 6	0.00 0.000 6	0.69 0.689 6	122.76 17.258 6	4.60 0.881 6

920

ANIMAL NUMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: 1	Male 4 Dose	Level: 0.75	Dosage '	Jnit: mg/kg	g/day			
I05506 I05507 I05509 I05511 I05512 I05522	44.53 82.95 75.12 81.05	7.01 1.03 16.78 0.14	28.98 32.46 27.21 37.12 37.24 52.20	30.79 14.40 42.06 21.98	0.00 0.00 0.00 0.00 0.00 0.00	0.82 1.92 0.57 0.59 0.25 1.54	157.93 88.90 116.45 188.61 169.66 158.85	5.12 6.69 4.44 4.90 3.80 3.42
MEAN S.D. N	16.683	6.06 6.565 6	8.991	29.95 13.432 6		0.95 0.6 4 3 6	146.73 36.914 6	4.73 1.157 6
Group:	Female 1 Dose	Level: 0	Dosage '	Jnit: mg/kg	g/day			
105529 105530 105531 105535 105544 105549	70.50 85.44 85.08 89.58	0.01 0.25 0.37 0.44	42.94 90.55 52.80 79.48 72.70 50.29	65.47 91.87 52.46 46.44	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.11 0.73 2.16 0.69	75.62 128.68 73.71 125.42 106.71 76.27	4.60 5.65 4.93 4.02 3.73 4.49
MEAN S.D. N			64.79 18.833 6	22.407	0.00 0.000 6		97.74 25.813 6	4.57 0.680 6
Group:	Female 2 Dose	Level: 0.03	Dosage '	Unit: mg/kg	g/day			
I05537 I05541 I05547 I05550	79.24 108.45 67.50 89.13	0.77	59.21 116.25 40.43 62.40	90.73 67.42	0.00 0.00 0.00 0.00	0.01 0.26 1.14 0.93	131.29 132.70 86.87 88.98	6.03 6.63 4.59 2.99
MEAN S.D. N	86.08 17.337 4	0.34 0.288 4	69.57 32.593 4	66.89 17.818 4	0.00 0.000 4	0.59 0.536 4	109.96 25.465 4	5.06 1.624 4

921

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
Group: Fe	emale 3 Dose	e Level: 0.15	Dosage 1	Unit: mg/kg	g/day			
105532 105538 105539 105545 105548 105552	63.15 70.84 68.60 64.50 67.75 53.55	0.06 0.08 0.35 0.13 0.66 0.40	33.18 53.04 492.12 114.49 75.11 45.64	29.09 40.85 272.75 81.43 55.06 48.94	0.00 0.00 0.00 0.00 0.00	1.38 0.00 1.33 0.17 0.00 2.13	95.64 114.53 114.65 106.43 116.19 82.66	4.36 3.19 6.09 4.61 4.02 4.69
MEAN S.D. N	64.73 6.148 6	0.28 0.234 6	135.60 176.980 6	88.02 92.174 6	0.00 0.000 6	0.84 0.901 6	105.02 13.401 6	4.49 0.953 6
Group: Fe	emale 4 Dose	e Level: 0.75	Dosage 1	Unit: mg/kg	g/day			
I05533 I05534 I05536 I05540 I05542 I05551	69.41 60.42 66.67 65.40 92.90 64.20	0.73 0.28 0.15 0.08 0.32 0.42	90.70 60.87 66.36 35.46 59.88 76.86	76.17 66.05 59.95 33.64 43.92 82.48	0.00 0.00 0.00 0.00 0.00	0.00 0.13 0.04 1.39 1.02 0.24	108.13 81.98 114.01 119.54 151.57 108.31	4.03 4.39 5.41 4.36 7.00 5.21
MEAN S.D. N	69.83 11.681 6	0.33 0.230 6	65.02 18.541 6	60.37 18.740 6	0.00 0.000 6	0.47 0.587 6	113.92 22.513 6	5.07 1.0 8 7 6

922

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Ma	le 1 Dose	e Level: 0	Dosage '	Unit: mg/kg	g/day			
I05519 I05520 I05526	50.40 74.30 55.75 72.92	2.60 2.25 0.40 3.11 0.48 2.43	25.09 29.31 22.23	31.24 51.38	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	101.15 112.05 112.26 115.75 127.37 92.95	3.82 3.11 4.39 2.89 2.83 3.90
MEAN S.D. N	63.49 9.676 6	1.88 1.151 6	26.69 5.838 6	33.31 10.926 6	0.00 0.000 6	0.00 0.000 6	110.26 11.939 6	3.49 0.637 6
Group: Ma	le 2 Dose	e Level: 0.03	Dosage	Unit: mg/kg	g/day			
I05514 I05515 I05516 I05521	77.44	1.41 1.40 0.31 3.03	26.17 29.91	35.52	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	120.88 126.21 97.87 105.02	5.30 2.51 5.85 4.16
MEAN S.D. N	67.69 14.422 4	1.54 1.121 4	32.07 6.060 4	42.38 11.204 4	0.00 0.000 4	0.00 0.000 4	112.50 13.269 4	4.46 1.475 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage '	Unit: mg/k	g/day			
105505 105510 105518 105523 105524 105528	68.33 54.45 66.60	5.40 0.38 1.06 2.36 1.11 0.74	25.88 26.53 25.62	27.04 22.77 39.19 37.12 32.22 21.66	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.32 0.00 0.00	117.98 114.00 149.51 140.05 86.43 100.82	5.76 3.90 4.50 6.33 3.74 3.55
MEAN S.D. N	68.16 13.025 6	1.84 1.867 6	25.78 2.718 6	30.00 7.358 6	0.00 0.000 6	0.05 0.131 6	118.13 23.608 6	4.63 1.155 6

923

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
Group: Ma	ile 4 Dose	e Level: 0.75	Dosage '	Unit: mg/kg	g/day			
105506 105507 105509 105511 105512 105522	47.35 48.45 71.85 71.00 65.67 61.00	0.85 1.81 1.13 2.40 0.17 3.96	26.15 32.25 24.92 24.62 33.79 36.25	31.68 32.53 22.42 48.45 36.30 41.15	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	149.78 117.94 130.15 137.80 128.50 133.19	5.35 6.72 5.49 4.61 3.49 3.60
MEAN S.D. N	60.89 10.801 6	1.72 1.341 6	29.66 5.047 6	35. 4 2 8.885 6	0.00 0.000 6	0.00 0.000 6	132.89 10.581 6	4.88 1.235 6
Group: Fe	emale 1 Dose	e Level: 0	Dosage '	Unit: mg/kg	g/day			
105529 105530 105531 105535 105544 105549	72.55 76.75 48.35 68.60 52.84 55.44	0.28 0.07 0.50 0.35 0.42 0.07	75.71 61.83 208.06	49.80 102.72 92.55 59.99 101.29 59.93	0.00 0.00 0.00 0.00 0.00	0.00 0.01 0.00 0.00 1.26 0.00	82.65 184.14 90.39 109.23 145.88 99.05	4.40 8.76 8.31 5.76 5.54 5.97
MEAN S.D. N	62.42 11.701 6	0.28 0.179 6	91.49 64.841 6	77.71 23.710 6	0.00 0.000 6	0.21 0.514 6	118.56 38.982 6	6.46 1.705 6
Group: Fe	male 2 Dose	e Level: 0.03	Dosage '	Unit: mg/kg	g/day			
I05537 I05541 I05547 I05550	80.90 66.41 83.87 47.16	0.16 0.17 0.46 0.31	63.92 70.21 65.82 44.95	82.77 78.87 70.18 119.41	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	167.85 119.83 284.36 110.60	9.01 7.95 6.35 4.93
MEAN S.D. N	69.59 16.783 4	0.28 0.141 4	61.23 11.165 4	87.81 21.716 4	0.00 0.000 4	0.00 0.000 4	170.66 79.847 4	7.06 1.792 4

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	IMAL MBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ g/dL
Gr	oup: Fe	emale 3 Dose	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
IO IO IO	5532 5538 5539 5545 5548 5552	57.80 87.05 50.45 57.66 56.95 62.72	0.18 0.09 0.08 0.03 0.59	73.31 34.86 45.40 97.36 80.60 35.64	64.68 46.45 87.24 92.73 76.53 71.52	0.00 0.00 0.00 0.00 0.00	1.98 0.00 0.00 0.00 0.00 0.00	221.66 133.62 122.82 126.61 125.43 99.82	8.42 6.15 8.69 7.04 5.95 6.53
ME. S.: N		62.11 12.832 6	0.25 0.248 6	61.20 26.181 6	73.19 16.617 6	0.00 0.000 6	0.34 0.802 6	138.33 42.411 6	7.13 1.168 6
Gr	oup: Fe	emale 4 Dose	e Level: 0.75	Dosage	Unit: mg/kg	g/day			
IO IO IO	5533 5534 5536 5540 5542 5551	80.05 71.00 48.50 68.05 82.95 63.39	0.55 0.19 0.16 0.05 0.37 0.18	197.69 75.81 51.69 27.69 53.10 133.61	243.31 98.79 75.52 27.51 54.14 259.85	0.00 0.00 0.00 0.00 0.00	0.04 0.00 0.00 0.00 0.00 0.00	298.47 161.23 130.92 94.60 124.93 119.61	7.38 6.76 6.89 4.96 8.88 7.73
ME. S.: N		68.99 12.436 6	0.25 0.179 6	89.93 63.894 6	126.52 99.828 6	0.00 0.000 6	0.01 0.016 6	154.96 73.494 6	7.10 1.295 6

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 37

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL				THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	
Group: Ma	le 1 Dose	e Level: 0	Dosage 1	Unit: mg/kg	g/day			
105520	58.12 56.30 51.45 54.80	1.38 0.36 2.11 0.89		21.01 42.28 34.97 65.45 32.02 47.15	0.00 0.00 0.00 0.00 0.00 0.00	0.02 0.86 0.00 0.00 0.47 0.70	252.81 298.92 279.29 241.26 316.62 250.74	4.67 4.18 4.63 3.30
MEAN S.D. N	2.818	2.68 4.010 6	24.08 8.004 6	15.181			273.27 30.081 6	
Group: Ma	le 2 Dose	e Level: 0.03	Dosage 1	Unit: mg/k	g/day			
I05514 I05515 I05516 I05521	72.96 56.42 53.39 60.98	0.94	32.81 23.69 14.32 37.38	39.25 48.23	0.00	0.70 0.43 0.13 0.14	306.12 283.59 272.54 229.90	6.21 3.96 4.83 5.43
MEAN S.D. N	60.94 8.601 4	3.48 4.532 4	27.05 10.218 4	67.65 28.460 4	0.00 0.000 4	0.35 0.272 4	273.04 31.973 4	5.11 0.951 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage 1	Unit: mg/k	g/day			
I05510 I05518 I05523 I05524	66.10 52.23 61.98 64.07	0.83 2.11 0.68	24.13 26.75	36.78 29.76 38.59 44.88 33.62 23.33	0.00 0.00 0.00 0.00	0.07 0.68 0.92 0.00 0.32 0.01	265.64 255.41 272.85 284.01 221.20 228.32	4.29 3.46 5.45 3.41
MEAN S.D. N	63.22 6.968 6	1.00 0.563 6	21.25 6.703 6	34.49 7.452 6	0.00 0.000 6	0.33 0.387 6	254.57 25.007 6	4.00 0.844 6

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 37

ANIMAL NUMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING μ U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: 1	Male 4 Dose	Level: 0.75	Dosage '	Unit: mg/kg	g/day			
I05506 I05507 I05509 I05511 I05512 I05522	69.37 86.47 75.68 64.22	14.80 1.24 1.50 0.25	24.16 51.78 17.49 6.35 21.10 69.66	91.86 35.79 35.89 39.97	0.00	0.00 0.36 0.66 0.14 0.04 0.03	229.83 199.81 259.19 230.58 246.92 270.21	3.61 3.33 4.31 4.22 2.99 3.18
S.D.	11.785	9.42 14.866 6	23.908	66.580			239.42 25.037 6	
Group: 1	Female 1 Dose	e Level: 0	Dosage '	Unit: mg/k	g/day			
105529 105530 105531 105535 105544 105549	77.09 60.99 61.72 62.18	0.08 0.20 0.25 0.46	42.85 39.24 88.53 40.91 75.30 65.95	74.66 208.96 63.01 65.02	0.00	0.18 0.69 0.27 0.40 2.61 0.21	256.85 189.21 211.24 267.83 216.47 236.08	5.64 4.38
MEAN S.D. N		0.130	58.80 20.805 6	58.605	0.00 0.000 6	0.941	229.61 29.621 6	5.82 1.217 6
Group: 1	Female 2 Dose	Level: 0.03	Dosage '	Unit: mg/kg	g/day			
I05537 I05541 I05547 I05550	81.53 63.15	0.31	64.21 61.86 45.86 55.39	127.77 76.97	0.00	0.00 0.01 0.68 0.27	279.90 240.82 223.65 232.10	6.09 4.37
MEAN S.D. N	71.41 8.993 4	0.30 0.068 4	56.83 8.209 4	131.36 41.770 4	0.00 0.000 4	0.24 0.319 4	244.12 24.864 4	5.06 1.180 4

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 37

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{G}/dL
Group: Fe	emale 3 Dose	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
I05532 I05538 I05539 I05545 I05548 I05552	66.39 54.30 50.23 46.45 46.73 56.82	0.20 0.07 0.08 0.09 0.30 0.48	383.80 27.95 38.80 119.09 34.02 27.36	351.81 58.49 86.17 227.52 52.35 51.92	0.00 0.00 0.00 0.00 0.00	1.56 0.00 1.21 0.00 0.00 0.91	192.15 225.80 221.63 237.82 184.62 220.15	4.53 3.21 3.49 4.18 2.78 3.89
MEAN S.D. N	53.49 7.537 6	0.20 0.162 6	105.17 140.935 6	138.04 124.485 6	0.00 0.000 6	0.61 0.703 6	213.70 20.701 6	3.68 * 0.646 6
Group: Fe	emale 4 Dose	e Level: 0.75	Dosage	Unit: mg/k	g/day			
I05533 I05534 I05536 I05540 I05542 I05551	63.27 53.74 55.56 54.54 54.14 68.07	0.29 0.15 0.19 0.07 0.09 0.12	70.06 49.92 42.44 31.28 67.52 104.58	150.87 123.86 63.03 47.69 67.27 271.41	0.00 0.00 0.00 0.00 0.00	1.07 1.59 0.00 0.26 0.52 0.10	190.90 203.76 204.79 191.80 196.18 190.95	3.51 5.03 3.62 3.16 4.84 5.21
MEAN S.D. N	58.22 5.998 6	0.15 0.080 6	60.97 25.978 6	120.69 83.839 6	0.00 0.000 6	0.59 0.622 6	196.40 6.414 6	4.23 * 0.895

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 62

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL		THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL μ_{G}/dL
Group: Ma	le 1 Dose	e Level: 0	Dosage 1	Unit: mg/kg	g/day			
I05519 I05520 I05526	57.71 60.20 50.13 63.25	0.50 1.30 0.39 2.28 0.65 1.40	27.43 27.41 15.13		0.00 0.00 0.00 0.00 0.00	0.25 1.72 0.00 0.00 0.00 1.42	119.34 163.61 145.97 164.61 139.41 135.30	2.89 2.79 2.77 3.81 1.73 2.55
MEAN S.D. N	56.51 8.318 6	1.09 0.719 6	26.93 9.256 6	41.70 16.877 6	0.000	0.57 0.790 6	144.71 17.407 6	2.76 0.667 6
Group: Ma	le 2 Dose	e Level: 0.03	Dosage 1	Jnit: mg/kg	g/day			
I05515 I05516	86.10 59.33 49.45 62.77	2.10 0.67 0.27 3.13	29.19 27.02 17.22 44.97		0.00 0.00 0.00 0.00	0.54 0.11 0.47 0.57	147.03 143.03 118.77 148.62	4.36 3.15 4.47 3.64
MEAN S.D. N	64.41 15.522 4	1.54 1.318 4	29.60 11.494 4	74.50 * 17.333	0.00 0.000 4	0.42 0.213 4	139.36 13.928 4	3.91 * 0.624 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage 1	Jnit: mg/kg	g/day			
I05518 I05523	58.68 60.80 76.60 62.76	1.07 0.51 0.77 2.83 0.94 0.77	25.73 31.30 35.79	36.91 26.22 30.11 62.53 31.79 33.29	0.00 0.00 0.00 0.00 0.00	1.22 1.53 2.85 0.00 0.00	131.32 117.68 167.15 166.99 135.36 131.96	3.22 2.56 2.73 4.44 2.60 2.90
MEAN S.D. N	65.51 6.813 6	1.15 0.845 6	27.23 8.199 6	36.81 13.086 6	0.00 0.000 6	0.98 1.118 6	141.74 20.528 6	3.08 0.711 6

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Summary and Individual Blood Hormone Determination
Day 62

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL		THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Ma	ile 4 Dose	Level: 0.75	Dosage 1	Unit: mg/kg	g/day			
I05509 I05511 I05512	69 38	1.10 1.52 0.19	8.28 4.43 20.03	84.83 50.89 33.16 43.47 35.68 56.44	0.00 0.00 0.00 0.00 0.00	0.00 0.33 0.97 0.00 0.00	110.61 96.11 120.78 133.14 121.31 142.07	2.24 2.24 3.01 3.42 1.84 2.79
MEAN S.D. N	73.09 * 7.137 6	1.22 0.728 6	14.03 9.757 6	50.75 18.886 6	0.00 0.000 6	0.22 0.392 6	120.67 16.237 6	2.59 0.585 6
Group: Fe	emale 1 Dose	e Level: 0	Dosage 1	Jnit: mg/kg	g/day			
I05531		0.03 0.23 0.29 0.24	87.01 135.19	95.52 73.45 154.45 166.44 116.03 104.97	0.00 0.00 0.00 0.00 0.00	2.88 0.32 0.00 0.00 3.86 0.10	86.34 157.85 105.00 104.25 94.26 141.85	5.01 3.16 3.14 3.32
S.D.	72.33 6.264 6	0.100	84.16 37.377 6	35.602	0.000	1.19 1.718 6	114.93 28.369 6	3.53 0.859 6
Group: Fe	male 2 Dose	Level: 0.03	Dosage 1	Jnit: mg/kg	g/day			
T05541	75.87 88.44 67.51 72.45	0.24 0.30 0.41 0.42	71.56	171.29 128.24 149.12 160.38	0.00 0.00 0.00 0.00	0.00 0.09 1.74 0.00	178.52 124.69 122.85 116.15	4.64 5.27 3.51 2.87
MEAN S.D. N	76.07 8.934 4	0.34 0.087 4	82.13 17.053 4	152.26 18.393 4	0.00 0.000 4	0.46 0.856 4	135.55 28.879 4	4.07 1.083 4

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 62

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
Group: Fe	emale 3 Dose	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
I05532 I05538 I05539 I05545 I05548 I05552 MEAN S.D.	63.46 62.14 65.91 60.86 48.14 61.25	0.05 0.06 0.00 0.05 0.36 0.44	196.89 40.91 50.54 142.62 60.76 60.28 92.00 63.048	162.41 57.31 122.72 226.73 96.83 85.06 125.18 61.195	0.00 0.00 0.00 0.00 0.00 0.00 0.00	3.00 0.00 1.30 0.00 0.48 0.13 0.82 1.176	100.87 122.69 109.98 147.17 99.01 102.13 113.64 18.596	4.30 1.97 3.15 2.68 1.94 2.55
N Group: Fe	6 emale 4 Dose	6 E Level: 0.75	6 Dosage	6 Unit: mg/k	6 u/dav	6	6	6
105533 105534 105536 105540 105542 105551	68.36 67.55 73.98 73.87 66.81 113.15	1.04 0.05 0.12 0.09 0.40 0.10	539.64 21.16 53.49 47.69 414.10 98.43	637.44 92.30 103.29 87.57 248.93 208.43	0.00 0.00 0.00 0.00 0.00 0.00	1.64 1.91 0.17 0.00 0.69 0.00	92.49 104.34 101.67 102.37 84.83 85.64	2.41 3.70 2.53 1.65 3.75 4.45
MEAN S.D. N	77.29 17.850 6	0.30 0.384 6	195.75 222.733 6	229.66 210.776 6	0.00 0.000 6	0.74 0.849 6	95.22 8.753 6	3.08 1.049 6

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 91

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL				THYROID STIMULATING		TOTAL THYROXIN µg/dL
Group: Ma	le 1 Dose	e Level: 0	Dosage '	Unit: mg/k	g/day			
I05517 I05519 I05520 I05526	72.02 68.04 50.11 60.09	1.78 0.44 2.53 0.96	19.55 16.52	20.61 53.30 30.76 65.61 29.74 51.35	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	141.51 162.07 144.10 148.94 161.62 162.45	4.25 3.67 4.53 2.93
MEAN S.D. N	9.547	1.32 0.786 6	18.66 10.784 6	17.359		0.00 0.000 6	153.45 9.720 6	3.89 0.553 6
Group: Ma	le 2 Dose	e Level: 0.03	Dosage	Unit: mg/k	g/day			
I05514 I05515 I05516 I05521	70.30 48.85 58.29 64.30	1.86 0.96 0.34 10.76	29.08 29.88 28.37 41.20	82.17 40.06 40.27 107.46	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	166.24 148.07 151.67 146.06	4.38 5.22
MEAN S.D. N	60.44 9.148 4	3.48 4.893 4	32.13 * 6.076 4	67.49 33.199 4	0.00 0.000 4	0.00 0.000 4	153.01 9.120 4	5.30 * 0.735 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage '	Unit: mg/k	g/day			
I05510 I05518 I05523 I05524	63.97 58.44 52.27 64.33 73.62 72.47	1.05 0.90 2.03 0.82	20.81	37.08 34.69 26.72 47.88 34.88 23.84		0.00 0.00 0.17 0.00 0.00	143.76 141.60 156.52 174.10 119.61 143.77	4.37 4.49 6.03
MEAN S.D. N	64.18 8.157 6	1.18 0.506 6	19.18 3.040 6	34.18 8.478 6	0.00 0.000 6	0.03 0.069 6	146.56 18.023 6	4.47 0.870 6

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Summary and Individual Blood Hormone Determination
Day 91

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL		ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Ma	ale 4 Dose	e Level: 0.75	Dosage	Unit: mg/k	g/day			
I05511 I05512	49.60 86.62 60.08 64.66	1.73 1.70 0.26	13.32	48.87 40.22 34.03 38.67 33.13 57.55	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	107.40 89.57 127.61 144.57 102.29 136.40	4.45 4.61 5.46 3.78
MEAN S.D. N	12.571	0.923	10.93 8.875 6	9.438	0.00 0.000 6		117.97 * 21.468 6	
Group: Fe	emale 1 Dose	e Level: 0	Dosage	Unit: mg/k	g/day			
I05530 I05531 I05535 I05544	69.78 50.36 62.89 70.71	0.06 0.30 0.29 1.05	30.39 76.52 126.05 218.24	96.58 37.67 104.81 94.80 115.65 88.15	0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	95.65 200.64 117.41 144.43 160.65 139.16	4.54
	65.58 8.513 6	0.342		89.61 27.146 6		0.00 0.000 6	142.99 36.187 6	
Group: Fe	emale 2 Dose	e Level: 0.03	Dosage	Unit: mg/k	g/day			
I05537 I05541 I05547 I05550	75.93 89.16 68.87 61.58	0.37 0.38	276.11 88.60 48.03 34.29	579.38 143.46 87.11 106.94	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	161.68 144.58 121.55 160.17	6.55 5.03
MEAN S.D. N	73.89 11.748 4	0.33 0.050 4	111.76 111.968 4	229.22 234.602 4	0.00 0.000 4	0.00 0.000 4	147.00 18.641 4	6.00 0.720 4

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Summary and Individual Blood Hormone Determination
Day 91

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{G}/dL
Group: F	emale 3 Dose	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
I05532 I05538 I05539 I05545 I05548 I05552	53.44 54.36 56.38 50.87 46.19 55.40	0.07 0.09 0.01 0.00 0.30 0.38	208.42 55.31 48.35 64.59 29.92 74.01	161.28 71.47 96.47 142.80 64.58 74.24	0.00 0.00 0.00 0.00 0.00	0.09 0.00 0.00 0.00 0.00 0.00	120.33 113.79 114.24 113.45 109.64 92.26	4.88 3.27 3.49 4.38 3.13 3.47
MEAN S.D. N	52.77 3.737 6	0.14 0.159 6	80.10 64.629 6	101.81 40.773 6	0.00 0.000 6	0.02 0.037 6	110.62 * 9.628 6	3.77 0.697 6
Group: F	emale 4 Dose	e Level: 0.75	Dosage	Unit: mg/kg	g/day			
I05533 I05534 I05536 I05540 I05542 I05551	63.67 57.80 71.04 85.09 58.02 91.43	0.51 0.04 0.14 0.26 0.23 0.42	162.24 34.90 29.06 42.06 95.90 394.36	186.20 67.09 60.95 65.39 72.08 503.53	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	95.87 81.56 92.51 90.84 81.86 83.67	4.18 5.45 4.94 3.81 5.99 5.15
MEAN S.D. N	71.18 14.228 6	0.27 0.174 6	126.42 140.697 6	159.21 175.397 6	0.00 0.000 6	0.00 0.000 6	87.72 * 6.128 6	4.92 0.807 6

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ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL		ESTRIOL pg/mL	THYROID STIMULATING μU/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Ma	le 1 Dose	e Level: 0	Dosage '	Unit: mg/kg	g/day			
I05519 I05520 I05526	44.88 54.72 37.96 60.22	0.80 0.89 0.41 3.20 0.91 2.05	21.40 19.07 15.79	35.67	0.00 0.00 0.00 0.00	0.01 1.43 0.48 0.35 0.30 0.02	153.39 155.85 152.78 168.82 162.99 164.16	4.94 4.14 4.19 4.97 3.38 4.68
MEAN S.D. N	47.79 8.681 6	1.38 1.049 6	22.96 11.485 6	29.96 10.990 6	0.000	0.43 0.524 6	159.67 6.579 6	4.38 0.608 6
Group: Ma	le 2 Dose	e Level: 0.03	Dosage '	Unit: mg/kg	g/day			
I05515 I05516	57.72 41.90 43.62 53.31	1.43 0.44 0.31 8.03	9.14 16.57	65.16 29.60 29.96 70.45	0.00	0.76 0.32 0.11 0.15	148.24 133.97 77.19 117.72	5.02 3.70 5.04 5.13
MEAN S.D. N	49.14 7.613 4	2.55 3.686 4	24.11 14.242 4	48.79 22.060 4	0.00 0.000 4	0.3 <u>4</u> 0.298 4	119.28 * 30.705 4	4.72 0.683 4
Group: Ma	le 3 Dose	e Level: 0.15	Dosage '	Unit: mg/kg	g/day			
I05505 I05510 I05518 I05523 I05524 I05528	39.10 46.25 57.87 51.67		25.43 28.63 26.43	25.41 39.59	0.00 0.00 0.00 0.00 0.00	1.10 0.51 2.09 0.18 0.09 0.46	134.08 110.87 136.26 144.20 114.48 107.88	3.40 4.42 4.67 3.94
MEAN S.D. N	48.39 7.014 6	1.13 0.973 6	23.23 7.363 6	23.47 8.774 6	0.00 0.000 6	0.74 0.751 6	124.63 * 15.365 6	3.99 0.621 6

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ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ g/dL
Group: Ma	ale 4 Dos	e Level: 0.75	Dosage	Unit: mg/k	g/day			
105507 105511 105512 105522	59.90 43.70 70.20 59.49	2.10 0.69 0.04 1.80	0.00 1.01 0.00 2.00	33.59 27.68 22.69 36.89	0.00 0.00 0.00 0.00	1.59 0.34 0.59 1.18	58.09 97.68 34.06 75.57	5.27 7.00 3.25 5.85
MEAN S.D. N	58.32	1.16	0.75 * 0.958 4	30.21 6.298 4		0.93 0.566 4	66.35 * 26.941 4	
Group: Fe	emale 1 Dos	e Level: 0	Dosage	Unit: mg/k	g/day			
I05531 I05535		0.03 0.52 0.34	47.22 51.65 318.47 162.44	351.64 68.58 77.36 239.29 153.92 61.78	0.00	1.33 0.00 0.00 0.06 2.75 0.22	95.65 183.66 115.47 139.41 152.04 125.36	5.84
MEAN S.D. N	58.89 16.743 6	0.18 0.209 6	148.48 110.143 6	158.76 116.512 6	0.00 0.000 6	0.73 1.115 6	135.27 30.659 6	5.66 0.894 6
Group: Fe	emale 2 Dos	e Level: 0.03	Dosage	Unit: mg/k	g/day			
T05541	76.03 61.45 39.39 59.31	0.29 0.13 0.26 0.14	47.66 41.73	492.79 101.86 164.10 364.55	0.00 0.00 0.00 0.00	0.00 0.08 0.85 1.77	148.10 131.20 98.77 102.12	5.29 5.85 3.35 2.84
MEAN S.D. N	59.05 15.063 4	0.21 0.082 4	125.20 101.227 4	280.83 180.363 4	0.00 0.000 4	0.68 0.824 4	120.05 23.703 4	4.33 1.462 4

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 182

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN $\mu_{\mathbb{G}}/dL$
Group: Fe	emale 3 Dose	e Level: 0.15	Dosage	Unit: mg/kg	g/day			
I05532 I05538 I05539 I05545 I05548 I05552	47.71 36.38 42.82 48.24 32.13 48.26	0.01 0.04 0.00 0.04 0.03 0.16	197.86 45.10 52.30 52.62 39.61 36.02	141.98 64.69 100.79 74.46 51.74 60.51	0.00 0.00 0.00 0.00 0.00 0.65	4.33 0.25 0.89 0.62 0.98 0.57	90.44 100.45 106.11 86.22 103.15 93.10	4.36 2.83 3.63 4.00 4.03 4.59
MEAN S.D. N	42.59 6.904 6	0.05 0.058 6	70.59 62.705 6	82.36 33.716 6	0.11 0.265 6	1.27 1.520 6	96.58 * 7.824 6	3.91 * 0.622 6
Group: Fe	emale 4 Dose	e Level: 0.75	Dosage	Unit: mg/k	g/day			
I05533 I05534 I05536 I05540 I05542 I05551	63.42 66.38 51.73 60.27 56.03 96.30	0.17 0.05 0.09 0.15 0.19 0.07	36.11 9.45 0.00 47.41 93.61 52.80	55.31 37.27 53.37 60.05 115.82 99.85	0.00 0.00 0.00 0.00 0.00	2.31 1.10 0.62 0.21 0.55 0.22	83.76 81.38 76.41 71.65 92.22 104.92	5.31 6.31 5.96 3.74 5.83 6.49
MEAN S.D. N	65.69 15.876 6	0.12 0.058 6	39.90 33.589 6	70.28 30.505	0.00 0.000 6	0.84 0.793 6	85.06 * 11.963 6	5.61 1.002 6

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Summary and Individual Blood Hormone Determination Additional Collection - Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	TR:	IODC	TAL THYROI /dL			YRONINE L				IN
Group:	Male	1	Dose	Level:	0	Dosa	ge Uni	t: mg	g/kg/da	У
I05508 I05519 I05527		110.			5.18 3.61 3.83		3.46 2.73 3.56			
MEAN S.D. N		115. 10. 3	464		4.21 0.850 3		3.25 0.453 3		1.01 0.145 3	
Group:	Male	2	Dose	Level:	0.03	Dosa	ge Uni	t: m	g/kg/da	У
I05514 I05515 I05516 I05521		103. 120.	61 14		5.14 4.58 5.44 5.36		3.97 3.01 4.11 4.31		1.10	
MEAN S.D. N		110. 7. 4	289		5.13 0.388 4		3.85 0.577 4			
Group:	Male	3	Dose	Level:	0.15	Dosa	ge Uni	t: m	g/kg/da	У
I05510 I05518 I05524 I05528		86.	03 79		4.19 4.41 3.88 4.85		2.88 2.49 2.38 3.07		0.93	
MEAN S.D. N		94. 5. 4	00 * 649		4.33 0.408 4		2.71 0.324 4		0.94 0.106 4	

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Summary and Individual Blood Hormone Determination Additional Collection - Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL		THYROXIN
Group:	Male 4 Dose Level	l: 0.75 Dos	age Unit: m	g/kg/day
	59.28 55.46 13.96		4.90 3.16 1.83	
MEAN S.D. N	42.90 * 25.135 3	2.45 * 0.800 3	3.30 1.540 3	1.12 0.251 3
Group:	Female 1 Dose Lev	vel: 0 Do	sage Unit:	mg/kg/day
I05531 I05535	131.98 87.43 98.87 104.98	3.10	5.50 2.62 4.93 3.52	1.43 0.78 1.17 0.86
MEAN S.D. N	105.82 18.899 4	4.05 0.986 4	4.14 1.313 4	1.06 0.299 4
Group:	Female 2 Dose Lev	vel: 0.03 De	osage Unit:	mg/kg/day
	81.34		4.24 3.41 2.80	1.32 0.86 0.85
MEAN S.D. N	92.34 15.127 3	3.59 0.502 3	3.48 0.723 3	1.01 0.269 3

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Summary and Individual Blood Hormone Determination Additional Collection - Terminal Sacrifice

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	TRIIC				FREE IODOTHYRONII pg/mL	NE '	THYROXIN	THYROXIN
Group:	Female	3	Dose	Level:	0.15	Dos	age Unit:	mg/kg/day
I05538		77.02 72.24			3.27 2.98 2.96 3.87			0.59
MEAN S.D. N		79.71 10.28	7		3.27 0.424 4		2.88 0.823 4	
Group:	Female	4	Dose	Level:	0.75	Dos	age Unit:	mg/kg/day
I05536		59.03			2.88 2.43 3.13 2.83		4.52 3.87 2.04 3.30	1.00 0.79
					2.82 0.290 4		3.43 1.054 4	

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Appendix 6 Summary and Individual Blood Hormone Determination Day 217

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER		TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{G}/dL
Group: Male	e 1 Dose	Level: 0	Dosage 1	Jnit: mg/kg	J/day			
I05520 I05526	38.18 44.16	2.66 2.51	17.90 10.98	64.49 25.43	0.00	1.61 2.12	159.60 183.22	3.75 2.87
MEAN S.D. N	41.17 4.228 2	2.59 0.106 2	14.44 4.893 2	44.96 27.620 2	0.00 0.000 2	1.87 0.361 2	171.41 16.702 2	3.31 0.622 2
Group: Male	e 3 Dose	Level: 0.15	Dosage I	Jnit: mg/kg	J/day			
I05505 I05523	27.26 52.61	0.99 3.84	17.56 21.73	32.66 59.98	0.00	1.21 0.97	154.43 164.81	3.28 4.20
MEAN S.D. N	39.94 17.925 2	2.42 2.015 2	19.65 2.949 2	46.32 19.318 2	0.00 0.000 2	1.09 0.170 2	159.62 7.340 2	3.74 0.651 2
Group: Male	e 4 Dose	Level: 0.75	Dosage U	Jnit: mg/kg	J/day			
I05511 I05522	51.54 44.31	4.72 5.36	0.00 27.09	37.83 70.81	0.00	1.67 1.05	165.18 129.72	4.74 2.51
MEAN S.D.	47.93 5.112	5.04 0.453	13.55 19.156	54.32 23.320	0.00	1.36 0.438	147.45 25.074	3.625 1.577

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Appendix 6
Summary and Individual Blood Hormone Determination
Day 217

	JIMAL JMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN $\mu_{\rm G}/{ m dL}$
Gr	oup: Fe	emale 1 Dose	e Level: 0	Dosage '	Unit: mg/kg	g/day			
)5529)5549	54.69 40.39	0.86 0.12	53.08 43.63	83.74 64.84	0.00	1.78 1.66	116.20 133.52	4.89 6.58
	EAN .D.	47.54 10.112 2	0.49 0.523 2	48.36 6.682 2	74.29 13.364 2	0.00 0.000 2	1.72 0.85 2	124.86 12.247 2	5.74 1.195 2
Gr	oup: Fe	emale 3 Dose	e Level: 0.15	Dosage '	Unit: mg/kg	g/day			
)5539)5552	57.55 59.07	0.10 0.82	44.84 68.85	71.13 88.81	0.00	1.88 0.59	114.34 121.25	3.37 3.91
	EAN .D.	58.31 1.075 2	0.46 0.509 2	56.85 16.978 2	79.97 12.502 2	0.00 0.000 2	1.24 0.912 2	117.80 4.886 2	3.64 0.382 2
Gr	oup: Fe	emale 4 Dose	e Level: 0.75	Dosage '	Unit: mg/kg	g/day			
)5533)5542	55.91 66.34	0.61 0.37	133.46 88.23	289.99 154.68	0.00	1.76 1.56	99.29 101.57	3.93 3.51
	EAN D.	61.13 7.375	0.49 0.170	110.85 31.982	222.34 95.679	0.00	1.66 0.141	100.43 1.612	3.72 0.297

942

Appendix 6
Summary and Individual Blood Hormone Determination
Day 245

	NIMAL UMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
G	roup: Male	e 1 Dose	e Level: 0	Dosage T	Jnit: mg/kg	g/day			
	05520 05526	52.17 44.90	2.83 1.40	40.85 16.61	79.85 31.48	0.00	0.25 0.00	171.00 133.39	4.18 1.74
		48.54 5.141 2	$2.12 \\ 1.011 \\ 2$	28.73 17.140 2	55.67 34.203 2	0.00 0.000 2	0.13 0.177 2	152.20 26.594 2	2.96 1.725 2
G	roup: Male	e 3 Dose	Level: 0.15	Dosage T	Jnit: mg/kg	g/day			
	05505 05523	46.88 54.44	0.50 7.18	23.84 25.40	43.65 59.41	0.00	0.10 0.00	154.84 151.74	3.79 3.37
	EAN .D.	50.66 5.346 2	3.84 4.723 2	24.62 1.103 2	51.53 11.144 2	0.00 0.000 2	0.05 0.071 2	153.29 2.192 2	3.58 0.297 2
G	roup: Male	e 4 Dose	Level: 0.75	Dosage T	Jnit: mg/kg	g/day			
	05511 05522	37.08 25.17	1.55 2.99	17.87 26.57	53.06 77.43	0.00	0.67 0.33	170.42 137.27	4.18 2.45
S	EAN .D.	31.13 8.422	2.27 1.018	22.22 6.152	65.25 17.232	0.00	0.50 0.240	153.85 23.441	3.32 1.223

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ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ_{g}/dL
Group: Fem	ale 1 Dose	e Level: 0	Dosage '	Unit: mg/kg	g/day			
I05529 I05549	56.47 43.54	0.12 0.07	38.61 112.14	95.66 115.58	0.00	0.68 0.98	130.32 136.09	4.93 5.81
MEAN S.D. N	50.01 9.143 2	0.10 0.035 2	75.38 51.994 2	105.62 14.086 2	0.00 0.000 2	0.83 0.212 2	133.21 4.080 2	5.37 0.622 2
Group: Fem	ale 3 Dose	Level: 0.15	Dosage '	Unit: mg/kg	g/day			
I05539 I05552	63.10 60.29	0.07 0.28	61.24 88.08	137.78 94.05	0.00	0.81	127.17 142.77	3.56 3.76
MEAN S.D. N	61.70 1.987 2	0.18 0.148 2	74.66 18.979 2	115.92 30.922 2	0.00 0.000 2	0.41 0.573 2	134.97 11.031 2	3.66 0.141 2
Group: Fem	ale 4 Dose	Level: 0.75	Dosage '	Unit: mg/kg	g/day			
I05533 I05542	62.75 81.69	0.66	257.61 114.63	255.84 120.11	0.00	1.04 0.82	118.99 121.98	3.84 3.38
MEAN S.D. N	72.22 13.393	0.36 0.424	186.12 101.102	187.98 95.976	0.00 0.000	0.93 0.156 2	120.49 2.114 2	3.61 0.325

944

Appendix 6
Summary and Individual Blood Hormone Determination
Day 274

ANIMAL NUMBER		TOSTERONE E	STRADIOL pg/mL		ESTRIOL pg/mL	THYROID STIMULATING #U/mL	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN μ g/dL
Group: Male	e 1 Dose Lev	el: 0	Dosage Un	nit: mg/kg/	'day			
I05520 I05526	34.89 45.23	1.76 1.40	17.17 14.11	62.84 34.27	0.00	0.00	134.97 167.54	5.56 2.40
MEAN S.D. N	40.06 7.311 2	1.58 0.255 2	15.64 2.164 2	48.56 20.202 2	0.00 0.000 2	0.01 0.014 2	151.26 23.030 2	3.98 2.234 2
Group: Male	e 3 Dose Lev	el: 0.15	Dosage Ur	nit: mg/kg/	'day			
I05505 I05523	42.85 61.34	3.64 2.55	25.06 25.26	39.86 63.44	0.00	0.25 0.00	146.70 161.73	2.43
MEAN S.D. N	52.10 13.074 2	3.10 0.771 2	25.16 0.141 2	51.65 16.674 2	0.00 0.000 2	0.13 0.177 2	154.22 10.628 2	2.87 0.622 2
Group: Male	e 4 Dose Lev	el: 0.75	Dosage Un	nit: mg/kg/	'day			
I05511 I05522	59.62 26.17	2.36 4.12	6.94 30.46	51.42 83.94	0.00	0.24 0.09	163.13 163.73	4.19 2.36
MEAN S.D.	42.90 23.653	3.24 1.245	18.70 16.631	67.68 22.995	0.00	0.17 0.106	163.43 0.424	3.28 1.294

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 $\begin{array}{c} {\tt Appendix} \ 6 \\ {\tt Summary} \ {\tt and} \ {\tt Individual Blood Hormone Determination} \\ {\tt Day} \ 274 \end{array}$

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	TOTAL THYROXIN µg/dL
Group: Fe	male 1 Dose	e Level: 0	Dosage	Unit: mg/k	g/day			
I05529 I05549	64.71 47.01	0.44	43.91 42.07	115.88 57.38	0.00	0.00 0.68	91.10 130.21	4.88 4.88
MEAN S.D. N	55.86 12.516 2	0.23 0.297 2	42.99 1.301 2	86.63 41.366 2	0.00 0.000 2	0.34 0.481 2	110.66 27.655 2	4.88 0.000 2
Group: Fe	male 3 Dose	e Level: 0.15	Dosage	Unit: mg/k	g/day			
I05539 I05552	45.77 44.48	0.04		127.24 124.21	0.00	0.29	114.25 103.46	3.00 2.98
MEAN S.D. N	45.13 0.912 2	0.11 0.099 2		125.73 2.143 2	0.00 0.000 2	0.15 0.205 2	108.86 7.630 2	2.99 0.014 2
Group: Fe	male 4 Dose	e Level: 0.75	Dosage	Unit: mg/k	g/day			
I05533 I05542	49.13 63.28	0.49 0.40	109.08 108.09	153.99 128.04	0.00	0.64 0.01	115.88 85.17	2.59 3.22
MEAN S.D. N	56.21 10.006	0.45 0.064	108.59 0.700	141.02 18.349	0.00	0.33 0.445 2	100.53 21.715	2.91 0.445

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26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL	
Group: M	Male 1	Dose Level: 0	Dos	age Unit:	mg/kg/da	У					
I05520 I05526	48.93 54.85	1.68 1.47	22.29 12.73	66.72 34.79	0.00	0.00	113.68 167.98	4.34 6.23	3.20 3.35	1.27 1.26	
MEAN S.D. N	51.89 4.186 2	1.58 0.148 2	17.51 6.760 2	50.76 22.578 2	0.00 0.000 2	0.04 0.057 2	140.83 38.396 2	5.29 1.336 2	3.28 0.106 2	1.27 0.007 2	
Group: M	Male 3	Dose Level: 0.19	5 Dos	age Unit:	mg/kg/da	У					
I05505 I05523	35.82 56.14	0.16 2.50	21.68 21.64	35.93 55.20	0.00	0.15	141.49 150.29	4.68 5.39	3.96 4.09	1.44 1.51	
MEAN S.D. N	45.98 14.368 2	1.33 1.655 2	21.66 0.028 2	45.57 13.626 2	0.00 0.000 2	0.08 0.106 2	145.89 6.223 2	5.04 0.502 2	4.03 0.092 2	1.48 0.049 2	
Group: №	Male 4	Dose Level: 0.79	5 Dos	age Unit:	mg/kg/da	У					
I05511 I05522	52.62 27.46	1.59 1.66	0.00 14.90	43.71 66.78	0.00	0.01 0.05	145.00 116.61	4.78 4.24	4.61 2.84	1.17 0.95	
MEAN S.D. N	40.04 17.791 2	1.63 0.049 2	7.45 10.536 2	55.25 16.313 2	0.00 0.000 2	0.03 0.028 2	130.81 20.075	4.51 0.382 2	3.73 1.252 2	1.06 0.156 2	

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 $\begin{array}{c} {\tt Appendix} \ \ {\tt 6} \\ {\tt Summary} \ \ {\tt and} \ \ {\tt Individual} \ \ {\tt Blood} \ \ {\tt Hormone} \ \ {\tt Determination} \\ {\tt Day} \ \ {\tt 322} \end{array}$

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOI pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Group:	Female 1	Dose Level: 0		Dosage Uni	t: mg/kg/	day				
I05529 I05549	60.74 55.31	0.66 0.04	93.93 67.50	136.07 78.68	0.00	0.14 0.22	95.57 102.40	3.84 3.31	3.87 4.09	1.16 1.37
MEAN S.D. N	58.03 3.840 2	0.35 0.438 2	80.72 18.689 2	107.38 40.581 2	0.00 0.000 2	0.18 0.057 2	98.99 4.830 2	3.58 0.375 2	3.98 0.156 2	1.27 0.148 2
Group:	Female 3	Dose Level: 0	.15	Dosage Uni	t: mg/kg/	day				
I05539 I05552	54.81 61.78	0.00 0.15	46.03 78.67	127.28 179.51	0.00	0.00 0.33	102.53 86.79	2.30 2.66	3.24 3.34	0.99 1.04
MEAN S.D. N	58.30 4.929 2	0.08 0.106 2	62.35 23.080 2	153.40 36.932 2	0.00 0.000 2	0.17 0.233 2	94.66 11.130 2	2.48 0.255 2	3.29 0.071 2	1.02 0.035 2
Group:	Female 4	Dose Level: 0	.75	Dosage Uni	t: mg/kg/	day				
I05533 I05542	40.44 66.14	0.02	95.89 95. 1 9	182.57 116.98	0.00	0.85	127.50 94.51	4.40 2.64	4.41 4.04	1.38 1.08
MEAN S.D. N	53.29 18.173 2	0.03 0.007 2	95.54 0.495 2	149.78 46.379 2	0.00 0.000 2	0.43 0.601 2	111.01 23.327 2	3.52 1.245 2	4.23 0.262 2	1.23 0.212 2

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Summary and Individual Blood Hormone Determination Day 364 26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS)T-6295) IN CYNOMOLGUS MONKEYS

CORTISOL TESTOSTERONE ESTRADIOL ESTRONE ESTRIOL STRUCK STIMULATING TRIIODOTHYRONINE TRIIODOTHYRONINE THYROXIN THYROXIN NUMBER $\mu g/dL$ ng/mL pg/mL pg/mL pg/mL μU/mL ng/dL μg/dL ng/dL Dose Level: 0 Dosage Unit: mg/kg/day Group: Male 1 I05520 I05526 142.33 173.51 4.92 5.87 $\frac{1.36}{1.43}$ 26.83 55.41 0.00 6.576 22.521 0.000 2 2 2 157.92 22.048 2 2.93 0.078 2 0.01 0.007 MEAN S.D. N 5.40 0.672 2 1.40 0.049 2 3.43 0.163 Group: Male 3 Dose Level: 0.15 Dosage Unit: mg/kg/day 27.97 21.80 0.15 5.86 3.19 4.17 4.73 1.28 0.099 MEAN S.D. N 4.53 1.888 2 24.89 46.63 0.00 4.363 18.406 0.000 2 2 2 0.08 0.106 138.88 3.472 2 4.45 0.396 3.74 0.035 2 Group: Male 4 Dose Level: 0.75 Dosage Unit: mg/kg/day 6.84 6.13 MEAN S.D. N 2.03 17.36 56.29 0.00 0.064 6.746 7.877 0.000 2 2 2 2 0.00 166.33 33.100 2 6.49 0.502 2 3.49 0.608 2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Group:	Female 1	Dose Level: 0)	Dosage Uni	t: mg/kg/	'day				
I05529 I05549	56.92 54.02	0.36	46.66 72.28	106.07 120.53	0.00	0.38	114.22 94.96	3.48 2.75	3.48 3.89	1.17 1.40
MEAN S.D. N	55.47 2.051 2	0.19 0.247 2	59.47 18.116 2	113.30 10.225 2	0.00 0.000 2	0.19 0.269 2	104.59 13.619 2	3.12 0.516 2	3.69 0.290 2	1.29 0.163 2
Group:	Female 3	Dose Level: 0	.15	Dosage Uni	lt: mg/kg/	'day				
I05539 I05552	48.00 74.04	0.01 0.13	53.88 25.95	120.92 71.07	0.00	0.12 0.39	113.58 89.22	2.73 3.99	3.40 3.06	1.10 1.03
MEAN S.D. N	61.02 18.413 2	0.07 0.085 2	39.92 19.749 2	96.00 35.249 2	0.00 0.000 2	0.26 0.191 2	101.40 17.225 2	3.36 0.891 2	3.23 0.240 2	1.07 0.049 2
Group:	Female 4	Dose Level: 0	.75	Dosage Uni	t: mg/kg/	'day				
I05533 I05542	61.92 89.59	0.13 0.07	166.75 164.57	352.52 175.61	0.00	0.28	108.62 105.87	3.84 3.34	3.20 3.31	1.15 1.07
MEAN S.D. N	75.76 19.566 2	0.10 0.042 2	165.66 1.541 2	264.07 125.094 2	0.00 0.000 2	0.14 0.198 2	107.25 1.945 2	3.59 0.354 2	3.26 0.078 2	1.11 0.057 2

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 $\begin{array}{c} {\tt Appendix} \ \ {\tt 6} \\ {\tt Summary} \ \ {\tt and} \ \ {\tt Individual} \ \ {\tt Blood} \ \ {\tt Hormone} \ \ {\tt Determination} \\ {\tt Day} \ \ {\tt 456} \end{array}$

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL '	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Group: Ma	ale 1 Do	se Level: 0	Dos	age Unit:	mg/kg/da	Y				
I05520	45.28	3.12	24.62	33.29	0.00	4.00	160.85	7.90	5.07	2.53
I05526	42.55	2.03	20.60	17.89		3.18	158.81	7.34	3.03	1.83
MEAN	43.92	2.58	22.61	25.59	0.00	3.59	159.83	7.62	4.05	2.18
S.D.	1.930	0.771	2.843	10.889	0.000	0.580	1.442	0.396	1.442	0.495
N	2	2	2	2	2	2	2	2	2	2
Group: Ma	ale 3 Do	se Level: 0.15	Dos	age Unit:	mg/kg/da	Y				
I05505	35.05	5.77	33.45	15.52	0.00	3.02	156.75	5.12	4.10	1.85
I05523	58.45	4.15	34.94	31.76		2.40	189.99	8.58	4.63	2.07
MEAN	46.75	4.96	34.20	23.64	0.00	2.71	173.37	6.85	4.37	1.96
S.D.	16.546	1.146	1.054	11.483	0.000	0.438	23.504	2.447	0.375	0.156
N	2	2	2	2	2	2	2	2	2	2
Group: Ma	ale 4 Do	se Level: 0.75	5 Dos	age Unit:	mg/kg/da	Y				
I05511	34.37	2.19	15.15	34.29	0.00	2.70	200.22	8.55	3.56	1.51
I05522	18.72	5.27	32.89	47.87		2.67	142.75	6.89	4.05	1.83
MEAN	26.55	3.73	24.02	41.08	0.00	2.69	171.49	7.72	3.81	1.67
S.D.	11.066	2.178	12.544	9.603	0.000	0.021	40.637	1.174	0.346	0.226
N	2	2	2	2	2	2	2	2	2	2

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26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIM NUMB		TESTOSTERONE	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING μ U/mL	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Grou	p: Female 1	Dose Level: 0)	Dosage Uni	t: mg/kg/	'day				
I055 I055		0.75 0.16	60.82 58.64	62.11 17.39	0.00	3.41 2.27	131.39 127.08	6.12 5.03	4.81 4.72	2.15 2.27
MEAN S.D. N		0.46 0.417 2	59.73 1.541 2	39.75 31.622 2	0.00 0.000 2	2.84 0.806 2	129.24 3.048 2	5.58 0.771 2	4.77 0.064 2	2.21 0.085 2
Grou	p: Female 3	Dose Level: 0	.15	Dosage Uni	t: mg/kg/	'day				
I055 I055		0.06 0.15	111.82 63.26	73.29 56.27	0.00	5.31 5.26	127.44 104.90	4.32 5.02	3.48 3.31	1.46 1.10
MEAN S.D. N		0.11 0.064 2	87.54 34.337 2	64.78 12.035 2	0.00 0.000 2	5.29 0.035 2	116.17 15.938 2	4.67 0.495 2	3.40 0.120 2	1.28 0.255 2
Grou	p: Female 4	Dose Level: 0	.75	Dosage Uni	t: mg/kg/	'day				
I055 I055		0.73	101.24 180.10	86.37 115.95	0.00	5.20 4.19	140.68 147.41	4.86 4.23	3.55 3.15	1.56 1.11
MEAN S.D. N	70.83 25.442 2	0.52 0.304 2	140.67 55.762 2	101.16 20.916 2	0.00 0.000 2	4.70 0.714 2	144.05 4.759 2	4.55 0.445 2	3.35 0.283 2	1.34 0.318 2

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 $\begin{array}{c} {\tt Appendix} \ \ {\tt 6} \\ {\tt Summary} \ \ {\tt and} \ \ {\tt Individual} \ \ {\tt Blood} \ \ {\tt Hormone} \ \ {\tt Determination} \\ {\tt Day} \ \ {\tt 546} \end{array}$

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL	TESTOSTERONE ng/mL	ESTRADIOL pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING $\mu_{\rm U}/m_{\rm L}$	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Group:	Male 1	Dose Level: 0	Dos	age Unit:	mg/kg/da	У				
I05520	41.44	3.51	19.03	35.81	0.00	3.01	141.17	5.57	4.31	1.98
I05526	48.80	2.29	21.13	22.20		3.34	144.88	5.51	4.10	1.97
MEAN S.D. N Group:	45.12 5.204 2 Male 3	2.90 0.863 2 Dose Level: 0.19	20.08 1.485 2 5 Dos	29.01 9.624 2 age Unit:	0.00 0.000 2 mg/kg/da	3.18 0.233 2	143.03 2.623 2	5.54 0.042 2	4.21 0.148 2	1.98 0.007 2
I05505	43.54	2.03	22.13	11.11	0.00	3.11	127.36	4.68	3.06	1.51
I05523	55.25	4.77	33.60	27.76		3.17	164.68	7.26	3.91	1.83
MEAN	49.40	3.40	27.87	19.44	0.00	3.14	146.02	5.97	3.49	1.67
S.D.	8.280	1.937	8.111	11.773	0.000	0.042	26.389	1.824	0.601	0.226
N	2	2	2	2	2	2	2	2	2	2
Group:	Male 4	Dose Level: 0.79	5 Dos	age Unit:	mg/kg/da	У				
I05511	31.74	6.17	27.18	34.39	0.00	1.92	211.71	7.91	5.89	1.92
I05522	17.51	6.28	30.18	40.74		3.36	133.42	6.19	3.90	1.80
MEAN	24.63	6.23	28.68	37.57	0.00	2.64	172.57	7.05	4.90	1.86
S.D.	10.062	0.078	2.121	4.490	0.000	1.018	55.359	1.216	1.407	0.085
N	2	2	2	2	2	2	2	2	2	2

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 $\begin{array}{c} {\tt Appendix} \ \ {\tt 6} \\ {\tt Summary} \ \ {\tt and} \ \ {\tt Individual} \ \ {\tt Blood} \ \ {\tt Hormone} \ \ {\tt Determination} \\ {\tt Day} \ \ {\tt 546} \end{array}$

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROCCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	CORTISOL µg/dL	TESTOSTERONE ng/mL	ESTRADIOI pg/mL	ESTRONE pg/mL	ESTRIOL pg/mL	THYROID STIMULATING	TOTAL TRIIODOTHYRONINE ng/dL	FREE TRIIODOTHYRONINE pg/mL	TOTAL THYROXIN µg/dL	FREE THYROXIN ng/dL
Group:	Female 1	Dose Level: 0		Dosage Uni	t: mg/kg/	'day				
I05529	61.95	0.32	88.86	60.95	0.00	2.28	113.93	4.61	4.23	1.65
I05549	50.10	0.15	55.18	29.70		2.86	122.28	4.59	4.96	1.91
MEAN	56.03	0.24	72.02	45.33	0.00	2.57	118.11	4.60	4.60	1.78
S.D.	8.379	0.120	23.815	22.097	0.000	0.410	5.904	0.014	0.516	0.184
N	2	2	2	2	2	2	2	2	2	2
Group:	Female 3	Dose Level: 0	.15	Dosage Uni	t: mg/kg/	day				
I05539	58.68	0.22	249.40	112.37	0.00	4.32	133.88	QNS	3.65	1.63
I05552	26.08	0.18	228.31	104.83		2.22	194.67	7.69	6.48	1.81
MEAN	42.38	0.20	238.86	108.60	0.00	3.27	164.28	7.69	5.07	1.72
S.D.	23.052	0.028	14.913	5.332	0.000	1.485	42.985	-	2.001	0.127
N	2	2	2	2	2	2	2	1	2	2
Group:	Female 4	Dose Level: 0	.75	Dosage Uni	t: mg/kg/	day				
I05533	49.05	0.73	89.07	85.47	0.00	3.89	122.53	4.63	3.41	1.41
I05542	82.98	0.40	94.97	46.34		4.50	131.85	4.36	3.46	1.31
MEAN	66.02	0.57	92.02	65.91	0.00	4.20	127.19	4.50	3.44	1.36
S.D.	23.992	0.233	4.172	27.669	0.000	0.431	6.590	0.191	0.035	0.071
N	2	2	2	2	2	2	2	2	2	2

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Summary and Individual E2, FSH, and LH Additional Serum Analysis at Anilytics

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	E2 pg/mL		FSH ng/mL		LH ng/mL			
Group:	Male 1	Dose	Level:	0	Dosage	Unit:	mg/kg/d	lay
I05508 I05527	0.00 9.89							
MEAN S.D. N	4.95 6.993 2							
Group:	Male 2	Dose	Level:	0.0	3 Dosag	e Unit	: mg/kg/	day
I05514 I05515 I05516 I05521	17.02 0.49 1.53 47.01							
MEAN S.D. N	16.51 21.691 4							
Group:	Male 3	Dose	Level:	0.19	5 Dosag	e Unit	: mg/kg/	'day
I05510 I05518 I05524 I05528	6.62 3.35 0.76 3.24							
MEAN S.D. N	3.49 2.404 4							

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Covance 6329-223

Appendix 6

Summary and Individual E2, FSH, and LH Additional Serum Analysis at Anilytics

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	E2 pg/mL		FSH ng/mL	L ng	H /mL 		
Group:	Male 4	Dose	Level:	0.75	Dosage	Unit:	mg/kg/day
I05506 I05507 I05512 I05522a I05511a	0.00 0.00 0.00 18.68 12.85						
MEAN S.D. N	6.31 8.877 5						

a Recovery animal.

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Summary and Individual E2, FSH, and LH Additional Serum Analysis at Anilytics

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	E2 pg/mL	FSH ng/mL	LH ng/mL		
Group:	Female 1	Dose Level:	0 Dosage	unit:	mg/kg/day
T05531	132 76	3.46 1.61 1.21 0.36	0.81		
MEAN S.D. N	68.32 50.931 4	1.66 1.308 4	1.61 1.039 4		
Group:	Female 2	Dose Level:	0.03 Dosage	unit:	mg/kg/day
I05541 I05547 I05550	76.34 88.20 33.55	2.24 2.83 0.51	2.25 0.83 1.85		
MEAN S.D. N	66.03 28.747 3	1.86 1.206 3	1.64 0.732 3		
Group:	Female 3	Dose Level:	0.15 Dosage	unit:	mg/kg/day
I05538 I05545	87.24 42.82	2.03 1.80 0.38 0.42	2.19 2.17		
MEAN S.D. N	50.99 24.533 4	1.16 0.88 4	2.25 0.389 4		

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Summary and Individual E2, FSH, and LH Additional Serum Analysis at Anilytics

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	E2 pg/mL	FSH ng/mL	LH ng/mL			
Group: F	emale 4	Dose Level:	0.75	Dosage	Unit:	mg/kg/day
I05534 I05536 I05540 I05551 I05542a I05533a	0.00 0.00 4.45 19.30 159.41 122.77	0.38 0.76 0.88 0.32 1.37 1.50	2.20 2.03 2.06 1.73 2.55 1.58			
MEAN S.D. N	50.99 71.102 6	0.87 0.490 6	2.03 0.344 6			

a Recovery animal.

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Appendix 6

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

		T3 ng/dL	T4 ug/dL	Free T4 ng/dL	TSH mIU/L	Estradiol pg/mL
Group:	Male	1 Dose	Level: 0 Do	osage Unit:	mg/kg/day	
I05508		160	3	1.4	0.24	<35
I05527		132	3.5	1.5	0.86	<35
Mean		146.0	3.3	1.5	0.6	NA
SD		19.80	0.35	0.07	0.44	AM
N		2	2	2	2	NA
Group:	Male	2 Dose	Level: 0.03	Dosage Un	it: mg/kg/d	lay
I05514		154	3.6	1.5	0.48	<35
I05515		135	3	1.4	0.49	<35
I05516		166	4	1.8	0.7	<35
I05521		126	4.1	1.4	0.55	<35
Mean		151.7	3.5	1.6	0.6	NА
SD		15.63	0.50	0.21	0.12	NA
N		3	3	3	3	NA
Group:	Male	3 Dose	Level: 0.15	Dosage Un	it: mg/kg/d	ay
I05510		123	3.2	1.3	1.5	<35
I05524		128	2.9	1.6	0.55	<35
I05528		133	2.8	NS	NS	< 35
Mean		128.0	3.0	1.5	1.0	NА
SD		5.00	0.21	0.21	0.67	NA
N		3	3	2	2	NA

NS Test cancelled. Quantity not sufficient.

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Appendix 6

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUCROCCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

	T3 ng/dL	T4 ug/dL	Free T4 ng/dL	TSH mIU/L	Estradiol pg/mL
Group:	Male 4 Dose I	evel: 0.75	Dosage Un	it: mg/kg/	day
I05506	94	5.6	1.6	1.7	<35
I05507	81	3.3	1.5	1.4	<35
I05512	53	2.4	1.4	1.2	<35
Mean	76.0	3.8	1.5	1.4	NA
SD	20.95	1.65	0.10	0.25	NA
N	3	3	3	3	NA
Group:	Female 1 Dose	Level: 0	Dosage Uni	t: mg/kg/d	ay
I05530	176	4.7	1.8	0.69	<35
I05531	128	2.9	1.4	0.27	146
I05535	134	4.7	1.7	NS	<35
I05544	154	2.8	1.2	2.1	83
Mean	148.0	3.8	1.5	1.0	114.5
SD	27.73	1.07	0.28	0.96	44.55
N	4	4	4	3	2
Group:	Female 2 Dose	Level: 0.0	3 Dosage	Unit: mg/k	g/day
I05541	140	4.4	2	0.52	73
I05547	150	4.4	1.6	0.7	48
I05550	124	3.3	1.5	1.1	<35
Mean	138.0	4.0	1.7	0.8	60.5
SD	13.11	0.64	0.26	0.30	17.68
N	3	3	3	3	2

NS Test cancelled. Quantity not sufficient.

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Appendix 6

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PPOS;T-6295) IN CYNOMOLGUS MONKEYS

	T3 ng/dL	T4 ug/dL	Free T4 ng/dL	TSH mIU/L	Estradiol pg/mL
Group:	Female 3 Dose	Level: 0.1	5 Dosage	Unit: mg/k	g/day
I05532	100	3.5	1.4	3	<35
I05538	121	2.5	1.1	0.63	78
I05545	105	3.3	1.3	0.68	<35
I05548	137	3.6	1.6	0.99	<35
I05538	121	2.5	1.1	0.63	78
Mean	116.8	3.1	1.3	1.2	78.0
SD	14.70	0.54	0.21	1.03	0.00
N	5	5	5	5	2
Group:	Female 4 Dose	Level: 0.7	5 Dosage	Unit: mg/k	g/day
I05534	79	4.2	1.9	3.3	<35
I05540	101	2.8	1.3	1.5	<35
I05551	120	4	1.6	0.88	<35
Mean	100.0	3.7	1.6	1.9	NA
SD	20.52	0.76	0.30	1.26	NA
N	3	3	3	3	NA

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Appendix 6

26-WEEK CAPSULE TOXICITY STUDY WITH PERPLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

	T3 ng/dL	T4 ug/dL	Free T4 ng/dL	TSH mIU/L	Estradiol pg/mL
Group: Male	4 Dose Le	evel: 0.75	Dosage Un	it: mg/kg/d	lay
105522	132	3	1.2	0.49	<35
I05511	240	5.3	1.3	0.035	<35
Mean	186.0	4.2	1.3	0.3	NA
SD	76.37	1.63	0.07	0.32	NA
N	2	2	2	2	NA
Group: Fema	le 4 Dose	Level: 0.7	5 Dosage	Unit: mg/kg	g/day
105542	134	3.3	1.4	0.79	152
I05533	134	3.5	1.4	1.4	53
Mean	134.0	3.4	1.4	1.1	102.5
SD	0.00	0.14	0.00	0.43	70.00
N	2	2	2	2	2

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APPENDIX 7

Cell Proliferation Report

Note: This appendix contains information supplied and audited by Pathology Associates International (PAI).



CELL PROLIFERATION REPORT

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS COVANCE STUDY NUMBER 6329-223

PREPARED FOR:

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I. CELL PROLIFERATION REPORT

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T-6295) IN CYNOMOLGUS MONKEYS COVANCE STUDY NUMBER 6329-223

PURPOSE

The purpose of the study was to assess the effect of the test material on critical enzyme levels, hormones, and other selected biochemical parameters when administered daily by capsule to cynomolgus monkeys for at least 26 weeks.

This report, submitted by Pathology Associates - A Charles River Company (PAI) to the study Sponsor, 3M, represents the cell proliferation findings and interpretation for Covance Study Number 6329-223 entitled "26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys". All aspects of the tasks associated with PAI's portion of this study were conducted in compliance with the Environmental Protection Agency Good Laboratory Practice (GLP) Regulations as set forth in Title 40 of the US Code of Federal Regulations, Part 792, issued November 29, 1983 (effective December 29, 1983), and with any applicable amendments.

MATERIALS AND METHODS

Tissue Collection for Cell Proliferation

Four animals per sex in groups 1 - 4 were sacrificed after 26 weeks on study. A representative sample of the liver, testes (males only) and pancreas from each animal was fixed in formalin, processed and embedded to paraffin block by Covance per protocol specifications. Tissue blocks were then shipped to PAI for sectioning and staining. From each block, a slide was prepared for H&E evaluation and immunohistochemical detection of proliferating cell nuclear antigen (PCNA), a marker of cell proliferation.

Immunohistochemistry for Cell Proliferation

Sections of paraffin-embedded tissues were cut at 5 μ m and placed on positively charged slides (Superfrost Plus, Fisher Scientific, Pittsburgh, PA) to ensure adhesion during processing for PCNA. Standard immunohistochemical methods were used to stain tissues for PCNA (PAI's Standard Operating Procedure for Immunohistochemical Staining (SOP #707). Briefly, tissue sections were incubated with a monoclonal antibody to PCNA and reagents required for the avidin-biotin peroxidase method for the detection of the antigen-antibody complex. PCNA expression in cells was localized by the chromagen 3,3'-diaminobenzidine (DAB). Tissue sections were counterstained with hematoxylin.

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Cell Proliferation Measurements

The percentage of hepatocytes in S-phase (labeling index, LI) was determined by scoring at least 3000 hepatocytes in 10 fields of liver. The LI in the testes (males only) was determined by scoring the number of PCNA-positive Leydig cells among at least 100 Leydig cells. The labeling index in the pancreas was scored subjectively with 4 being both acinar and islets stained heavily and 3 being predominant staining in the acinar region. A negative control slide was included in the staining run and consisted of study tissue that was not incubated with the primary antibody.

For cell proliferation evaluations, slides were first perused at low magnification (100X) to judge quality of staining, processing and sectioning, potential patterns of cellular proliferation, and histomorphologic changes. Cell proliferation was then quantified at higher magnification (200X for liver and pancreas, and 400X for testes) as described above. Histomorphology was further assessed by evaluating the H&E slide prepared from the same tissue block for each animal evaluated for cell proliferation.

Statistical Analysis

The Student's t-test (two-sided, unequal variance) was used to test for statistical significance in LI between control and treatment groups using Microsoft Excel version 5.0. A P value of 0.05 or less was judged to be statistically significant.

RESULTS

Cell Proliferation

Individual animal cell proliferation data are presented in Section II (Table II-1). Cell proliferation in the liver, testes and pancreas of control and test material-treated animals was similar.

Histopathology

Sections from the same tissue blocks used for preparation of PCNA-stained slides were stained with hematoxylin and eosin (H&E) for histopathologic evaluation to facilitate the interpretation of the immunostained slides. Individual animal findings are presented in Appendix I.

Single sections of liver, pancreas, and testes from 16 adult male monkeys and single sections of liver and pancreas from 16 adult female monkeys representing control, low-dose (0.03 mg/kg/day), mid-dose (0.15 mg/kg/day) and high-dose (0.75 mg/kg/day) treatment groups were evaluated histologically. Each tissue section was stained with hematoxylin and eosin. The purpose of this evaluation was to determine whether or not morphologic changes were occurring in these tissues which may alter or confound the specificity of the PCNA staining observed in these animals.

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The results showed that no significant changes were observed in either the liver, pancreas, or testicular tissues from male monkeys or the liver and pancreas tissues from female monkeys, which would alter the interpretation of the PCNA staining in this study.

DISCUSSION

In the present study, cell proliferation was measured within the liver, testes and pancreas of male monkeys, and the liver and pancreas of female monkeys from control (0 mg/kg/day), low dose (0.03 mg/kg/day), mid-dose (0.15 mg/kg/day) and high dose (0.75 mg/kg/day) groups after 26 weeks on study to assess the effect of the test material on critical enzyme levels, hormones, and other selected biological parameters, including cell proliferation.

There did not appear to be a cell proliferative response to the test material in the liver, testes or pancreas, as determined by labeling indices, which were similar in all animals.

SUMMARY

In the present study, cell proliferation, as determined by measuring the labeling index, was not increased in the liver, testes or pancreas of monkeys.

II. TABLE

Legend

ND, not determined due to suboptimal staining

NP, slide not present

Liver labeling index: Percentage of hepatocytes in S-phase

Pancreas labeling index: Scored subjectively with 4 = islets and acinar staining heavily; 3 =

staining more abundant in acinar cells than islets

Testes labeling index: Percentage of PCNA-positive Leydig cells

COVANCE STUDY NO. 6329-223 N MONKEYS Page II-1

TABLE II-1. CELL PROLIFERATION IN MONKEYS

Dose Group	Sex/Group	Animal Number	Labeling Index	Labeling Index Pancreas	Labeling Index
0 mg/kg/day (Control)	F/1	105530	0.000%		Testes
0 mg/kg/day (Control)		105531	0.030%	4	N
	F/1			3	N
0 mg/kg/day (Control)	F/1 F/1	IO5535 IO5544	0.000%	3	NF.
mg/kg/day (Control)	F/1		0.199%	4	NF
		Mean	0.057%	3.5	-
202	F /0	SEM	0.048%	0.3	
0.03 mg/kg/day (Low dose)	F/2	IO5537	0.113%	3	NF
0.03 mg/kg/day (Low dose)	F/2	IO5541	0.125%	4	NF
0.03 mg/kg/day (Low dose)	F/2	IO5547	0.000%	3	NF
0.03 mg/kg/day (Low dose)	F/2	105550	0.212%	3	NF
		Mean	0.112%	3.3	
	F / 0	SEM	0.044%	0.3	
0.15 mg/kg/day (Mid dose)	F/3	IO5532	0.000%	3	NF
0.15 mg/kg/day (Mid dose)	F/3	IO5538	0.086%	3	NF
0.15 mg/kg/day (Mid dose)	F/3	IO5545	0.029%	3	NF
0.15 mg/kg/day (Mid dose)	F/3	105548	0.120%	4	NF
		Mean	0.059%	3.3	
		SEM	0.027%	0.3	
).75 mg/kg/day (High dose)	F/4	105534	0.000%	3	NF
0.75 mg/kg/day (High dose)	F/4	105536	0.313%	3	NP
0.75 mg/kg/day (High dose)	F/4	IO5540	0.000%	3	NF
).75 mg/kg/day (High dose)	F/4	105551	0.000%	3	NF
	Y1*10********	Mean	0.078%	3.0	-
		SEM	0.078%	0.0	
mg/kg/day (Control)	M/1	IO5508	0.100%	4	9.52%
mg/kg/day (Control)	M/1	IO5517	0.062%	3	9.00%
mg/kg/day (Control)	M/1	105519	0.108%	3	20.75%
) mg/kg/day (Control)	M/1	IO5527	0.464%	4	19.23%
		Mean	0.184%	3.5	14.63%
		SEM	0.094%	0.3	3.12%
0.03 mg/kg/day (Low dose)	M/2	IO5514	0.095%	3	16.36%
0.03 mg/kg/day (Low dose)	M/2	IO5515	0.000%	3	18.52%
0.03 mg/kg/day (Low dose)	M/2	105516	0.000%	3;	22.95%
0.03 mg/kg/day (Low dose)	M/2	IO5521	0.000%	4	12.38%
		Mean	0.024%	3.3	17.55%
		SEM	0.024%	0.3	2.20%
0.15 mg/kg/day (Mid dose)	M/3	105510	0.053%	3	9.17%
0.15 mg/kg/day (Mid dose)	M/3	IO5518	0.029%	4	17.14%
0.15 mg/kg/day (Mid dose)	M/3	IO5524	0.155%	3.	14.42%
0.15 mg/kg/day (Mid dose)	M/3	IO5528	0.000%	4	10.71%
		Mean	0.059%	3.5	12.86%
		SEM	0.034%	0.3	1.80%
).75 mg/kg/day (High dose)	M/4	IO5506	0.030%	3	7.69%
).75 mg/kg/day (Hlgh dose)	M/4	IO5507	0.027%	3	19.61%
).75 mg/kg/day (High dose)	M/4	105509	NP	NP	NP
).75 mg/kg/day (High dose)	M/4	IO5512	0.000%	3	ND
		Mean	0.019%	3.0	13.65%
		SEM	0.009%	0.0	5.96%
ND, not determined due to sub	ooptimal stainin	g			
NP, slide not present					
liver: Percentage of hepatocy	tes in S-phase				
Pancreas: Scored subjectively	with A-islate an	d acinar etain	ed heavily (>50% la	heled): 3-acinars	~ielate

III. SIGNATURE PAGE

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys (Covance Study Number 6329-223)

Submitted by:	
PAI Project Manager:	
Sandra R. Eldridge, Ph.D.	/-2-02 Date
PAI Project Pathologist:	
Carolyn Moyer, D.V.M., Diplomate, A.C.V.P.	12/31/0/ Date

IV. QUALITY ASSURANCE STATEMENT



Cell Proliferation Report

26-Week Capsule Toxicity Study with Perfluorooctane Sulfonic Acid Potassium Salt (PFOS; T-6295) in Cynomolgus Monkeys

Covance Study No.: 6329-223

QUALITY ASSURANCE STATEMENT

This cell proliferation project has been inspected and audited by the PAI Quality Assurance Unit (QAU) as required by the Good Laboratory Practice (GLP) regulations promulgated by the U.S. Environmental Protection Agency (TSCA). The cell proliferation report is an accurate reflection of the recorded data. The following table is a record of the inspections/audits performed and reported by the QAU.

Date of Inspection	Phase Inspected	Date Findings Reported to Project Manager/ PAI Management	Date Findings Reported to Study Director/Study <u>Director Management</u>
12/06/99	Primary Antibody Dilution	12/06/99	12/27/01
02/17/00	Study Data and		
	Supporting Documentation	02/17/00	12/27/01
02/17/00	Draft Cell Proliferation Repor	t 02/17/00	12/27/01
12/27/01	Final Cell Proliferation Repor		12/27/01

Karen E. Butler

Quality Assurance Officer

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APPENDIX I

Individual Animal Findings

3MP #6329-223

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	SEX	DOSE GROUP	HISTOLOGIC FINDINGS
105530	F	1	Liver - NSF
105531	F	ā	Pancreas - NSF
103531	Г	1	Liver - NSF Pancreas - NSF
105535	F	1	Liver - chronic inflammation, minimal
105544	F	1	Pancreas - NSF Liver - NSF
105537	F	2	Pancreas - NSF Liver - NSF
105541	F	2	Pancreas - NSF Liver - chronic inflammation, minimal
		_	Pancreas - NSF
105547	F	2	Liver - NSF Pancreas - NSF
105550	F	2	Liver - NSF
105532	F	3	Pancreas - NSF Liver - NSF
		_	Pancreas - NSF
105538	F	3	Liver - chronic inflammation, minimal Pancreas - NSF
105545	F	3	Liver - chronic inflammation, minimal
105548	F	3	Pancreas - NSF Liver - chronic inflammation, minimal
X05524	F	4	Pancreas - NSF
105534	r	4	Liver - NSF Pancreas - NSF
105536	F	4	Liver - fat infiltration, centrilobular, moderate
105540	F	4	Pancreas - NSF Liver - NSF
105551	F	4	Pancreas - NSF Liver - NSF
103331	1		Pancreas - NSF
105508	M	1	Liver - chronic inflammation, minimal
			Pancreas - chronic inflammation, minimal Testes - NSF
105517	M	1	Liver - NSF
			Pancreas - NSF Testes - crush artifact, focal
105519	M	1	Liver - NSF
			Pancreas - NSF
105527	M	1	Testes - NSF Liver - NSF
10002.		•	Pancreas - NSF
105514	M	2	Testes - NSF Liver - chronic inflammation, minimal
103314	171	2	Pancreas - chronic inflammation, minimal
105515	M	2	Testes - NSF Liver - chronic inflammation, minimal
105515	TAT	2	Pancreas - NSF
105517	3.6	2	Testes - NSF
105516	M	2	Liver - NSF Pancreas - NSF
			Testes - NSF
105521	M	2	Liver - NSF Pancreas - NSF
			Testes - NSF
105510	M	3	Liver - chronic inflammation, minimal Pancreas - NSF
			Testes - NSF

Legend: NSF = no significant findings

Individual Animal Findings

3MP #6329-223

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS; T6295) IN CYNOMOLGUS MONKEYS

ANIMAL NUMBER	SEX	DOSE GROUP	HISTOLOGIC FINDINGS
105518	M	3	Liver - NSF Pancreas - NSF
105524	М	3	Testes - NSF Liver - NSF Pancreas - NSF
105528	M	3	Testes - NSF Liver - NSF Pancreas - NSF
105507	M	4	Testes - NSF Liver - fat infiltration, centrilobular, moderate Pancreas - NSF
105512	M	4	Testes - NSF Liver - NSF Pancreas - NSF
105506	M	4	Testes - NSF Liver - NSF Pancreas - NSF
105509	М	4	Testes - NSF No microscopic slides available. (Inventory shows blocks submitted; STPR does not show blocks sectioned.)

Legend: NSF = no significant findings

APPENDIX 8

Electron Microscopic Evaluation of Liver in Cynomolgus Monkeys

Note: This appendix contains information supplied and audited by Pathology Associates International (PAI).



Pathology Associates International

A Company of Science Applications International Corporation



PATHOLOGY REPORT (ANCILLARY STUDY)

ELECTRON MICROSCOPIC EVALUATION OF LIVER IN CYNOMOLGUS MONKEYS (RECOVERY ANIMALS)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

CLIENT STUDY NUMBER 6329-223 PAI STUDY NUMBER EM 99.76

Prepared by:

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Pathology Associates International 4915-D Prospectus Drive Durham, NC 27713

September 1, 2000

PREPARED FOR 3M CORPORATE TOXICOLOGY, 3M CENTER, ST. PAUL, MN 55144-1000

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Light Microscopy and Transmission Electron Micrograph Interpretation Forms	П
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Quality Assurance Statement	IV

I. Pathology Narrative

PATHOLOGY REPORT (ANCILLARY STUDY)

ELECTRON MICROSCOPIC EVALUATION OF LIVER IN CYNOMOLGUS MONKEYS (RECOVERY ANIMALS)

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

CLIENT STUDY NUMBER 6329-223 PAI STUDY NUMBER EM 99.76

SUMMMARY

Two male and two female cynomolgus monkeys treated for 26 weeks with 0.75 mg/kg PFOS were removed from treatment for up to 53 weeks. Liver samples obtained by biopsy at Week 57 and necropsy at Week 79 were examined for reversibility, persistence, or delayed occurrence of toxic effects. Light and electron microscopic evaluation of livers identified no pathological changes. The treatment-related changes of hepatocellular hypertrophy and vacuolation, noted at 26 weeks and characterized ultrastructurally by increased numbers of lipid droplets within hepatocytes, had completely disappeared during the recovery period.

PROCEDURES

The objective of this study was to examine by electron microscopy the livers from selected animals in a 26-week capsule toxicity study with PFOS in cynomolgus monkeys. In addition to a general qualitative evaluation for differences between control and treated animals, the ultrastructural endpoints included quantitation of peroxisomes within hepatocytes and membrane and mitochondrial changes in hepatocytes. Light microscopy of paraffin-embedded liver sections was also performed.

This report details the light and electron microscopy findings in the four high-dose male and female monkeys designated as recovery animals. A previous report (dated 6-24-1999) indicated that treatment of cynomolgus monkeys with 0.75 mg PFOS/kg/day for 26 weeks resulted in hepatocellular vacuolation and hypertrophy by light microscopy. Hepatocellular vacuolation and hypertrophy were primarily centrilobular in distribution and did vary in incidence and severity between individual animals. Ultrastructurally, there were increased lipid droplets within hepatocytes. Increased lipid droplets were

present in both the high-dose males examined and in two of four high-dose females examined. Increased hepatocellular glycogen was present in the remaining two high-dose females. These ultrastructural changes correlated with hepatocellular hypertrophy and vacuolation noted by light microscopy and with increased liver weight parameters in the high-dose animals. The no-effect level for hepatocellular vacuolation (lipid droplet accumulation) was 0.15 mg/kg/day of PFOS (mid-dose group). Quantitation of peroxisomes within hepatocytes by electron microscopy indicated no remarkable differences between control livers and livers treated with 0.03, 0.15, or 0.75 mg PFOS/kg/day. Ultrastructural differences in cellular membranes or mitochondria were not discernible between control and treated animals in the samples examined. The recovery animals were examined to assess for reversibility or persistence of these hepatocellular changes, or for the delayed occurrence of additional PFOS-induced effects.

For the toxicity study, 22 male and 22 female cynomolgus monkeys were given the test article or the vehicle once daily for at least 26 weeks according to Text Table 1.

Text Table 1. Group Designations and Desage Levels					
Dosage Group	Dose Level (mg/kg/dav) ^a	Total Material Dose Level (mg/kg/day) ^b	Number of Males	Number of Females	
I	0"	304	64	6 ^d	
H	0.03	15 ⁶	4	4	
Ш	0.15	6 ^e	6 ^d	6^{d}	
IV	0.75	30°	6 ^d	6 ^{rt}	

- Dose levels were provided. The control group (Group 1) received an equivalent amount of lactose in gelatin capsules as the total material administered to Group 4.
- The low-dose group (Group 2) received the test material diluted with lactose (1.499, w.w).
- 5 The mid-dose (Group 3) and high-dose (Group 4) groups received the test material diluted with lactose (1:39, w/w).

During Week 57 (approximately 31 weeks into the recovery period), the 2 high-dose recovery males and 2 high-dose recovery females were anesthetized and liver biopsies were surgically obtained from each animal and chemically preserved and processed as described below.

During Week 79, the 4 high-dose recovery animals were necropsied and liver samples obtained as described below. The two control recovery animals were returned to the Covance stock animal colony, and the two Group III animals were transferred to a subsequent study (Covance 6329-268). Liver samples were not obtained and examined in the control recovery or Group III recovery animals.

Animals to be sacrificed at recovery sacrifice times were anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied. Multiple tissues were collected and preserved in 10% neutral-buffered formalin according to the protocol. Additionally,

Two animals in Groups 1, 3, and 4, designated as recovery animals, were treated for at least 26 weeks, then treatment was discontinued and the animals, were observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 52 weeks posttreatment.

pieces of liver from each animal were thin-sliced and placed in ½ strength Karnovsky's fixative (2.0% paraformaldehyde/2.5% glutaraldehyde in 0.1M phosphate buffer) for subsequent ultrastructural examination. These livers were processed into Epon blocks and submitted to this laboratory for subsequent electron microscopy processing and evaluation. Hematoxylin and eosin (H&E) stained slide sections of formalin-fixed, paraffin-embedded livers were submitted for light microscopic examination.

The four high-dose recovery animals are listed in Text Table 2. For each animal, there was a 57-Week liver biopsy sample and a 79-Week terminal necropsy liver sample.

Text Table 2. Recovery Animals Exam	ined by Light and Electron Microscopy
0.75 mg/kg/day PFOS	(Group 4 High-Dose)
Males	Females
I05511	I05533
I05522	IO5542

Thin sections (approximately 90 nm) from the Epon-embedded livers were cut, mounted on 200-mesh copper grids, stained with 5% methanolic uranyl acetate and Reynold's lead entrate, and examined on a Zeiss 900 transmission electron microscope. Centrilobular hepatocytes, where clearly identifiable in liver sections, were preferentially examined. Representative electron photomicrographs of liver were taken and significant ultrastructural features were summarized for each photograph and animal on a designated transmission electron micrograph interpretation form. The number of peroxisomes in hepatocytes was manually counted for each center photographed hepatocyte and recorded. For light microscopy, the H&E slides from the same animals selected for electron microscopy were evaluated and significant features were summarized on a light microscopic evaluation form.

RESULTS AND DISCUSSION

Individual interpretations of light microscopy slides and electron micrographs for each animal are shown in Section II. Representative electron photomicrographs were selected as report figures, labeled, and are shown in Section III. All remaining electron micrographs are separately attached to this report.

Light Microscopy

A summary of the incidence and severity of light microscopic findings in the control and high-dose livers is shown in Text Table 3. There were no microscopic findings that appeared to be associated with test material administration. Hepatocellular hypertrophy and vacuolation, noted after 26 weeks of treatment in some high-dose animals, were not identified in recovery samples at either the 57-Week biopsy or 79-Week terminal necropsy samples, indicating complete reversal of the light microscopic liver changes.

The liver findings noted in the recovery animals were considered normal background histopathology of cynomolgus monkeys.

Text Table 3. Incidence and Severity of Lig Recovery Anii		ver Findings –	
	0.75 mg/kg/d	lay (High-Dose)	
	Males	Females	
(number examined)	(2)	(2)	
57-Week Biopsy			
Infiltrate, lymphohistiocytic, minimal	1	2	
Terminal Necropsy			
Infiltrate, lymphohistiocytic, minimal	2	2	
Hyperplasia, bile duct, slight]	_	
Inflammation, lymphohistiocytic, slight	1	_	
Inflammation, eosinophilic, slight	1	_	
Clearing, cytoplasmic, centrilobular, minimal – 1			

⁻ Incidence of zero.

Electron Microscopy

Electron microscopic evaluation of the 57-week biopsy and 79-week necropsy liver samples identified no abnormal features, and all tissue samples were considered to be ultrastructurally normal (Text Table 4). The hepatocellular hypertrophy and vacuolation seen after 26 weeks of treatment, and characterized ultrastructurally by increased lipid droplets, were not seen in the recovery animal liver samples, indicating recovery of these test material related effects. The electron microscopic features described in these recovery samples were considered normal ultrastructural findings in hepatocytes. Figures 1-4 are representative electron micrographs from these samples and illustrate normal liver and hepatocellular features.

Text Table 4. Summary of	Ultrastructural F	indings – Recovery Animals
Treatment Group (mg/kg/day)/Sex	Animal No.	Comments
(0.75) Male, 57-week biopsy	105511	Normal
(0.75) Male, 79- week necropsy	105511	Normal
(0.75) Male, 57-week biopsy	105522	Normal
(0.75) Male, 79-week necropsy	105522	Normal
(0.75) Female, 57-week biopsy	105533	Normal
(0.75) Female, 79-week necropsy	105533	Normal
(0.75) Female, 57-week biopsy	I05542	Normal
(0.75) Female, 79-week necropsy	I05542	Normal

September 1, 2000 Date

Peroxisomes were identified and quantitated in representative hepatocytes (Text Table 5). Mean peroxisome numbers per hepatocyte were considered normal.

Text Table 5. Quantitation of Hepatocellular Peroxisomes							
	0.75 mg PFOS/kg/day (High-Dose) Recovery Animals						
	Male Female						
57-week biopsy 79-week necropsy		57-week biopsy 79-week necro		k necropsy			
Animal	Number! of	Animal	Number of	Animal	Number of	Animal	Number of
Number	Peroxisomes	Number	Peroxisomes	Number	Peroxisomes	Number	Peroxisomes
105511	18.5	105511	19.2	105533	29.8	I05533	20.8
105522	19.4	105522	25.8	105542	23.0	I05542	15.2
Mean =	18.95	Mean =	22.5	Mean =	26.4	Mean =	18.0

Average number of peroxisomes per hepatocyte for five hepatocytes counted per animal. For Animal No. 105511 (biopsy), peroxisomes were counted in only four hepatocytes

CONCLUSION

Light and electron microscopic evaluation of livers from cynomolgus monkeys treated with 0.75 mg PFOS/kg/day for 26 weeks and allowed to "recover" untreated for 31 and 53 weeks identified no pathological changes. The treatment-related changes of hepatocellular hypertrophy and vacuolation, characterized ultrastructurally by increased numbers of lipid droplets within hepatocytes at 26 weeks, had completely resolved during the recovery period.

SIGNATURE OF AUTHOR

James B. Nold, D.V.M., Ph.D.,

Diplomate, A.C.V.P.

II. Light Microscopy and Transmission Electron Micrograph Interpretation Forms ¹

¹ Forms are exact copies of signed/dated raw data sheets maintained in archived study file.

LIGHT MICROSCOPIC EVALUATION

Study No.: <u>632</u> 9- <u>223 (EM 99.76)</u>	Species/Strain:	Cynomolgus Monkeys
Animal No: see below	Tissue:	<u>Liver</u>
Sex: see below		
interpreting Pathologist (signature and date):	James 3. n	April 7, 2000

Dose/Group	Animal Number	Microscopic Findings and Comments
0.75 mg/kg (High-dose)	105511	Infiltrate, lymphohistiocytic, multifocai, minimal
Recovery Males 57 wk biopsy	105522	! Norma.
0.75 mg/kg (High-dose)	105533	1. Infiltrate, lymphohistiocytic, focal, minimal
Recovery Females 57 wk biopsy	105542	Infiltrate, lymphohistiocytic, multifocal, minimal
0.75 mg/kg (High-dose) Recovery Males	105511	Infiltrate, lymphohistiocytic, multifocal, minimal
79 wk necropsy	105522	I. Infiltrate, lymphohistiocytic, multifocal, minimal Hyporplasia, focal, slight, bile duct Inflammation, lymphohistiocytic, multifocal, slight Inflammation, cosinophilic, multifocal, slight
0.75 mg/kg (High-dose) Recovery Females	105533	Infiltrate, lymphohistiocytic, multifocal, minimal
798 week necropsy	105542	Infiltrate, lymphohistiocytic, multifocal, minimal Clearing, cytoplasmic, centrilobular, minimal

Species/Strain: Cynomolgus Monkey

Study No.: <u>6329-223 (EM 99</u>.76)

Animal No.: 10551; 57-week biopsy	Tissue: <u>Liver - centrilobular</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: 99.76-31-1A Z18823 -
Sex: Male	Photo/Negative No(s):Z18827
Significant Lesions (check one):Yes	X No
Interpreting Pathologist (signature and date):	May 26, 2000
Features: Z18823, Liver. Hepatocyte. 15,290X. central nucleus. The surrounding cytoplasm contain mitochondria and several small to large lipid drople mostly slightly smaller than the mitochondria, are peroxisomes counted. The intervening cytosol conreticulum and some fine granules, which may be gl Z18824. Liver. 10,320X. Portions of three cells a exhibit a mixture of normal appearing cytoplasmic endoplasmic reticulum and scattered peroxisomes, contains irregular clear spaces surrounded by membriothondria are evident, and this cell is probably that are several large structures containing finely granular represent smooth endoplasmic reticulum intermixed appears to be membrane bound, but this may be a prompacting of the surrounding cytoplasm. Or, thes invaginations of extracellular material such as plast appear normal. Peroxisomes were not counted in this individual hepatocyte showing most of its cytoplast Z18825. Liver. Hepatocyte. 10,320X. This hepat nucleus. Its surrounding cytoplasm contains numer lipid droplets. The intervening cytoplasm contains scattered fine glycogen granules, and some dark rouperoxisomes counted. Three adjacent hepatocytes bottom right of the photograph is a finely granular scentered hepatocyte and appears similar to that desc Z18826. Liver. Hepatocyte. 10,320X. This hepat centered hepatocyte and appears similar to that desc Z18826. Liver. Hepatocyte. 10,320X. This hepat containing numerous mitochondria and slightly dila lipid droplets are present. Seventeen (17) peroxisor.	This hepatocyte has a small round into numerous round to oval ets. The darker round organelles, peroxisomes. Twenty-four (24) tains profiles of endoplasmic ycogen. The dorsal two hepatocytes elements, including mitochondria. The larger ventral cell's bytoplasm branous material. Only a couple of not a hepatocyte. Around the periphery lar and reticular material. This may d with glycogen and/or ribosomes. It oseudomembrane caused by se structures may represent cytoplasmic ma. The nuclear profiles in these cells his electron micrograph because an m is not present. Locyte is polygonal with a round central rous mitochondria and a few small profiles of endoplasmic reticulum, und peroxisomes. Twenty-two (22) appear essentially normal. At the structure, which is outside of the cribed in Z18224. Locyte is bordered by an extracellular nuclear profile and abundant cytoplasmic ated endoplasmic reticulum.

I05511 Biopsy Continued.

Z1827. Liver. Hepatocyte. 10.320X. A large round nucleus is present in the centered hepatocyte. The surrounding cytoplasm contains numerous mitochondria and abundant endoplasmic reticulum. A few dark residual bodies are present. Eleven (11) peroxisomes counted. At the right dorsal margin of the photograph are an endothelial cell and a granular structure that appears to be an invagination of plasma.

Conclusions: Normal hepatocytes. Peroxisomes average 18.5 per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: 105511 79-week necropsy	Tissue: <u>Liver - centrilobular</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: <u>99.76-32-2A</u> Z18828 -
Sex: Male	Photo/Negative No(s).: Z18832
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	May 29, 2000
Features: Z18828. Liver. Hepatocyte. 10,320X. shape with a small round nucleus. Approximately 8 droplets are present in the cytoplasm. The majority round to rod-shaped mitochondria. intervening area (SER) and "more clear" patches of glycogen. Some reticulum (RER) and round dark peroxisomes are alperoxisomes counted. Bile canaliculi can be seen bright and left with the central hepatocyte. Z18829. Liver. Hepatocyte. 10,320X. The central collagen are present at the top right margin of this endsor present at the lower left margin. The intervening surrounding cytoplasm containing numerous profile mitochondria. There is mild dilatation of the endopenvelope, which is a fixation artifact. Several dark lipid droplets are also identified. Differentiation be is difficult. Eleven (11) peroxisomes counted. Z18830. Liver. Hepatocyte. 10,320X. The cytople abundant SER, although some profile is not evident in the hepatocyte. Approximately 20 lipid droplets are precounted. This hepatocyte's microvillous border is e along sinusoids. The nucleus of an endothelial cell hepatocytes are present to the left and right of the control of t	8-9 small to medium sized lipid of the cytoplasm contains numerous is of smooth endoplasmic reticulume profiles of rough endoplasmic leso evident. Twenty-eight (28) etween the hopatocytes situated on the leven and surrounding extracellular lectron micrograph. A sinusoid is not hepatocyte has a round nucleus and is of endoplasmic reticulum and dark dasmic reticulum and nuclear residual bodies and occasional small tween peroxisomes and mitochondria asm of this hepatocyte contains also evident, especially around some is plane of section of the centered essent. Twenty (20) peroxisomes evident both dorsally and ventrally is present at the lower right. Adjacent tentered hepatocyte. ology of this hepatocyte is very us mitochondria, endoplasmic everal lipid droplets are present.

105511 Necropsy Continued.

Z18832. Liver. Hepatocyte. 10,320X. This hepatocyte appears similar to Z18830. Its cytoplasm contains abundant SER. Other recognizable organelles include some RER, lipid droplets, mitochondria, peroxisomes and residual bodies. Eighteen (18) peroxisomes counted. At the lower right margin of the photograph is a sinusoid containing several erythrocytes. A prominent bile canaliculus is present at the right where three hepatocytes appear to meet. These hepatocytes are considered to be ultrastructurally normal.

Conclusions: Normal hepatocytes. Average 19.2 peroxisomes per hepatocyte.

Study No.: _6329-223_(EM 99.76)_	Species/Strain: Cynomolgus Monkey
Animal No.: <u>[05522</u>	Tissue: Liver centrilobular
Treatment Group: .75 mg/kg (hi-dose)	Block No(s).: 99.76-33-1A Z18833 -
Sex: <u>Male</u>	Photo/Negative No(s): Z18837
Significant Lesions (check one):Yes	X No
Interpreting Pathologist (signature and date):	~ B. N. S-(May 29, 2000

Features: Z18833, Liver. Hepatocyte. 10,320X. A sinusoid containing finely granular plasma is along the right microvillous margin of this hepatocyte. The hepatocyte has an oval nucleus. In the surrounding cytoplasm are several very electron-dense residual bodies. There is mild dilatation of the nuclear envelope and endoplasmic reticulum, which is a fixation artifact. Eighteen (18) peroxisomes counted. Mitochondria are numerous and are variably shaped.

<u>Z18834.</u> Liver. Hepatocyte. 10,320X. This hepatocyte appears ultrastructurally similar to Z 18833. There is mild dilatation of the endoplasmic reticulum and nuclear envelope. The hepatocyte lines a sinusoid, which contains two erythrocytes and a granulated eosinophil. Eight (8) peroxisomes counted.

Z18835. Liver. Hepatocyte. 10,320X. Several small lipid droplets are present in the cytoplasm of this hepatocyte. It has a slightly oval nucleus and abundant cytoplasm which contains numerous mitochondria and profiles of endoplasmic reticulum. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. A distinct myelin figure is evident associated with a lipid droplet to the left of the nucleus. Twenty-two (22) peroxisomes counted.

<u>Z18836.</u> Liver. Hepatocyte. 10,320X. The hepatocyte has a large polygonal nucleus. The cytoplasm contains abundant SER and RER, which exhibit slight dilatation. Several small to large lipid droplets are present. Numerous round dark peroxisomes are evident. Thirty-five (35) peroxisomes counted. Mitochondria are numerous and variably shaped, but appear ultrastructurally normal.

Z18837. Liver. Hepatocyte. 10,320X. A sinusoid is present along the left and lower margins of this electron micrograph. The lighter-staining endothelial cell is present along the lower margin. The centered hepatocyte has an oval nucleus and numerous mitochondria and endoplasmic reticulum in its surrounding cytoplasm. There is mild dilatation of the endoplasmic reticulum and nuclear envelope. Several lipid droplets and residual bodies are also discernible. Fourteen (14) peroxisomes counted.

Conclusions: Normal hepatocytes. Peroxisomes average 19.4 per hepatocyte.

Study No.: _6329-223_(EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: 105522 79-week necropsy	Tissue: Liver - centrilobular
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: 99.76-34-2A Z18838 -
Sex: Male	Photo/Negative No(s).:_Z18342
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	B. N. S.4 May 29, 2000

Features: Z18838. Liver. Hepatocyte. 10,320X. This hepatocyte has a large round nucleus. At the very top left margin of the electron micrograph is a segment of sinusoid along its microvillous border. A bile canaliculus is evident at the lower left margin of the photograph, where the centered hepatocyte meets an adjacent hepatocyte. The centered hepatocyte has abundant cytoplasm, which contains numerous profiles of RER and SER. There is slight dilatation of the endoplasmic reticulum. Mitochondria are numerous are round to oval in shape. Approximately twenty-three (23) peroxisomes counted. Z18839. Liver. Hepatocyte. 10,320X. Two hepatocytes are clearly evident in this electron micrograph. They appear ultrastructurally similar. They exhibit mild dilatation of their endoplasmic reticulum and nuclear envelopes. They have numerous mitochondria and occasional lipid droplets and residual bodies. Peroxisomes are usually round and more electron-dense than the mitochondria. Seventeen (17) peroxisomes counted in the upper hepatocyte.

Z18840. Liver. Hepatocyte. 10,320X. This hepatocyte has a large round central nucleus. The surrounding cytoplasm has numerous mitochondria and many slightly dilated profiles of endoplasmic reticulum. Both the SER and RER appear slightly dilated. Approximately 15-16 small to medium sized lipid droplets are present, as are a few very electron dense residual bodies. Twenty-one (21) peroxisomes counted. Z18841. Liver. Hepatocyte. 10,320X. This hepatocyte's nucleus is not evident in this plane of section. A sinusoid containing an erythrocyte is present along the very top margin of this electron micrograph. There is slight dilatation of the endoplasmic reticulum throughout the cytoplasm. Also, random small to medium sized lipid droplets are present. Numerous peroxisomes are evident. Forty (40) peroxisomes counted. Z18842. Liver. Hepatocyte. 10,320X. This hepatocyte appears similar to Z18838. and is ultrastructurally normal. It has an oval nucleus and abundant surrounding cytoplasm containing numerous mitochondria and slightly dilated profiles of endoplasmic reticulum. Twenty-eight (28) peroxisomes counted. Sinusoids are evident at the upper left and lower right margins of the photograph.

Conclusions: Normal hepatocytes. Peroxisomes average 25.8 per hepatocyte.

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: 105533 57-week biopsy	Tissue: <u>Liver - centrilobular</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s):: 99.76-35-1A Z18843 -
Sex: Female	Photo/Negative No(s).:_Z18847
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	- R. N. 84 May 29, 2000
Features: Z18843. Liver. Hepatocyte. 10,320X. profile. A sinusoid lined by an endothelial cell is profile. A sinusoid lined by an endothelial cell is profile. A sinusoid lined by an endothelial cell is profile. A sinusoid lined by an endothelial cell is profile. A sinusoid lined by an endothelial cell is profile. The endoplasmic reticulum, nuclear envisinghtly dilated. This dilatation is a fixation artifact droplets are present. Forty (40) peroxisomes counted Z18844. Liver. Hepatocyte. 10,320X. This some a large oval nucleus. Its cytoplasm contains numer profiles of RER. Some glycogen granules appear to Eighteen (18) peroxisomes counted. Z18845. Liver. Hepatocyte. 10,320X. This electron Z18844, although two nuclear profiles are present, a plane of section although it may be binucleated. The Z18846. Liver. Hepatocyte. 10,320X. The center nucleus. The surrounding cytoplasm contains nume profiles of endoplasmic reticulum, both SER and RI lipid droplets are present. Thirty-three (33) peroxisc collagen and a sinuscid are present along the lower hepatocyte at the top right is more lightly staining the cytoplasm contain abundant SER. Some mitochond Z18847. Liver. Hepatocyte. 10,320X. This electron Z18844. Although there is slight dilatation of the enappears ultrastructurally normal. Twenty-four (24)	resent along the upper right margin of a is present at the lower left margin. A we hepatocytes. The cytoplasm of the merous mitochondria and endoplasmic elope, and mitochondria appear to be. A few small to medium sized lipid ed. What triangular-shaped hepatocyte has bus mitochondria and slightly dilated to be intermixed with the SER. The micrograph appears similar to which is probably a function of the irry-four (34) peroxisomes counted. Ed hepatocyte contains a small round erous mitochondria and slightly dilated ER. One myelin figure and several omes counted. Some extracellular right margin of the photograph. The man the centered hepatocyte, and its dria and peroxisomes are also evident. On micrograph appears very similar to indoplasmic reticulum, this hepatocyte

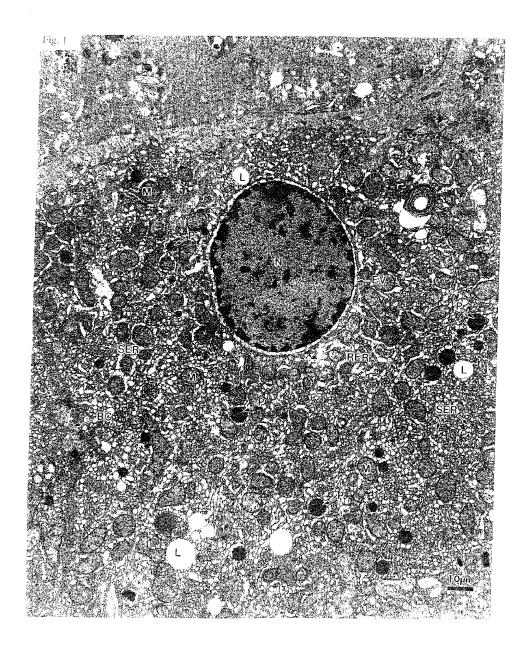
Conclusions: Normal hepatocytes. Peroxisomes average 29.8 per hepatocyte.

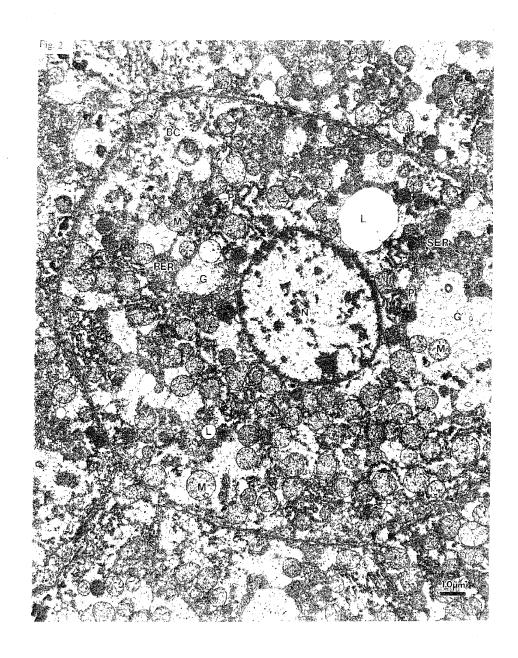
Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105533</u> 79-week necropsy	Tissue: <u>Liver - centrilobular</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: 99.76-36-2A Z18848 -
Sex: Female	Photo/Negative No(s).: Z18852
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	
Features: Z18848. Liver. Hepatocyte. 10,320X. Thi hepatocyte with adjacent hepatocytes along either side, and bottom left margins. Along the sinusoids, the hepatocytes and abundant surrounding cytoplasm. The cytonumerous scattered mitochondria. A few lipid droplets evident as clusters, usually around mitochondria. Thirty Z18849. Liver. Hepatocyte. 10,320X. This pentagona "trapezoid" appearance and is bounded by hepatocytes of nucleus and abundant surrounding cytoplasm. The cyto and lots of SER. Some profiles of RER are present arou peroxisomes counted. Z18850. Liver. Hepatocyte. 10,320X. This hepatocyte left margin. The sinusoid is lined by an endothelial cell erythrocytes. The hepatocyte has a small central nucleu of glycogen. These are lightly stained areas with fine gr RER appear ultrastructurally normal. Eight (8) peroxiso Z18851. Liver. Hepatocyte. 10,320X. This electron micra the service of the peroxison of the hepatocyte. The hepatocyte is cytoplasm contains multi between SER and mitochondria. Eighteen (18) peroxiso Z18852. Liver. Hepatocyte. 10,320X. This hepatocyte contains one medium sized lipid droplet in its cytoplasm present along the lower right margin of the electron micrand some glycogen are present in the cytoplasm of the heperoxisomes counted.	Sinusoids are present along the top right tocytes exhibit microvillous borders. The content of the patocyte has a large oval opplasm contains large amounts of SER and and residual bodies are present. RER is y-five (35) peroxisomes counted. The provided hepatocyte has a somewhat on five sides. It has a round central uplasm contains numerous mitochondria and the mitochondria. Twenty-four (24) the is bordered by a sinusoid at its lower and contains two profiles of the is. Its cytoplasm contains numerous areas ranular material. Mitochondria, SER and omes counted. The provided his is round, with a round nucleus, and an endothelial cell and containing an ple patches of glycogen interspersed omes counted. The provided his provided his provided his round, with a round nucleus, and an A sinusoid containing an erythrocyte is rourable. Abundant SER, mitochondria.
Conclusions: Normal hepatocytes. Peroxisomes average	ze 20.8 per hepatocyle

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105542</u> 57-week biopsy	Tissue: <u>Liver - periportal</u>
Treatment Group:75 mg/kg/ (hi-dose)	Block No(s).: 99.76-37-1A Z18853 -
Sex: <u>Female</u>	Photo/Negative No(s).: Z18857
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	<u> В У) Sy</u> May 29, 2000
Features: Z18853. Liver. Hepatocyte. 10,320X. by adjacent hepatocytes on all sides. It has a large parrounding cytoplasm. Just to the lower left of its extracellular space containing some microvilli and several small lipid droplets are present in the cytop endoplasmic reticulum is slightly dilated, and sever Nineteen (19) peroxisomes counted. Z18854. Liver. Hepatocyte. 10,320X. Similar to this hepatocyte is slightly dilated, which along with artifact of fixation. The mitochondria appear to also swelling. Multiple bile canaliculi are evident along adjacent hepatocytes. Approximately thirteen (13). Z18855. Liver. Hepatocyte. 10,320X. This hepatourounding cytoplasm contains numerous profiles. Approximately 20 small to medium sized lipid drop Fifty-one (51) peroxisomes counted. Z18856. Liver. Hepatocyte. 10,320X. Extracellul collagen fibrils is present next to the centered hepatoval nucleus and abundant surrounding cytoplasm vendoplasmic reticulum. A few small lipid droplets peroxisomes counted. Z18837. Liver. Hepatocyte. 10,320X. Smooth emitochondria are abundant in the cytoplasm of this large round nucleus and several small to medium six Nineteen (19) peroxisomes counted.	polygonal nucleus and abundant nucleus is a small segment of collagen, probably next to a sinusoid, lasm of the centered hepatocyte. The all residual bodies are present. Z18853, the endoplasmic reticulum of the dilated nuclear envelope, is an exhibit some slight artifactual the margins of this cell's contact with peroxisomes counted, poyte has a large round nucleus. It's of SER, which are minimally dilated, olets are present in the cytoplasm, ar space containing numerous ocyte. The hepatocyte has a large with numerous mitochondria and are present. Thirteen (13) adoplasmic reticulum and hepatocyte. The hepatocyte has a zeed lipid droplets are present.
Conclusions: Normal hepatocutes, Parovivornos e	uana aa 22 A man hawataata

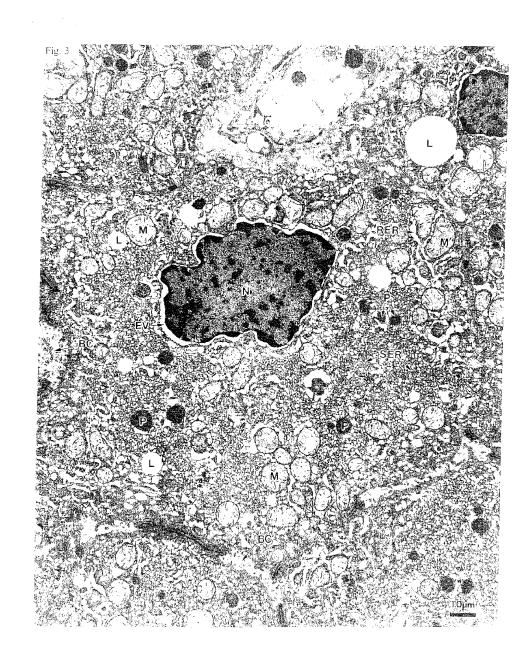
Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105542</u> 79-week necropsy	Tissue: <u>Liver - centrilobular</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: 99.76-38-2A
Sex: Female	Z18858 - Photo/Negative No(s): Z18862
Significant Lesions (check one):Yes	X No
Interpreting Pathologist (signature and date):	m 8, √) en May 29, 2000
Features: Z18858. Liver. Hepatocyte. 10,320X. nucleus. To the left of and beneath the nucleus are: The remaining cytoplasm contains abundant SER, p some profiles of RER. Six (6) peroxisomes counted Z18859. Liver. Hepatocyte. 10,320X. The cytopla multiple areas of glycoger, grainule accumulation. T numerous small electron dense granules. A few lipi cytoplasm. The darker and irregular cytoplasmic maglycogen. Five (5) peroxisomes counted. Z18860. Liver. Hepatocyte. 10,320X. Thirty-two hepatocyte's cytoplasm. The cell has a large round noccupied by SER, mitochondria, and occasional lipic evident around mitochondria. A microvillous borde along the right margin of this hepatocyte. Z18861. Liver. Hepatocyte. 10,320X. For this hep present in this plane of section. A moderate number present. Several of these contain some membranous profiles of SER and RER are present. There is sligh reticulum. Numerous variably shaped mitochondria ultrastructurally normal. Eleven (11) peroxisomes of Z18862. Liver. Hepatocyte. 10,320X. This hepat shaped in this plane of section. It has a large round a cytoplasm. Several small to medium sized lipid drogome profiles of RER, mitochondria, and peroxisom cytoplasm. Approximately twenty two (22) peroxison endothelial cell and erythrocyte is present at the lower Conclusions: Normal hepatocytes. Peroxisomes av	several medium sized lipid droplets. patches of glycogen, mitochondria, and d. asm of this hepatocyte contains these are lightly stained areas with d droplets are also present in the aternal is SER intermixed with (32) peroxisomes are counted in this nucleus. Most of the cytoplasm is d droplets. Some profiles of RER are r and adjacent sinusoid are present patocyte, its nuclear profile is not r of medium sized lipid droplets are is or myelin-like debris. Numerous it dilatation of the endoplasmic are present, but they appear counted. ocyte appears somewhat triangular nucleus and abundant surrounding plets are present. Abundant SER, es occupy the majority of the omes counted. A sinusoid with an per left margin of the photograph.
Teroxisomes av	orago 10.2 per neparocyte.

III. Transmission Electron Micrographs





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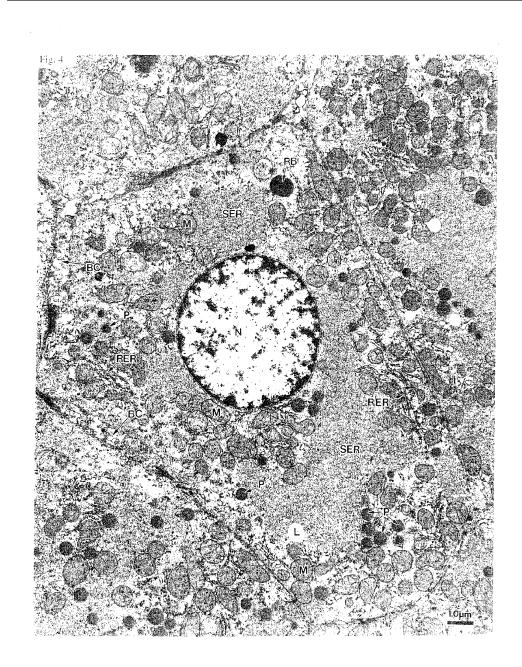


Figure Legends

 $\label{eq:Magnification} \textbf{Magnification}. \ \ \text{Print magnification is indicated on the back of each photograph. The measurement bar on each photomicrograph equals one micron (0.001mm).}$

Figure 1. Liver. Hepatocyte showing normal cytoplasmic organelles. Some peroxisomes and other normal organelles are identified. There is slight artifactual dilatation of the nuclear envelope and endoplasmic reticulum. Animal No. 105522, 0.75 mg/kg/day (high-dose male), 57-week biopsy, 10,320X magnification.

<u>Figure 2.</u> Liver. Hepatocyte. Gfycogen accumulations are shown. Glycogen are the small granules within the clear areas. Animal No. I05511, 0.75 mg/kg/day (high-dose male), 79-week necropsy, 10.320X magnification.

Figure 3. Liver. Hepatocyte showing normal cytoplasmic organelles. There is slight artifactual dilatation of the endoplasmic reticulum and nuclear envelope. Animal No. 105542, 0.75 mg/kg/day (high-dose female), 57-week biopsy, 10,320X magnification.

Figure 4. Liver. Hepatocyte showing normal cytoplasmic organelles. Animal No. I05533, 0.75 mg/kg/day (high dose female), 79-week necropsy, 10.320X magnification.

Index of Labels for Ultrastructural Structures

Abbreviation	Structure
BC	Bile canaliculus
EV	Nuclear envelope
G	Glycogen
L	Lipid droplet
M	Mitochondria
N	Nucleus
P	Peroxisome
RB	Residual body
RER	Rough endoplasmic reticulum
SER	Smooth endoplasmic reticulum

IV. Quality Assurance Statement

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QUALITY ASSURANCE STATEMENT

This electron microscopy study has been inspected and audited by the Quality Assurance Unit as required by the Good Laboratory Practices Regulations promulgated by the U.S. Food and Drug Administration. PAI has a functioning and responsive Quality Assurance Unit which reports directly to management. The following is a record of inspections/audits and their resulting reports:

Date of inspection	Phase Inspected	Date Findings Reported to Management and Study Pathologist
4/1, 2/99	Data Audit	4/2/99
4/2/99	Draft Report Audit	4/2/99
7/13/99	Audit of Data from Additional Groups	7/13/99
7/13/99	Final Report Audit	7/13/99
5/25, 30/00	Data and Draft Report Audit Recovery Animals	5/30/00
9/1/00	Final Report Audit	9/1/00

Jeanne deWard, B.S., RQAP-GLP Quality Assurance Specialist

Date

Sponsor: 3M Corporate Toxicology

Test Article: PFOS

Study Number: 6329-223, PAI Study EM-99.76



Pathology Associates International



A Company of Science Applications International Corporation

PATHOLOGY REPORT (ANCILLARY STUDY)

ELECTRON MICROSCOPIC EVALUATION OF LIVER IN CYNOMOLGUS MONKEYS

26-WEEK CAPSULE TOXICITY STUDY WITH PERFLUOROOCTANE SULFONIC ACID POTASSIUM SALT (PFOS;T-6295) IN CYNOMOLGUS MONKEYS

CLIENT STUDY NUMBER 6329-223 PAI STUDY NUMBER EM 99.76

Prepared by:

James B. Nold, D.V.M., Ph.D., Diplomate, A.C.V.P.

Pathology Associates International 4915-D Prospectus Drive Durham, NC 27713

July 13, 1999

PREPARED FOR 3M CORPORATE TOXICOLOGY, 3M CENTER, ST. PAUL, MN 55144-1000

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Pathology Narrative	I
Light Microscopy and Transmission Electron Micrograph Interpretation Forms	П
Transmission Electron Micrographs	Ш
Quality Assurance Statement	ΓV

I. Pathology Narrative

1009

PATHOLOGY REPORT (ANCILLARY STUDY)

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SUMMMARY

Treatment of cynomolgus monkeys with 0.75 mg PFOS/kg/day for 26 weeks resulted in hepatocellular vacuolation and hypertrophy by light microscopy. Hepatocellular vacuolation and hypertrophy were primarily centrilobular in distribution and did vary in incidence and severity between individual animals. Ultrastructurally, there were increased lipid droplets within hepatocytes. Increased lipid droplets were present in both the high-dose males examined and in two of four high-dose females examined. Increased hepatocellular glycogen was present in the remaining two high-dose females. These ultrastructural changes correlated with hepatocellular hypertrophy and vacuolation noted by light microscopy and with increased liver weight parameters in the high-dose animals. The no-effect level for hepatocellular vacuolation (lipid droplet accumulation) was 0.15 mg/kg/day of PFOS (mid-dose group).

Quantitation of peroxisomes within hepatocytes by electron microscopy indicated no remarkable differences between control livers and livers treated with 0.03, 0.15, or 0.75 mg PFOS/kg/day. Ultrastructural differences in cellular membranes or mitochondria were not discernible between control and treated animals in the samples examined.

PROCEDURES

The objective of this study was to examine by electron microscopy the livers from selected animals in a 26-week capsule toxicity study with PFOS in cynomolgus monkeys. In addition to a general qualitative evaluation for differences between control and treated animals, the ultrastructural endpoints included quantitation of peroxisomes within hepatocytes and membrane and mitochondrial changes in hepatocytes. Light microscopy of paraffin-embedded liver sections was also performed.

For the toxicity study, 22 male and 22 female cynomolgus monkeys were given the test article or the vehicle once daily for at least 26 weeks according to Text Table 1.

I-1

Text Table 1. Group Designations and Dosage Levels

Dosage Group	Dose Level (mg/kg/day) ^a	Total Material Dose Level (mg/kg/day) ^b	Number of Males	Number of Females
I	0,	30°	6 ^d	6 ^d
II	0.03	15 ^b	4	4
III	0.15	6°	6 ^d	6 ^d
IV	0.75	30°	6 ^d	6 ^d

- Dose levels were provided. The control group (Group 1) received an equivalent amount of lactose in gelatin capsules as the total material administered to Group 4.
- The low-dose group (Group 2) received the test material diluted with lactose (1:499, w:w).
- ^c The mid-dose (Group 3) and high-dose (Group 4) groups received the test material diluted with lactose (1:39, w:w).
- ^d Two animals in Groups 1, 3, and 4, designated as recovery animals, were treated for at least 26 weeks, then treatment was discontinued and the animals were observed for reversibility, persistence, or delayed occurrence of toxic effects for at least 13 weeks posttreatment.

Animals to be sacrificed at scheduled terminal and recovery sacrifice times were anesthetized with ketamine and xylazine, weighed, exsanguinated, and necropsied. Multiple tissues were collected and preserved in 10% neutral-buffered formalin according to the protocol. Additionally, pieces of liver from each animal were thin-sliced and placed in ½ strength Karnovsky's fixative (2.0% paraformaldehyde/2.5% glutaraldehyde in 0.1M phosphate buffer) for subsequent ultrastructural examination. These livers were processed into Epon blocks and submitted to this laboratory for subsequent electron microscopy processing and evaluation. Hematoxylin and eosin (H&E)-stained slide sections of formalin-fixed, paraffin-embedded livers were submitted for light microscopic examination.

Per sponsor request, tissue samples from terminal sacrifice control and high-dose males and females were initially processed and evaluated ultrastructurally (Text Table 2). Two high-dose males, Animals Nos. 105506 and 105509, died or were sacrificed in a moribund condition prior to scheduled terminal sacrifice. Ultrastructural examination of livers from these two unscheduled death animals was not performed. Following evaluation of the electron micrographs from the control and high-dose livers, the sponsor requested that electron microscopy be performed on the low- and mid-dose livers to evaluate whether increased lipid droplet accumulation was evident in these dose groups.

Text Table 2. Animals Selected for Electron Microscopy

	day PFOS	0.03 mg/kg/day PFOS		0.15 mg/kg/day PFOS		0.75 mg/kg/day PFOS	
(Group	1 Control)	(Group 2	low-dose)	(Group 3	mid-dose)	(Group 4	High-Dose)
Males	Females	Males	Females	Males	Females	Males	Females
I05508	105530	105514	105537	I05510	105532	I05507	105534
I05517	105531	105515	105541	I05518	I05538	I05512	105536
I05519	105535	105516	105547	I05524	105545		105540
I05527	I05544	105521	105550	105528	I05548		105551

Thin sections (approximately 90 nm) from the Epon-embedded livers were cut, mounted on 200-mesh copper grids, stained with 5% methanolic uranyl acetate and Reynold's lead

citrate, and examined on a Zeiss EM10C/CR, a Zeiss EM10, or a JEOL 100S transmission electron microscope. Centrilobular hepatocytes, where clearly identifiable in liver sections, were preferentially examined. Representative electron photomicrographs of liver were taken and significant ultrastructural features were summarized for each photograph and animal on a designated transmission electron micrograph interpretation form. The number of peroxisomes in hepatocytes was manually counted for each center photographed hepatocyte and recorded. For light microscopy, the H&E slides from the same animals selected for electron microscopy were evaluated and significant features were summarized on a light microscopic evaluation form.

RESULTS AND DISCUSSION

Individual interpretations of light microscopy slides and electron micrographs for each animal are shown in Section II. Representative electron photomicrographs were selected as report figures, labeled, and are shown in Section III. All remaining electron micrographs are maintained in the archived study file.

Light Microscopy

A summary of the incidence and severity of light microscopic findings in the control and high-dose livers is shown in Text Table 3. There was an increased incidence of vacuolation of the cytoplasm of hepatocytes in high-dose treated animals compared with control animals. The distribution of this vacuolation was predominantly centrilobular, but for one high-dose female, Animal No. I05534, there was diffuse slight hepatocellular vacuolation. Affected animals generally also had enlargement (hypertrophy) of centrilobular hepatocytes. This enlargement appeared to be related to the presence of the small to large vacuoles with the cytoplasm. Some sporadic vacuolation noted in low- and mid-dose animals did not appear to be treatment-related and was not clearly associated with hepatocellular hypertrophy.

Text Table 3. Incidence and Severity of Light Microscopic Liver Findings

Microscopic Finding	0 mg/kg/day (Control)		0.03 mg/kg (Low-Dose)		0.15 mg/kg (Mid-Dose)		0.75 mg/kg/day (High-Dose)	
	Maies	Females	Males	Females	Males	Fernales	Males	Fernale s
(number examined)	(4)	(4)	(4)	(4)	(4)	(4)	(2)	(4)
Vacuolation, hepatocellular, centrilobular								
minimal	-	-	1			-	-	2
slight	-	-	-	-	-	- 1	-	
moderately-severe	-	-	-	-	-	-	1	1
Vacuolation, hepatocellular, diffuse	,,,							
slight	-	-	-		-			1
Vacuolation, hepatocellular, multifocal								
minimal	-	-	1	1		-	-	-

Text Table 3 Continued. Incidence and Severity of Light Microscopic Liver Findings

Microscopic Finding		kg/day ntrol)	0.03 mg/kg (Low-Dose)		0.15 mg/kg (Mid-Dose)		0.75 mg/kg/day (High-Dose)	
	Males	Females	Males	Females	Males	Females	Males	Female s
(number examined)	(4)	(4)	(4)	(4)	(4)	(4)	(2)	(4)
Hypertrophy, hepatocellular, centrilobular								
minimal	-	-	-	-	-	-	1	2
slight	-		-	-	-	-	-	-
moderate		-	-		-	-	1	- 1
Clearing, cytoplasmic, centrilobular								
minimal	1	2	-	2	1	-		-
slight	-	-	3	1	11	2	1	2
Clearing, cytoplasmic, diffuse								
minimal	-	-	-	-	1		-	-
slight	-	-	-	-	1	-	-	-
Infiltrate, lymphohistiocytic								
minimal	4	4	4	4	3	3	1	3
slight	-	-	-	-	-	1	-	
Inflammation, eosinophilic- granulomatous								
minimal	-	-	1	-	-	-	-	-
slight	-	1	-	-		-		
Pigment, hepatocellular, centrilobular								
slight	-	-	11	-	-	-	-	-
Ectasia, biliary minimal	-		-	1		-	-	-
Angiectasis minimal	1	_	_	_				

Electron Microscopy

Control (0 mg/kg/day). Ultrastructural features of control hepatocytes are demonstrated in Figures 1 - 3. Hepatocytes characteristically contain numerous mitochondria and abundant endoplasmic reticulum. Peroxisomes are common organelles composed of a fine granular matrix surrounded by a membrane and normally vary in size from 0.1 - 1.5 microns in diameter. Hepatocytes exhibit a microvillous border which protrudes into the perisinusoidal space. Tight junctions border bile canaliculi between hepatocytes. Glycogen is common in the cytoplasm and may be in the form of small granules or slightly larger rosettes. Residual bodies are secondary lysosomes (phagolysosomes) containing electron dense degenerative cytoplasmic material. Lipid metabolism is a normal liver function, and it's normal to see random lipid droplets within hepatocytes.

There were no discernible differences between control males and females in this study, and all were considered normal. A summary of ultrastructural findings is shown in Text Table 4. One male, Animal No. 105527, appeared to have increased numbers of peroxisomes compared with the other control animals. However, because so few animals and individual hepatocytes were examined, this value may not be significantly increased.





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Text Table 4. Summary of Ultrastructural Findings

Treatment Group		
(mg/kg/day)/Sex	Animal No.	Comments
(0) Male	105508	Normal
(0) Male	105517	Normal
(0) Male	I05519	Normal
(0) Male	I05527	Normal. Increased peroxisomes
(0.03) Male	I05514	Mild increase in lipid droplets
(0.03) Male	I05515	Slight increase in lipid droplets
(0.03) Male	105516	Normal
(0.03) Male	105521	Normal
(0.15) Male	105510	Normal
(0.15) Male	I05518	Normal
(0.15) Male	105524	Normal, slight increase in peroxisomes
(0.15) Male	105528	Normal
(0.75) Male	105507	Lipid droplet accumulation, hepatocellular, moderately severe.
		Increased glycogen
(0.75) Male	I05512	Lipid droplet accumulation, moderate, hepatocellular. Increased
		peroxisomes
(0) Female	105530	Normal
(0) Female	I05531	Normal
(0) Female	I05535	Normal
(0) Female	I05544	Normal
(0.03) Female	I05537	Normal
(0.03) Female	I05541	Normal
(0.03) Female	I05547	Normal
(0.03) Female	I05550	Normal
(0.15) Female	I05532	Normal
(0.15) Female	I05538	Increased glycogen
(0.15) Female	I05545	Normal
(0.15) Female	I05548	Normal
(0.75) Female	105534	Increased glycogen
(0.75) Female	I05536	Lipid droplet accumulation, moderately severe
(0.75) Female	I05540	Lipid droplet accumulation, mild to moderate
(0.75) Female	I05551	Increased glycogen

Peroxisomes were identified and quantitated in representative hepatocytes. For the control livers, the average number of peroxisomes counted per hepatocyte photographed was 11.50 for control males and 10.94 peroxisomes per cell for control females. (Text Table 5). Depending upon fixation and staining, peroxisomes may be difficult to differentiate in routine electron photomicrographs from primary lysosomes or marginal cuts through the ends of mitochondria. Cytochemical and immunocytochemical methods are available for specifically identifying peroxisomes by light and electron microscopy, and utilization of these methods would provide a more specific and accurate method of peroxisome quantitation (Beier K, 1992; Reddy UN, 1988).

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Text Table 5. Quantitation of Hepatocellular Peroxisomes

	0 mg PFOS/kg	g/day (Contr	ol)	0.03 mg PFOS/kg/day (Low-Dose)			
	Male Female			Male	F	emale	
Animal Number	Number of Peroxisomes	Animal Number	Number of Peroxisomes	Animal Number	Number of Peroxisomes	Animal Number	Number of Peroxisomes
105508	7.50	I05530	12.75	I05514	6.00	105537	8.80
I05517	12.25	105531	13.75	I05515	15.00	I05541	12.00
105519	3.50	I05535	7.00	I05516	7.20	105547	10.00
105527	22.75	I05544	10.25	105521	10.80	105550	17.60
Mean =	11.50	Mean =	10.94	Mean =	9.75	Mean =	12.10

().15 mg PFOS/k	g/day (Mid-	Dose)	0.75 mg PFOS/kg/day (High-Dose)			
	Male Female		Male		F	emale	
Animal	Number of	Animal	Number of	Animal	Number of	Animal	Number of
Number	Peroxisomes	Number	Peroxisomes	Number	Peroxisomes	Number	Peroxisomes
105510	10.60	I05532	4.20	105507	11.0	105534	5.50
I05518	18.40	I05538	7.20	105512	23.25	105536	3.75
105524	23.20	105545	9.00			105540	12.50
105528	14.60	105548	17.00			105551	9.50
Mean =	16.70	Mean ≃	9.35	Mean =	17.12	Mean =	7.81

Average number of peroxisomes per hepatocyte for four hepatocytes counted per animal for control and high-dose groups and five hepatocytes counted per animal for low- and mid-dose groups.

High-Dose (0.75 mg/kg/day). Lipid droplets were increased in animals given 0.75 mg PFOS/kg/day (Text Table 4). This increase was present in both high-dose males examined (Animal Nos. 105507 and 105512) and in two high-dose females (Animal Nos. 105536 and 105540). These are illustrated in Figures 4 - 7. Lipid droplets were randomly distributed in the cytosol and varied in size from less than .1 micron to greater than several microns in diameter. They generally were clear, but occasionally contained wispy lamellar material or faint smooth electron density. They were not membrane-bound, but appeared to form a defined margin with surrounding cytoplasm. These lipid droplets correlate with hepatocellular vacuolation described in these animals by light microscopy.

Increased cytoplasmic glycogen was evident in two high-dose females (Animal Nos. 105534 and 105551), and often formed distinct "pockets" of glycogen, resembling vacuoles or clear droplets, but containing glycogen particles (Figure 8). The accumulation of glycogen apparently correlates with the hepatocellular vacuolation described by light microscopy in these two animals. Lipid droplets did not appear increased in these two animals.

For high-dose animals, the average number of peroxisomes per hepatocyte was 17.12 for males and 7.81 for females (Text Table 5). One male (Animal No. 105512) averaged 23.25 peroxisomes per hepatocyte, however, this is not remarkably higher than that found in the control male Animal No. 105527. Animal No. 105507 averaged 11.0 peroxisomes per hepatocyte, similar to the average control value for males. Thus, administration of 0.75 mg/kg/day of PFOS to monkeys for 26 weeks did not appear to induce peroxisome proliferation in the liver.

Differences in mitochondria and cellular membranes were not discernible between high-dose and control livers. Mitochondria from control and high-dose livers did not exhibit remarkable differences ultrastructurally (Figures 3, 9, 10).

Low-Dose (0.03 mg/kg/day). Electron microscopic examination of the livers from monkeys given 0.03 mg/kg/day of PFOS did not identify any atypical ultrastructural features compared with control sample. Lipid droplets were identified in some hepatocytes, and two low-dose males appeared to have slightly increased lipid droplet accumulation (Animal Nos. 105514 and 105515). However, increased lipid droplet accumulation was not seen in the low-dose females or in the mid-dose males and females, and this observation in the two low-dose males was believed to represent normal biological variance and sampling. As noted earlier, lipid metabolism is a normal liver function, and it's normal to see random lipid droplets within hepatocytes. Figure 11 illustrates a hepatocyte from the low-dose group.

For low-dose animals, the average number of peroxisomes per hepatocyte was 9.75 for males and 12.10 for females (Text Table 5).

Mid-Dose (0.15 mg/kg/day). There was no consistent ultrastructural evidence of increased lipid droplet accumulation in the livers of the mid-dose monkeys given 0.15 mg/kg/day of PFOS. This mid-dose level, 0.15 mg/kg/day, is the no-effect level for the PFOS-related effect of increased hepatocellular lipid accumulation (vacuolation) in monkeys given PFOS. One female, Animal No. I05538, had increased glycogen, but a marked increase in glycogen was not seen in any other mid-dose livers examined.

For mid-dose animals, the average number of peroxisomes per hepatocyte was 16.70 for males and 9.35 for females (Text Table 5). Figure 12 illustrates a hepatocyte from the mid-dose group.

CONCLUSION

Ultrastructural evaluation of livers from cynomolgus monkeys treated with 0.75 mg PFOS /kg/day for 26 weeks identified increased lipid droplets within hepatocytes. Increased lipid droplets were present in both treated males examined and in two of four treated females examined. Increased hepatocellular glycogen was present in the remaining two high-dose females. These ultrastructural changes correlated with hepatocellular hypertrophy and vacuolation noted by light microscopy and with increased liver weight parameters in the high-dose animals. The no-effect level for hepatocellular vacuolation (lipid droplet accumulation) was 0.15 mg/kg/day of PFOS (mid-dose group). Quantitation of peroxisomes within hepatocytes by electron microscopy indicated no remarkable differences between control livers and livers treated with 0.03, 0.15 or 0.75 mg/kg/day. Ultrastructural differences in cellular membranes or mitochondria were not discernible between control and treated animals in the samples examined.

SIGNATURE OF AUTHOR

James B. Nold, D.V.M., Ph.D., Diplomate, A.C.V.P.

July 13, 1999

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I-8

II. Light Microscopy and Transmission Electron Micrograph Interpretation Forms ¹

1018

 $^{^{\}rm 1}$ Forms are typographically corrected versions of signed/dated raw data sheets maintained in archived study file.

LIGHT MICROSCOPIC EVALUATION

Study No.: 6329-223 (EM 99.76) Species/Strain: Cynomolgus Monkeys

Animal No: see below Tissue: <u>Liver</u>

Sex: see below

Interpreting Pathologist (signature and date): Samo B. M. ed. 6-24-99

	Animal	<u> </u>	
Dose/Group	Number		Microscopic Findings and Comments
0 mg/kg	I05508	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
(Control)	I05517	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
Males	105517	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
iviales	103319	2.	Clearing, cytoplasmic, centrilobular, minimal
	105527	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
	103327	2.	Angiectasis, focal, minimal
0 mg/kg	105530	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
(Control)	I05530	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
(Control)	103331	2.	Clearing, cytoplasmic, centrilobular, minimal
Females	105535	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
r ciliales	105555	2.	Clearing, cytoplasmic, centrilobular, minimal
	I05544	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
	1035-1	2.	Inflammation, eosinophilic-granulomatous, focal, slight
0.75 mg/kg	105507	1.	Infiltrate, lymphohistiocytic, focal, minimal
(High-dose)	102307	2.	Vacuolation, hepatocellular, centrilobular, moderately-severe
Males		3.	Hypertrophy, hepatocellular, centrilobular, moderate
	I05512	1.	Clearing, cytoplasmic, centrilobular, slight
		2.	Hypertrophy, hepatocellular, centrilobular, minimal
0.75 mg/kg	105534	1.	Infiltrate, lymphohistiocytic, focal, minimal
(High-dose)		2.	Vacuolation, hepatocellular, diffuse, slight
Females		3.	Hypertrophy, hepatocellular, centrilobular, minimal
	105536	1.	Vacuolation, hepatocellular, centrilobular, moderately-severe
		2.	Hypertrophy, hepatocellular, centrilobular, moderate
	I05540	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
		2.	Vacuolation, hepatocellular, centrilobular, minimal
		3.	Clearing, cytoplasmic, centrilobular, slight
		4.	Hypertrophy, hepatocellular, centrilobular, minimal
	I05551	1.	Infiltrate, lymphohistiocytic, multifocal, minimal
		2.	Vacuolation, hepatocellular, centrilobular, minimal
		3.	Clearing, cytoplasmic, centrilobular, slight

	Animal	
Dose/Group	Number	Microscopic Findings and Comments
0.03 mg/kg	I05514	1. Infiltrate, lymphohistiocytic, multifocal, minimal
		2. Inflammation, eosinophilic-granulomatous, focal, minimal
		3. Pigment, hepatocellular, multifocal, centrilobular, minimal
		4. Clearing, cytoplasmic, centrilobular, slight
(Low-dose)	I05515	Infiltrate, lymphohistiocytic, multifocal, minimal
)		2. Vacuolation, hepatocellular, centrilobular, minimal
Males	I05516	1. Infiltrate, lymphohistiocytic, multifocal, minimal
		Clearing, cytoplasmic, centrilobular, slight
	105521	Infiltrate, lymphohistiocytic, multifocal minimal
		2. Pigment, hepatocellular, multifocal, centrilobular, slight
		3. Vacuolation, hepatocellular, multifocal, minimal
		4. Clearing, cytoplasmic, centrilobular, slight
0.03 mg/kg	105537	Infiltrate, lymphohistiocytic, multifocal, minimal
		2. Clearing, cytoplasmic, centrilobular, slight
(Low-dose)	105541	1. Infiltrate, lymphohistiocytic, multifocal, minimal
		Clearing, cytoplasmic, centrilobular, minimal
Females	105547	1. Infiltrate, lymphohistiocytic, multifocal, minimal
		2. Ectasia, biliary, focal, minimal
	105550	Infiltrate, lymphohistiocytic, multifocal, minimal
		2. Clearing, cytoplasmic, centrilobular, minimal
	Y0.7.510	3. Vacuolation, hepatocellular, multifocal, minimal
0.15 mg/kg	105510	1. Infiltrate, lymphohistiocytic, multifocal, minimal
0.61.1	TO 5 5 1 0	2. Clearing, cytoplasmic, diffuse, minimal
(Mid-dose)	105518	Infiltrate, lymphohistiocytic, multifocal, minimal Clearing, cytoplasmic, centrilobular, minimal
Males	I05524	Clearing, cytoplasmic, centrilobular, minima Clearing, cytoplasmic, centrilobular, slight
Maies	105524	Creating, cytopiasine, centrioodiar, singin Infiltrate, lymphohistiocytic, multifocal, minimal
	103326	Clearing, cytoplasmic, diffuse, slight
0.15 mg/kg	105532	Infiltrate, lymphohistiocytic, multifocal, minimal
	I05538	Infiltrate, lymphohistiocytic, multifocal, minimal Infiltrate, lymphohistiocytic, multifocal, minimal
(Mid-dose)	103336	
Females	I05545	Clearing, cytoplasmic, centrilobular, slight Infiltrate, lymphohistiocytic, multifocal, minimal
remates	105548	
	105548	Infiltrate, lymphohistiocytic, multifocal, slight Clearing, cytoplasmic, centrilobular, slight
		2. Clearing, cytopiasinic, centinobular, sugnt

Interpreting Pathologist (signature and date): 3 Mal. 1 6-14-99

Tissue: <u>Liver</u>
Tissue: <u>Liver</u> 99.76-1 Block No(s).: <u>-99076-1</u> 42401
43401 - Photo/Negative No(s).:_43405
<u>X</u> No
mar 8 1 1999
arge central nucleus. The cytoplasm smic reticulum. Bile canaliculi are epatocyte. A number (approximately are present, principally in the upper ormal matrix granules are evident in ent. Five (5) peroxisomes counted. but this may be function of cut through id droplets present, similar to 4340%. It is margin of cell. Several lamellar (5) peroxisomes counted. Hower right. Only a few small to erous mitochondria and abundant at the bottom may be dilated Golgi, it. It cell and sinusoid at the bottom of the medium-sized clear lipid droplets. En (11) peroxisomes counted. On of mitochondria. Seven lasmic reticulum and cytosol. Outer mal.

Conclusions: Normal hepatocyte. Average 7.5 peroxisomes counted per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey					
Animal No.:	Tissue: <u>Liver</u>					
Treatment Group: <u>0 mg/kg (control)</u>	Block No(s).: 99.76-2					
Sex: Male	43406 - Photo/Negative No(s).: 43410					
Significant Lesions (check one): Yes	X No					
Interpreting Pathologist (signature and date):	m B. M. S. 1 1999					
Features: 43406: Liver. Hepatocyte surrounded by other hepatocytes with bile canaliculi in the lower right and upper left margins of the cell. There are numerous mitochondria and abundant endoplasmic reticulum. The ER and nuclear envelope appears slightly dilated. Only a couple small clear lipid droplets evident. Several small lysosomes or vacuoles with microvesicles in them are present. Five (5) peroxisomes counted. 43407: Liver. Hepatocyte with perisinusoidal microvillous border evident in lower right						
	ovillous border evident in lower right					

and upper left of photograph. A bile canaliculus is present on the right middle margin of the cell. Several small to medium-sized clear lipid droplets are evident. One larger one contains some lamellar profiles. Four (4) peroxisomes counted. 43408: Liver. Hepatocyte with sinusoid containing erythrocytes at the top. A lipid-containing perisinusoidal cell (Ito cell) is present at the top left and a bile canaliculus is present at the bottom. Random small clear lipid droplets are present in the hepatocellular cytoplasm and some of the ER appears mildly dilated. Eleven (11) peroxisomes counted. 43409: Liver. Hepatocyte contains numerous dense lysosomes and/or peroxisomes

intermixed with mitochondria and abundant ER. Several small clear lipid droplets are evident. Twenty-nine (29) peroxisomes counted. 43410: Liver. Enlarged photograph of mitochondria. Ten mitochondria are clustered together in this photograph. Although the image is a little out of focus, these organelles

Conclusions:	Normal hepatocyte.	Average	12.25 peroxisomes per h	epatocyte.

appear essentially normal. There may be mild dilatation of the ER in the cytoplasm.

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey	
Animal No.: <u>105519</u>	Tissue:Liver	
Treatment Group: <u>0 mg/kg (control)</u>	Block No(s).: 99.76-3 43421 - 43425,	
Sex:Male	Photo/Negative No(s): 43431	
Significant Lesions (check one):Yes	X No	
Interpreting Pathologist (signature and date):	ms 8m 21 MAR 3 1 1909	
Features: 43421: Liver. Hepatocyte. At lower left is a prominent perisinusoidal fatstoring cell (Ito cell) containing numerous large clear lipid droplets. The centered hepatocyte contains one large clear lipid droplet and several smaller ones. The nuclear envelope and ER is mildly dilated. Moderate numbers of glycogen granules present. Scattered residual bodies noted. Four (4) peroxisomes counted. 43422: Liver. Mitochondria and surrounding cytosol and ER. Membranes of ER are not very distinct. Glycogen in cytosol. Mitochondria appear essentially normal. Lamina of membranes and cristae appear parallel. Several normal granules in the matrix of the mitochondria.		

<u>43423:</u> Liver. Mitochondria. Same view as 43422 but slightly less magnification. Some dilatation of ER. Mitochondria appear normal. A peroxisome is present in the lower left of the photograph.

43224: Liver. Hepatocyte with several medium-sized and one large clear lipid droplets. Small granules within cytosol and around ER appear to be glycogen particles or ribosomes and polyribosomes. Four (4) peroxisomes counted. Slightly out of focus. 43425: Liver. Hepatocyte surrounded by other hepatocytes and a sinusoid at lower right. Several bile canaliculi evident between hepatocytes. A single medium-sized clear lipid droplet is present in the hepatocyte. Four (4) peroxisomes counted. A couple of larger dense lysosomes also identified.

43431: Liver. The centered hepatocyte is oblong diagonally in the photograph, and doesn't contain any distinct lipid droplets. A few lipid droplets are present in adjacent hepatocytes. There is mild dilation of the ER and nuclear envelope. Only a few lysosomal structures noted. Two (2) peroxisomes counted.

Conclusions: Normal hepatocyte. Average 3.5 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>I05527</u>	Tissue: <u>Liver</u>
Treatment Group: _0 mg/kg (control)	Block No(s).: 99.76-4 43426 -
Sex: Male	Photo/Negative No(s): 43420
Significant Lesions (check one):X Yes	
Interpreting Pathologist (signature and date):	~B n & 1 1999
Features: 43426: Liver. Hepatocyte with several small to medium-sized lipid droplets (approximately 20). The adjacent lower left hepatocyte shows significant dilatation of its ER. At top left and right margin, the extracellular interstitium has some collagen fibers. Some residual bodies noted. Twenty-one (21) peroxisomes counted. 43427: Liver. Mitochondria. Membrane, cristae and matrix appear normal. Several normal granules present matrix. Some rough ER present adjacent to mitochondria. Lysosome present at left of center mitochondrion. 43428: Liver. Hepatocyte. There is mild dilation of the ER and nuclear envelope. Scattered small to medium-size clear lipid droplets (approximately 18). Scattered residual bodies noted. Twenty-five (25) peroxisomes counted. 43429: Liver. Hepatocyte. Bile canaliculi are evident at the lower right and top of the cell. The ER is mildly dilated. Scattered clear lipid droplets are evident. Abundant numbers of dense bodies (peroxisomes)/lysosomes and residual bodies are present. Thirty (30) peroxisomes counted. 43430: Liver. Hepatocyte appears similar to above described cells. There are some scattered small to medium-size clear lipid droplets. Some residual bodies are present. Fifteen (15) peroxisomes counted.	
Conclusions: Normal hepatocyte. Appear to be incompared with other control samples. Average 22.7	creased numbers of peroxisomes 75 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey	
Animal No.: <u>105507</u>	Tissue: <u>Liver</u>	
Treatment Group: 0.75 mg/kg (hi-dose)	Block No(s).: 99.76-9 43411 -	
Sex: Male	Photo/Negative No(s): 43415	
Significant Lesions (check one): X Yes		
Interpreting Pathologist (signature and date): 1 1 1 1 1 1 1 1 1	~BN.SV MAR 3 1 1999	
1 X 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	' 1	
Features: 43412. Liver. Hepatocyte containing a	single very large clear lipid droplet	
and many small to medium-size clear lipid droplets.	I here appears to be an increase in	
the amount of glycogen α -rosette granules. Several		
A few scattered lysosomes and peroxisomes noted.		
43412: Liver. Hepatocyte contains a large number		
droplets in the cytosol (approximately 125), most being very small. Abundant glycogen		
as α-rosettes is present in the cytoplasm. Twenty-si	x (26) peroxisomes counted.	
43413: Liver. Hepatocyte containing several very l	arge clear lipid droplets and many	
smaller droplets. Some interstitial tissue containing	some collagen fibers is present at the	
lower left of the photograph. Some residual bodies		
present in cytoplasm. Three (3) peroxisomes counter	-	
43414: Liver. Several mitochondria are shown whi		
normal dense granules are present in the matrix and		
appear normal. In the cytoplasm there are multiple		
surrounded by fine dense granules (glycogen or ribosomes).		
43415: Liver. Hepatocyte with a bile canaliculus at the bottom margin and an interstitial		
fibroblastic cells at the upper right. The hepatocyte contains abundant small to medium- sized clear lipid droplets (>170). Random residual bodies are present. Six (6)		
peroxisomes counted.	odies are present. Six (0)	
peroxisomes counted.		
Conclusions: Lipid accumulation, moderately-seve		
glycogen. Average 11.0 peroxisomes per hepatocyte	e.	

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105512</u>	Tissue:Liver
Treatment Group: <u>0.75 mg/kg (hi-dose)</u>	Block No(s).: 99.76-10
Sex: <u>Male</u>	Photo/Negative No(s).: 43420
Significant Lesions (check one): X Yes	No
Interpreting Pathologist (signature and date):	Smy MAR 3 1 1999
Features: 43416: Liver. Photographed hepatocyte small clear lipid droplets. Most appear around 100 larger and one is about 1.75 microns in diameter. T droplets appear to be free within the cytosol and are peroxisomes counted. 43417: Liver. Hepatocyte contains multiple mediu (approximately 90). There are abundant numbers of peroxisomes. Forty-five (45) peroxisomes counted. 43418: Liver. Hepatocyte containing numerous sm droplets within the cytosol. They are too numerous counted. 43419: Liver. Hepatocyte adjacent to a central vein perisinusoidal space and endothelium and erythrocylipid droplets too numerous to count. A moderate in peroxisomes are evident. Twenty-five (25) peroxisomes 43420. Liver. Mitochondria. Mitochondria appear lipid droplets are present in the surrounding cytosol	nm in diameter, although a few are they are too numerous to count. The enot membrane-bound. Nine (9) m-sized clear lipid droplets f dense primary lysosomes or hall to medium-sized clear lipid to count. Twelve (12) peroxisomes m. Microvillous border in the etes are evident. Cell contains small number of primary lysosomes and/or omes counted.
Conclusions: Lipid accumulation, moderate, hepa and lysosomes appear increased, average 23.25 percentage 22.75	toccllular. Numbers of peroxisomes oxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey	
Animal No.: <u>105530</u>	Tissue: <u>Liver</u>	
Treatment Group: 0 mg/kg (control) Sex: Female	Block No(s).: 99.76-5 L4756 - Photo/Negative No(s).: L4760	
Significant Lesions (check one): Yes Interpreting Pathologist (signature and date):	~ Sn 4 MAR 3 1 1999	
Features: L4756: Liver. Hepatocyte contains three small lipid droplets. There are bile canaliculi at the top right at top left, and a perisinusoidal microvillous border at the bottom. The nuclear envelope and ER shows some mild artifactual (fixation) dilation. Numerous mitochondria are present. Five (5) peroxisomes counted. L4757: Liver. Mitochondria. Higher magnification of five mitochondria. Matrix and dense granules appear normal. ER between mitochondria is slightly dilated. L4758: Liver. Hepatocyte. A sinusoid is present at the top of the photograph, lined by an endothelial cell. Four (4) medium-sized lipid droplets are present in this cell. The nuclear envelope and ER shows some mild artifactual (fixation) dilation. Numerous mitochondria are present. Four (4) peroxisomes counted. L4759: Liver: Hepatocyte containing scattered small to medium-sized lipid droplets (approximately 14). Scattered primary lysosomes and/or peroxisomes present. There is a perisinusoidal microvillous border at the top beneath an endothelial cell and sinusoid. Twenty-five (25) peroxisomes counted. L4760: Liver. Hepatocyte containing approximately nine (9) small to medium-sized lipid droplets. Seventeen (17) peroxisomes counted. L4760: Liver. Hepatocyte containing approximately nine (9) small to medium-sized lipid droplets. Seventeen (17) peroxisomes counted.		

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey	
Animal No.: 105531	Tissue:Liver	
Treatment Group: <u>0 mg/kg (control)</u>	Tissue: <u>Liver</u> 99.76-6 Block No(s).: <u>-99.76-5</u> for 17	
Sex:Female	Photo/Negative No(s).: L4765	
Significant Lesions (check one):Yes		
Interpreting Pathologist (signature and date):	-Bn-4 MAR 3 1 1999	
Features: L4761: Liver. Hepatocyte with large central nucleus. Two margins are straight-edged by the grid bar. A few small to medium-sized clear to slightly shaded lipid droplets are present (approximately 32). ER profiles and glycogen granules are scattered throughout the cytosol. A moderate number of primary lysosomes and/or peroxisomes noted. Nine (9) peroxisomes counted. L4762: Liver. Mitochondria. One oval and one club-shaped mitochondria present. Both appear normal with cristae, membranes, and matrix. The club-shaped one contains several normal dense granules and some slightly dilated cristae, probably fixation artifact. Some RER and smooth ER (SER) are evident in the cytosol. L4763: Liver. Hepatocyte surrounded by interstitium containing some collagen fibers. Cells has slightly dilated ER and nuclear envelope. A single small lipid droplet is present in this cell. Four (4) peroxisomes counted.		
1.4764: Liver This benatocyte shows some dilation	n of ER and several lamellar residual	

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<u>L4764</u>: Liver. This hepatocyte shows some dilation of ER and several lamellar residual bodies in the cytoplasm. Four (4) small lipid droplets are evident. Numerous scattered glycogen granules are present. Eight (8) peroxisomes counted.

glycogen granules are present. Eight (8) peroxisomes counted.

<u>L4765:</u> Liver. Hepatocyte containing 5 small to medium-sized clear lipid droplets. Bile canaliculi are evident at the lower left and top right of the cell margins. A cluster of

RER is present in the lower left side of the nucleus. Some larger dark lysosomes/peroxisomes are present among some of the mitochondria. Thirty-four (34) peroxisomes counted.

Conclusions: Normal hepatocyte. Average 13.75 peroxisomes per hepatocyte.

Study No.: _6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.:	Tissue: <u>Liver</u>
Treatment Group: 0 mg/kg (control)	Block No(s).: 99.76-7 L4766 -
Sex: Female	Photo/Negative No(s):: <u>L4770</u>
Significant Lesions (check one):Yes	
Interpreting Pathologist (signature and date):	~BN& MAR 3 1 1999
Features: L4766: Liver. Hepatocyte contains some mild dilatation of the nuclear envelope and ER (fixation artifact). On the left and right sides are bile canaliculi, and ventrally is the sinusoidal margin showing the perisinusoidal microvillous border. Several dense residual bodies are present in the cytoplasm. Three small lipid droplets, one containing a lamellar body, are evident. One (1) peroxisome counted. L4767: Liver. Mitochondria. Higher magnification of four mitochondria show normal morphology. Membranes, cristae and matrix appear normal. Scattered dense granules are present. The ER in the cytosol is mildly dilated. L4768: Liver. Hepatocyte. There is moderate dilatation of the ER and nuclear envelope. Several scattered small to medium-sized clear lipid droplets are evident, as are some scattered residual bodies. Sinusoids are present at the bottom right and upper left of the photograph, and a bile canaliculus is present on the right margin of this centered hepatocyte with its neighbor hepatocyte. Two (2) peroxisomes counted. L4769: Liver. Hepatocyte with sinusoid in upper right corner and canaliculi prominent along. Bottom border. The cell exhibits dilated ER and nuclear envelope like the previously described cells for this animal – indicating suboptimal fixation. Multiple residual bodies are present. Nineteen (19) peroxisomes counted. L4770: Liver. Hepatocyte with similar overall morphology as L4769. Six (6) peroxisomes counted.	
Conclusions: Normal hepatocyte. Suboptimal fix hepatocyte.	tation. Average 7.0 peroxisomes per

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey	
Animal No.: <u>I05544</u>	Tissue: <u>Liver</u>	
Treatment Group: <u>0 mg/kg (control)</u>	Block No(s).: 99.76-8 L4771 -	
Sex: Female	Photo/Negative No(s).: <u>L4775</u>	
Significant Lesions (check one): Yes Interpreting Pathologist (signature and date):	_X No 	
Interpreting Pathologist (signature and date): MAR 3 1 1999		
Conclusions: Normal hepatocyte. Average 10.25 peroxisomes per hepatocyte.		

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105534</u>	Tissue: <u>Liver</u>
Treatment Group: <u>.75 mg/kg (hi-dose)</u>	Block No(s).: 99.76-11 I 4798 -
Sex: Female	Photo/Negative No(s):: <u>L4802</u>
Significant Lesions (check one): X Yes Interpreting Pathologist (signature and date):	MAD O
Features: L4798: Liver. Hepatocyte surrounded abundant numbers of mitochondria and ER. There envelope and of some ER. Scattered residual bodied droplet is evident. Four (4) peroxisomes counted. L4799: Liver. Enlarged view of five mitochondria normal. Several dense granules are present in the membranes appear normal. At the ride side is the nucleus. L4800: Liver. Hepatocyte. A few small clear lipid. There are also abundant glycogen granules in the cy in the cytoplasm appear to contain glycogen granule margin. Two (2) peroxisomes counted. L4801. Liver. Hepatocyte. There are numerous small clear lipid droplets are not as sharply defined as clear round lipperoxisomes counted. L4802: Liver. Hepatocyte appears similar to L480 lipid droplets and other rarefied areas with glycogen Some contain some whisply lamellar material. There throughout the cytoplasm. Twelve (12) peroxisomes.	is mild dilatation of the nuclear is are present. Just one distinct lipid. Mitochondria appear essentially matrix. The cristae and limiting mildly dilated nuclear envelope and the didroplets are present in the cytoplasm ytoplasm. A number of "clear areas" es without a distinct lipid droplet mall to medium-sized rarefied me contain some whispy lamellar these spaces. The margins of these pid droplets usually are. Four (4) 1 with some small to medium-sized in the cytoplasm (approximately 29). et are also abundant glycogen granules
Conclusions: Increased glycogen in this animal. In Average 4.75 peroxisomes per hepatocyte.	creased number of glycogen granules.
X8-115-11	

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey	
Animal No.:	Tissue: Liver	
Treatment Group: .75 mg/kg (hi-dose)	Block No(s).: 99.76-12 L4804 -	
Sex: Female	Photo/Negative No(s).: <u>L4808</u>	
Significant Lesions (check one): X Yes Interpreting Pathologist (signature and date):	2	
Features: L4804. Liver. Hepatocyte. Only a small segment of the nucleus is evident. There are multiple large clear lipid droplets in the cytoplasm. Numerous smaller droplets appear as less distinct dilatations in the cytosol. There are abundant glycogen granules in the cytoplasm. Three (3) peroxisomes counted. L4805: Liver. Hepatocyte. Multiple small to large clear lipid droplets in cytoplasm. Four (4) peroxisomes counted. L4806: Liver. Enlarged magnification of a cluster of mitochondria. Cristae are not well defined in this photograph, but matrix, granules and outer limiting membrane appear normal. L4507: Liver. Hepatocyte. Multiple small to large clear lipid droplets in cytoplasm (approximately 123). There are abundant glycogen granules in the cytoplasm. Three (3) peroxisomes counted. L4808: Liver. Hepatocyte contains multiple small to large lipid droplets. Droplets are too numerous to count. Several dense residual bodies present. Five (5) peroxisomes counted.		
Conclusions: Moderately-severe lipid accumulati mitochondria appear essentially similar to controls. hepatocyte.	on in hepatocytes. Membranes and Average 3.75 peroxisomes per	

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey	
Animal No.: <u>105540</u>	Tissue: <u>Liver</u>	
Treatment Group:75 mg/kg (hi-dose) Sex: Female	Block No(s).: 99.76-13 L4809 - Photo/Negative No(s).: L4813	
Significant Lesions (check one): X Yes Interpreting Pathologist (signature and date):	38, NOL MAR 31 1999	
Features: L4809: Liver. Hepatocyte. Only a small segment of nucleus is present in this photograph. Abundant ER and glycogen granules are present. There are scattered small to large lipid droplets, but not too many in this hepatocyte (approximately 15). A few dark residual bodies are evident. Fifteen (15) peroxisomes counted. L4810: Liver. Enlarged photograph of several mitochondria. No abnormalities noted. Cytoplasm contains some ER and scattered glycogen granules. L4811: Liver. Hepatocyte contains multiple medium to large clear lipid droplets (approximately 41). There is abundant glycogen in the cytoplasm. Five (5) peroxisomes counted. L4812: Liver. Hepatocyte. Similar to L4811. Hepatocyte contains multiple small to large clear lipid droplets, too numerous to count. There is abundant glycogen in the cytoplasm. Twenty-eight (28) peroxisomes counted. L4813: Liver. Hepatocyte contains abundant mitochondria and ER. Only a few clear lipid droplets are present. An endothelial cell is present at the top of the photograph. There is minimal to mild dilatation of the ER and nuclear envelope. Scattered residual bodies are present. Two (2) peroxisomes clearly identified.		
Conclusions: Mild to moderate increase in cytopla glycogen in most hepatocytes. Average 12.5 peroxi	smic lipid droplets. Increased isomes per hepatocyte.	

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105551</u>	Tissue: <u>Liver</u>
Treatment Group:75 mg/kg (hi-dose)	Block No(s).: 99.76-14 L4814 -
Sex: Female	Photo/Negative No(s): <u>L4818</u>
Significant Lesions (check one):XYes	No
Interpreting Pathologist (signature and date):	m=B,N=N = MAR 3 1 1999
Interpreting Pathologist (signature and date): Features: L4814. Liver. Hepatocyte. There is a dilated canaliculus at the top right of the hepatocyte. In the cytoplasm there are multiple rarefied areas that mostly appear to contain glycogen granules. However, a few have some lamellar material in them. There is slight dilatation of the nuclear envelope and ER. Some residual bodies are present. No distinct lipid droplets are present in this hepatocyte, however, there are several lipid droplets in the perisinusoidal fat-storing cell (Ito cell) at the top left. Nine (9) peroxisomes counted. L4815: Liver. Enlargement of a cluster of mitochondria. These organelles appear essentially normal. L4816: Liver. Hepatocyte contains a single medium-sized clear lipid droplets. The cytoplasm contains abundant glycogen granules. Several residual bodies present. Four (4) peroxisomes clearly identified. Several small dark bodies appear to be tips of mitochondria. L4817: Liver. Hepatocyte appears similar to L4814. There is abundant glycogen in the cytoplasm, often making clear areas containing just glycogen granules. Several clusters of RER present. One small lipid droplet present. Fourteen (14) peroxisomes counted. L4818: Liver. Hepatocyte contains multiple rarefied "pockets" of glycogen granules. No lipid droplets present. Eleven (11) peroxisomes counted.	
Conclusions: Increased glycogen. Average 9.5 p	eroxisomes per hepatocyte.
Conclusions. Increased gifosgen. Words 200 p	
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Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.:	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).:99.76-15 Z16232 -
Sex: <u>Male</u>	Photo/Negative No(s): Z16236
Significant Lesions (check one): X Yes	No
Interpreting Pathologist (signature and date):	- Sin or MAY 20 1939
Features: Z16232. Liver. Hepatocyte. Hepatocyte sized lipid droplets scattered throughout its cytoplas microvillous border and some collagen fibers in the	m. At the top margin is a

readires: <u>210232</u>. Erver. Reparocyte. Reparocyte contains multiple small to medium-sized lipid droplets scattered throughout its cytoplasm. At the top margin is a microvillous border and some collagen fibers in the space of Disse. Smooth endoplasmic reticulum (SER) and rough endoplasmic reticulum (RER) are present throughout the cytoplasm with many mitochondria also throughout. Mitochondria are well-preserved and cristae, granules and matrix are clearly evident. Several irregular dark staining residual bodies are present. One (1) peroxisome counted.

<u>Z16233</u>. Liver. Hepatocyte. A moderate number of small to medium-sized lipid droplets

Z16233. Liver. Hepatocyte. A moderate number of small to medium-sized lipid droplets are present in the cytoplasm, as well as several prominent residual bodies. The upper left and lower left borders show microvilli and collagen fibers adjacent to a sinusoid or central vein. The RER forms a distinct palisade a the bottom of the cell. Nine (9) peroxisomes counted.

<u>Z16234.</u> Liver. Hepatocyte. Centered hepatocyte shows minimal fixation artifact with some slight dilatation of SER and the nuclear envelope. There are a few small to medium-sized lipid droplets present. Four (4) peroxisomes counted.

<u>Z16235.</u> Liver. Hepatocyte. Cell appears similar to those described above. There are random lipid droplets and multiple residual bodies. Five (5) peroxisomes counted. <u>Z16236.</u> Liver. Hepatocyte. Multiple small to medium-sized lipid droplets present in the cytoplasm. Only a small nuclear profile is evident in this cell. Eleven (11) probable peroxisomes counted.

Conclusions: Tissue appears well-fixed for ultrastructural examination. There appears to be a mild increase in numbers of lipid droplets. Average 6.0 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105515</u>	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).:99.76-16 Z16237 -
Sex: Male	Photo/Negative No(s): Z16241
Significant Lesions (check one): X Yes	No
Interpreting Pathologist (signature and date):	BAY 20 1999

Features: Z16237. Liver. Hepatocyte. A central vein is present at the top margin and contains a large amount of collagen extracellularly. A bile canaliculus is present on the left between three hepatocytes. the endoplasmic reticulum and nuclear envelope are slightly dilated – this is a fixation artifact. Several lipid droplets are present. Prominent glycogen granules are present throughout the cytoplasm. Twenty-two (22) peroxisomes. Z16238. Liver. Hepatocyte. A bile canaliculus is present at the top border with another hepatocyte. One large and several smaller lipid droplets are present. Mitochondria appear normal and have fine cristae, matrix, and granules. Twenty-one (21) peroxisomes. Z16239. Liver. Hepatocyte. Large central nucleus is adjacent to a large lipid droplet. A few smaller lipid droplets are present. There is artifactual dilatation of the RER and the nuclear envelope. Several residual bodies are present. Fourteen (14) peroxisomes counted.

<u>Z16240.</u> Liver. Hepatocyte. The centered hepatocyte contains several medium-sized lipid droplets. There is marked dilatation of the RER and the nuclear envelope. A bile canaliculus is present on the left margin of this cell and extracellular collagen is evident in the upper right. Ten (10) peroxisomes counted.

<u>Z16241.</u> Liver. Hepatocyte. Hepatocyte contains two larger lipid droplets and several smaller ones. The RER and nuclear envelope are dilated. The ventral margin shows a microvillous border next to an endothelial cell at the bottom. A prominent bile canaliculus is present on the left, surrounded by dark desmosomes. Eight (8) peroxisomes counted.

Conclusions: Slight (equivocal) increase in lipid droplets. Average 15.0 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105516</u>	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).: 97.76-17 Z16242 -
Sex: <u>Male</u>	Photo/Negative No(s).: Z16246
Significant Lesions (check one):Yes	X No
Interpreting Pathologist (signature and date):	5B, n. el MAY 20 1999
Features: Z16242. Liver. Hepatocyte. Hepatocyte is adjacent to a cell containing a large lipid droplet, probably a perisinusoidal fat-storing cell (Ito cell). The hepatocyte contains numerous normal-appearing mitochondria and scattered dark irregular residual bodies. Smooth and RER are present throughout the cytoplasm. One (1) probable peroxisome counted. Z16243. Liver. Hepatocyte. Hepatocyte has a bile canaliculus present along its right margin with an adjacent hepatocyte. The cytosol contains abundant smooth and RER and numerous mitochondria. A few residual bodies are present. Two (2) peroxisomes seen. Z16244. Liver. Hepatocyte. Hepatocyte exhibits very slight dilatation of the endoplasmic reticulum and nuclear envelope. Glycogen granules are present throughout the cytoplasm, and scattered residual bodies are present. Two (2) probable peroxisomes identified. Z16245. Liver. Hepatocyte. A clear vacuole with a central round density is present to the left of the nucleus of the hepatocyte. This appears to be a cytoplasmic invagination from the plasma membrane. Normal-appearing mitochondria are present throughout the cytoplasm. A few residual bodies are present. Fifteen (15) peroxisomes counted. Z16246. Liver. Hepatocyte. The centered hepatocyte appears essentially similar to above-described cells. There are glycogen granules throughout the cytoplasm. Sixteen (16) peroxisomes counted.	
Conclusions: Essentially normal hepatocytes. Avo	erage 7.2 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: 105521	Tissue: <u>Liver</u>
Treatment Group: <u>0.03 mg/kg (low-dose)</u>	Block No(s).: 99.76-18 Z16247 -
Sex:Male	Photo/Negative No(s): Z16251
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	B, noly MAY 20 1999

Features: Z16247. Liver. Hepatocyte. Several large irregular electron-dense residual bodies are present in the centered hepatocyte and the subjacent hepatocyte. The SER and nuclear envelope are slightly dilated. Also, the mitochondria appears slightly swollen, although this appears to be artifactual along with the dilated SER. A few small lipid droplets are present. Fourteen (14) peroxisomes counted.

<u>Z16248.</u> Liver. Hepatocyte. Clusters of fine granules, probably glycogen, are present in the cytoplasm. The mitochondria appears slightly dilated, as does the SER in an adjacent hepatocyte to the top left. The smooth ER is poorly defined. Several small lipid droplets are present. Two erythrocytes are present at the lower right of the photograph. Eleven (11) peroxisomes counted.

Z16249. Liver. Hepatocyte. The RER, nuclear envelope, and SER in the hepatocyte are slightly dilated, consistent with some fixation artifact. Several small lipid droplets and residual bodies are present. A small segment of a perisinusoidal fat-storing cell is present at the lower right, adjacent to an endothelial cell. Sixteen (16) peroxisomes identified. Z16250. Liver. Hepatocyte. Several small lipid droplets are present in the hepatocyte. Multiple dark and irregular residual bodies are also present. The ER is slightly dilated throughout. Three (3) probable peroxisomes counted.

Z16251. Liver. Hepatocyte. There is mild dilatation of the nuclear envelope and the endoplasmic reticulum throughout. Mitochondria have a paler matrix and may be slightly enlarged. On the left is the hepatocyte's microvillous border, with an adjacent endothelial cell and erythrocyte in the sinusoid. A bile canaliculus is present in the lower right. Ten (10) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Some minimal to slight fixation artifacts. Average 10.8 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105537</u>	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).: <u>99.76-19</u> Z16252 -
Sex: Female	Photo/Negative No(s).: Z16256
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	may 20 1999

Features: Z16252. Liver. Hepatocyte. Fixation appears good. Dorsal to the hepatocyte is a central vein or sinusoid area. Several medium-sized lipid droplets are present in the cytoplasm. Fine glycogen granules are scattered throughout the cytoplasm. A desmosome is present at the lower left margin with an adjacent hepatocyte. Ten (10) peroxisomes counted.

<u>Z16253.</u> Liver. Hepatocyte. Hepatocyte shows very slight dilatation of endoplasmic reticulum. There is one large lipid droplet and several small droplets within the cytoplasm. A bile canaliculus is present at the top right margin of the cell. Five (5) peroxisomes counted.

<u>Z16254.</u> Liver. Hepatocyte. This cell appears essentially similar to Z16253, although there are lesser numbers of lipid droplets. Two irregular dark-staining residual bodies are present on the left and right side of the nucleus. The one on the right is somewhat vacuolated. Eleven (11) peroxisomes counted.

<u>Z16255</u>. Liver. Hepatocyte. A medium-sized lipid droplet containing some lamellar material is present to the right of the nucleus. Just a few smaller lipid droplets are present elsewhere in the cytoplasm. The endoplasmic reticulum is slightly dilated. At the bottom is the microvillous border extending into the space of Disse. A few small residual bodies are present. Six (6) probable peroxisomes counted.

<u>Z16256.</u> Liver. Hepatocyte. In this hepatocyte two mitochondria appear paler and somewhat swollen. The rest appear normal. Twelve (12) probable peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Quantity of lipid appears within normal expectations. Average 8.8 peroxisomes per hepatocyte.

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105541</u>	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).: 99.76-20 Z16257 -
Sex: Female	Photo/Negative No(s): Z16261
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	-B(1) 54 MAY 2 0 1999

Features: Z16257. Liver. Hepatocyte. Microvillar borders are present along the lower left and upper right margins of this hepatocyte. A bile canaliculus is present at the lower right. Lamellar material within a lipid droplet is present to the lower right of the central nucleus. There is abundant SER throughout the cell, and the RER appears slightly dilated. Seven (7) probable peroxisomes counted.

<u>Z16258.</u> Liver. Hepatocyte. Several medium-size lipid droplets are present, as well as approximately eight residual bodies, in the cytoplasm. The lower left margin is a microvillous border, and a bile canaliculus is present in the mid and upper right margins of this hepatocyte. Eight (8) peroxisomes counted.

Z16259. Liver. Hepatocyte. This cell is surrounded by several other hepatocytes, and contains approximately ten medium-sized lipid droplets in its cytoplasm. Several very dark round to oval residual bodies are present at the top of the cell. Several dark mitochondria noted; these are often difficult to differentiate from lysosomes or peroxisomes. Fourteen (14) peroxisomes counted.

<u>Z16260.</u> Liver. Hepatocyte. Hepatocyte appears essentially similar to those described above. Two lipid droplets noted. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. Twenty-three (23) peroxisomes counted.

<u>Z16261</u>. Liver. Hepatocyte. Cell contains approximately 5 small to medium-sized lipid droplets. At the bottom is a sinusoid containing a platelet or segment of a granulocyte in the circulation. Another sinusoidal margin and microvillous border is present at the top. There is slight dilatation of the endoplasmic reticulum. Eight (8) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Some lipid droplets noted, but within normal expectations for hepatocytes. Average 12.0 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.:	Tissue: <u>Liver</u>
Treatment Group: <u>0.3 mg/kg (low-dose)</u>	Block No(s).:99.76-21
Sex: Females	Photo/Negative No(s):: Z16266
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	-B. n. & MAY 2 0 1999

Features: <u>Z16262</u>. Liver. Hepatocyte. Photograph shows a hepatocyte with just a small nuclear profile. A microvillous border is present at the top right. Some artifactual knife marks are present. Several dark residual bodies are present, and only about six small lipid droplets are evident in the cytoplasm. Abundant SER and RER are throughout the cytoplasm intermixed with numerous mitochondria. Four (4) peroxisomes identified. <u>Z16263.</u> Liver. Hepatocyte. Numerous collagen fibers are present along the dorsal extracellular margin. At the lower left this hepatocyte's microvillous border extends in the space of Disse. There is slight dilatation of the nuclear envelope and endoplasmic reticulum. Several residual bodies and lipid droplets are present. Fine glycogen granules are randomly scattered throughout the cytoplasm. Six (6) peroxisomes clearly identified. Z16264. Liver. Hepatocyte. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. A bile canaliculus is present at the dorsal right margin of the cell, and another hepatocyte is present along the ventral margin. The general morphology is similar to the above described cells. Only one lipid droplet is evident in this cell. Several residual bodies are evident. Fourteen (14) probable peroxisomes identified. Z16265. Liver. Hepatocyte. A central vein and sinusoid surround this hepatocyte on the lower and upper left margins. Erythrocytes are present in the vascular lumens. Within the hepatocyte there is slight dilatation of the endoplasmic reticulum and nuclear envelope. Two small lipid droplets are present. Nine (9) peroxisomes counted. <u>Z16266.</u> Liver. Hepatocyte. Hepatocyte appears essentially similar to cells described above. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. A large irregularly-shaped residual body is present to the lower left of the nucleus. Seventeen (17) probable peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Average 10.0 peroxisomes per hepatocyte.

Study No.: <u>6329-223</u> (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.:	Tissue: <u>Liver</u>
Treatment Group:03 mg/kg (low-dose)	Block No(s).: 99.76-22
Sex: Female	Photo/Negative No(s).:_Z16272
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	m-BN 54 MD7 20 1899

Features: Z16267. Liver. Hepatocyte. Abundant numbers of glycogen granules are present throughout the cytoplasm of this hepatocyte. Bile canaliculi are evident on the right, left and lower left margins. A large dark residual body is present in an adjacent hepatocyte at the top left. Several smaller residual bodies are present in the cytoplasm of the centered hepatocyte. Mitochondria appear normal, having cristae, sporadic granules and a fine grainy matrix. Five (5) probable peroxisomes counted.

<u>Z16268.</u> Liver. Hepatocyte. Cytoplasm has a somewhat light appearance due to slight dilatation of the endoplasmic reticulum. The nuclear envelope is also slightly dilated. These are artifactual fixation-related changes. Prominent bile canaliculi are present on the left and lower right cellular margins. No lipid droplets evident. Fifteen (15) peroxisomes counted.

Z16269. Liver. Hepatocyte. Cell appears similar to Z16267 described above. There appears to be abundant glycogen granules in the cytosol. A microvillous border is present at the upper right extending in to the space of Disse, while bile canaliculi are evident along the lower left and upper left margins. There are many dark mitochondria which are difficult to differentiate from peroxisomes. Twenty-seven (27) probable peroxisomes counted.

Z16270. Liver. Hepatocyte. This hepatocyte appears to be binucleate. An endothelial cell is present lining the sinusoid ventrally and two erythrocytes are present dorsal to this cell. The endoplasmic reticulum and nuclear envelope is slightly dilated. Twenty (20) peroxisomes seen. Z16272. Liver. Hepatocyte. Two large and multiple smaller lipid droplets are present in this hepatocyte. Dorsally, the microvillous border extends into the space of Disse and is adjacent to an endothelial cell. Ventrally are a small segment of a lipid-containing cell, probably a perisinusoidal fat-storing cell and an adjacent hepatocyte. Twenty-one (21) probable peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Although one cell (Z16272) had a lot of lipid droplets, the overall impression is that lipid content in this liver was within expected normal limits. Average 17.6 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>I05510</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-23 Z16273 -
Sex: Male	Photo/Negative No(s).: Z16277
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	

Features: Z16273. Liver. Hepatocyte. Numerous glycogen granules are present randomly throughout the SER and cytosol. Fixation appears good. One swollen "barbell-shaped" mitochondria is present, but all other mitochondria appear normal. Scattered dark residual bodies are present. Thirteen (13) peroxisomes counted.

Z16274. Liver. Hepatocyte. Several small to medium-sized lipid droplets are present in the cytoplasm of the hepatocyte. Along its right margin its microvillous border faces another hepatocyte. A poorly-defined bile canaliculus is present at the lower left. The cytoplasm is filled with SER, RER, mitochondria and glycogen granules throughout. Some peroxisomes are noted. Scattered dark residual bodies are present. Ten (10) peroxisomes counted.

Z16275. Liver. Hepatocyte. Centered hepatocyte has only a small nuclear profile. At the bottom is a central vein surrounded by an endothelial cell and a moderate number of extracellular collagen fibers. An endothelial cell is the lighter shaded cell at the top right. Three lipid droplets present in the cytoplasm. Thirteen (13) peroxisomes counted. Z16276. Liver. Hepatocyte. This cell appears similar to Z16273. Approximately 10 small to medium-sized lipid droplets are present in the cytoplasm. Numerous glycogen granules are evident in the cytosol. A lamellar body is present at the bottom margin of the cell. Fourteen (14) peroxisomes counted.

<u>Z16277.</u> Liver. Hepatocyte. Approximately a dozen small to medium-sized lipid droplets are present in the cytoplasm. The cluster of 5 droplets at the far right are in another cell. The cytoplasm contains abundant fine glycogen granules. Several residual bodies are noted. Three (3) probable peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Moderate amount of glycogen in several cells. Number of lipid droplets appears normal. Average & peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105518</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose_	Block No(s).: 99.76-24 Z16278 -
Sex: Male	Photo/Negative No(s): Z16282
Significant Lesions (check one): Yes	
Interpreting Pathologist (signature and date):	SCO 64 MAY 20 1999
Features: Z16278. Liver. Hepatocyte. At the top right this hepatocyte is bordered by a perisinusoidal fat-storing cell containing several prominent lipid droplets. Four small lipid droplets are present in the hepatocyte. A bile canaliculus, adjacent to a large residual body, is present on the left margin of the cell. There is slight dilatation of the nuclear envelope and endoplasmic reticulum. Multiple irregular residual bodies are evident. Thirteen (13) peroxisomes clearly identified. Z16279. Liver. Hepatocyte. The centered hepatocyte is bordered by a darker hepatocyte on the right. On its left is a band of interstitial collagen. The nuclear envelope and endoplasmic reticulum are slightly dilated. Several endocytotic vesicles are present along the right cellular membrane. Sixteen (16) probable peroxisomes counted. Z16280. Liver. Hepatocyte. Hepatocyte has prominent bile canaliculi along its right and left margins with the adjacent hepatocytes. One small lipid droplet noted. Mitochondria stain somewhat more pale in this cell and contrast with darker peroxisomes. Multiple clusters of RER evident. Twelve (12) peroxisomes counted. Z16281. Liver. Hepatocyte. This hepatocyte appears to be binucleate. At the top left is an erythrocyte within the central vein or sinusoid. Several small lipid droplets are present in the cytoplasm. There is slight to moderate dilatation of the endoplasmic reticulum and nuclear envelope. Some shrunken mitochondria are difficult to differentiate from lysosomes or peroxisomes. Thirty-two (32) probable peroxisomes counted. Z16282. Liver. Hepatocyte. General cellular morphology is similar to cell described above. There is slight dilatation of the endoplasmic reticulum and nuclear envelope.	

1044

Conclusions: Essentially normal hepatocytes. Only small numbers of lipid droplets

seen. Average 18.4 peroxisomes per hepatocyte.

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99

Features: Z16283. Liver. Hepatocyte. Hepatocyte contains two medium-sized lipid droplets. The nuclear envelope and endoplasmic reticulum are slightly dilated. At the top right is a bile canaliculus between this cell and an adjacent hepatocyte. Desmosomes are present around the canaliculus. Thirty-one (31) peroxisomes counted. Z16284. Liver. Hepatocyte. This centered hepatocyte is surrounded by other hepatocytes on all margins in this photograph. Bile canaliculi are evident at the top left and bottom left margins. No lipid droplets are evident in this cell. Mitochondria, RER and SER appear normal. Twenty-nine (29) probable peroxisomes counted. Z16285. Liver. Hepatocyte. Two erythrocytes are present in the sinusoid adjacent to the left of this hepatocyte. Collagen fibers are present in the space of Disse. Along the right

left of this hepatocyte. Collagen fibers are present in the space of Disse. Along the right margin of this cell is a prominent bile canaliculus. A single medium-sized lipid droplet is present in this cell. Twenty-seven (27) peroxisomes counted.

Z16286. Liver. Hepatocyte. Cell appears essentially similar to cells described above.

At top left and bottom right are erythrocytes within sinusoids. No distinct lipid droplets are present in this cell. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. Several dark residual bodies are present. Twenty-one (21) peroxisomes counted.

<u>Z16287.</u> Liver. Hepatocyte. Cell has two large and several smaller lipid droplets present in its cytoplasm. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. Several dark residual bodies are present. Glycogen granules are present throughout the cytoplasm. Eight (8) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Slight increase in average number of peroxisomes. No increase in lipid noted. Average 23.2 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105528</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-26 Z16288 -
Sex: <u>Male</u>	Photo/Negative No(s): Z16292
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	MAY 20 1999

Features: Z16288. Liver. Hepatocyte. This hepatocyte contains about five medium-sized and approximately fifteen small lipid droplets in its cytoplasm. Microvillous border beneath endothelial cells are evident at the upper right and lower left margins. A bile canaliculus surrounded by desmosomes is present at the lower right margin. Scattered dark-staining residual bodies are present in the cytoplasm. There is slight dilatation of the endoplasmic reticulum and the nuclear envelope. Five (5) peroxisomes clearly identified.

Z16289. Liver. Hepatocyte. This hepatocyte's microvillous border extends into the space of Disse at the upper left margin of the photograph. At the lower left is a perisinusoidal fat-storing cell (Ito cell). There is slight dilatation of the endoplasmic reticulum and the nuclear envelope. Two small lipid droplets are evident. Sixteen (16) peroxisomes counted.

Z16290. Liver. Hepatocyte. This cell is a little darker staining than previous cells. At lower left a granulocyte is present in the sinusoid or central vein. At the top right a perisinusoidal fat-storing cell (Ito cell) is present. Several small lipid droplets are present in the hepatocyte and a few residual bodies are evident. There is slight dilatation of the endoplasmic reticulum and the nuclear envelope. Nineteen (19) peroxisomes counted. Z16291. Liver. Hepatocyte. Much of the cytoplasm has a dense granular appearance, composed of SER, glycogen granules, and probable cytoskeletal components. Approximately eighteen small to medium-sized lipid droplets are present. Nineteen (19) probable peroxisomes counted.

<u>Z16292.</u> Liver. Hepatocyte. Hepatocyte appears similar to Z16291. There are several lipid droplets present in the cytoplasm. Fourteen probable (14) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Lipid droplet numbers within normal expectations. Average 14.6 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105532</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-27 Z16293 -
Sex: Female	Photo/Negative No(s).: Z16297
Significant Lesions (check one): Yes	<u>X</u> No
Interpreting Pathologist (signature and date):	-B. Ooly MAY 20 1999

Features: Z16293. Liver. Hepatocyte. This photograph has a centered hepatocyte. At the top are multiple lipid droplets which are in an adjacent perisinusoidal fat-storing cell (Ito cell), not in this hepatocyte. There are numerous glycogen granules in the cytosol intermixed with the endoplasmic reticulum. Two very small lipid droplets are present. Mitochondria appear normal. They show fine cristae, some granules and finely grainy matrix. Four (4) peroxisomes clearly identified.

<u>Z16294.</u> Liver. Hepatocyte. A single large lipid droplet is present in the cytoplasm beneath the nucleus. Similar to Z16293, there are many fine granules in the cytoplasm which appear to be glycogen granules. Three (3) peroxisomes identified in this hepatocyte.

Z16295. Liver. Hepatocyte. Several medium-sized lipid droplets are present in this hepatocyte. At the upper right is a "P"-shaped extracellular area containing collagen fibers. Moderate amounts of glycogen are present in the cytoplasm of the hepatocyte. Several residual bodies are also present. Five (5) probable peroxisomes counted. Z16296. Liver. Hepatocyte. Centered hepatocyte appears similar to those described above. Three lipid droplets are evident in its cytoplasm. At the bottom is a longitudinal profile of a bile canaliculus and a cross-section of a canaliculus at the top margin. Fine glycogen granules are present throughout. Six (6) peroxisomes counted.

<u>Z16297.</u> Liver. Hepatocyte. Centered hepatocyte appears similar to those described above. Two medium-sized and several small lipid droplets present. To the right is an area of interstitium containing some collagen fibers. The nucleus probably belongs to an endothelial cell. Three (3) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. Moderate amounts of glycogen present in most cells. Lipid droplet numbers appear normal. Average 4.2 peroxisomes per hepatocyte.

Study No.: <u>6329-223 (EM 99.76)</u>	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105538</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-28 Z16298 -
Sex: Female	Photo/Negative No(s).: Z16302
Significant Lesions (check one):X Yes	No
Interpreting Pathologist (signature and date):	ms B n el MAY 20 1999

Features: Z16298. Liver. Hepatocyte. Section has a prominent single knife mark transecting the cell beneath the nucleus. Numerous glycogen granules are present in the cytoplasm. A single small lipid droplet is present. Mitochondria and other organelles appear normal. Five (5) peroxisomes counted.

 $\overline{Z16299}$. Liver. Hepatocyte. Hepatocyte has a single large and several small lipid droplets. A sinusoid is present at the upper left margin where the microvillous border extends into the space of Disse. There are abundant glycogen granules in the cytoplasm. Some mitochondria are lighter staining than the majority of darker one. These light mitochondria are somewhat difficult to differentiate from lysosomes or peroxisomes. Eighteen (18) probable peroxisomes counted.

<u>Z16300.</u> Liver. Hepatocyte. Cell contains abundant glycogen often in irregular clear spaces or pockets in the cytosol. A single lipid droplet is present. Three (3) peroxisomes identified.

<u>Z16301.</u> Liver. Hepatocyte. This centered hepatocyte has adjacent hepatocyte dorsally and ventrally and a microvillous-sinusoidal border at the top right. Its cytoplasm contains multiple irregular pockets of glycogen granules. Other organelles appear somewhat clumped between the glycogen pockets. Nine (9) peroxisomes counted.

 $\underline{Z16302}$. Liver. Hepatocyte. This cell appears similar to Z16301, although it has more pockets of glycogen granules and has an overall light appearance. Other organelles appear clumped between the glycogen granules. One (1) peroxisome clearly identified.

Conclusions: Essentially normal hepatocytes. There is increased glycogen in some of these hepatocytes. Average 7.2 peroxisomes per hepatocyte.

Study No.: _6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105545</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-29
Sex: Female	Z16303 - Photo/Negative No(s).: <u>Z16307</u>
Significant Lesions (check one): Yes	X No
Interpreting Pathologist (signature and date):	~B. O. R. MAY 20 1999
Features: Z16303. Liver. Hepatocyte. This cell is right and bottom right and by an interstitial margin of are evident between adjacent hepatocytes. There is reticulum and nuclear envelope. No lipid droplets a residual bodes are present. Six (6) probable peroxis Z16304. Liver. Hepatocyte. Centered hepatocyte is margins. Bile canaliculi are evident at the right and reticulum and nuclear envelope are slightly dilated. No lipid droplets are present. Fourteen (14) probabl Z16305. Liver. Hepatocyte. Hepatocyte appears si a central vein, lined by an endothelial cell and contain No lipid droplets are evident in this hepatocyte. Sew Z16306. Liver. Hepatocyte. This cell is somewhat hepatocytes, although the mitochondria still are stair right may be an endothelial cell. Twelve (12) proba Z16307. Liver. Hepatocyte. All mitochondria in the slight dilatation of the endoplasmic reticulum. Six (6)	on the left. Prominent bile canaliculi slight dilatation of the endoplasmic re evident. Several dark irregular omes counted. Its endoplasmic surrounded by hepatocytes on all bottom margins. Its endoplasmic Several residual bodies are present. Its eproxisome counted. Its eproxisome counted. Its endoplasmic sining a segment of an erythrocyte. Its endoplasmic segment of an erythrocyte. Its endoplasmic staining than previous hing fairly darkly. Cell on the far ble peroxisomes counted. Its cell are darkly staining. There is so peroxisomes identified.
Conclusions: Essentially normal hepatocytes. No e Average 9.0 peroxisomes per hepatocyte.	vidence of increased lipid droplets.

Study No.: 6329-223 (EM 99.76)	Species/Strain: Cynomolgus Monkey
Animal No.: <u>105548</u>	Tissue: <u>Liver</u>
Treatment Group:15 mg/kg (mid-dose)	Block No(s).: 99.76-30 Z16308 - Z16309
Sex: Female	Photo/Negative No(s).: <u>Z16311-</u> Z16313
Significant Lesions (check one): Yes	<u>X</u> No
Interpreting Pathologist (signature and date):	-B. MAY 20 1999

Features: Z16308. Liver. Hepatocyte. The centered hepatocyte is bordered by adjacent hepatocytes on its left and right margins. On the right is a prominent bile canaliculus. A microvillous border is evident at the top right. Fixation appears good and cytoplasmic organelles appear normal. No lipid droplets are present in the cytoplasm. Abundant SER is present in the cytoplasm. There are a number of shrunken dark, variably-sized mitochondria, which are difficult to clearly differentiate from possible lysosomes or peroxisomes. One large lysosome is present at about "4:40 o'clock" from the nucleus, and contains some linear debris. Twenty-nine (29) peroxisomes identified.

<u>Z16309</u>. Liver. Hepatocyte. This hepatocyte exhibits slight dilatation of the endoplasmic reticulum and nuclear envelope. Three small to medium-sized lipid droplets are present. An erythrocyte is evident in a sinusoid at the bottom left of the photograph. Random dark and irregular residual bodies are present. Seventeen (17) peroxisomes clearly identified.

<u>Z16310.</u> Liver. Hepatocyte. Crystalloid inclusions in some mitochondria, an occasional finding in mitochondria. Peroxisomes not counted in this hepatocyte.

Z16311. Liver. Hepatocyte. One large and several smaller lipid droplets are present in the cytoplasm. There is slight dilatation of the endoplasmic reticulum and nuclear envelope. Prominent bile canaliculi are present on the left and right margins with adjacent hepatocytes. Sixteen (16) probable peroxisome counted. Z16312. Liver. Hepatocyte. This hepatocyte is bordered by adjacent hepatocyte on all margins. Several small lipid droplets are present in the cytoplasm. There is slight dilatation of the nuclear envelope and endoplasmic reticulum. Nine (9) probable peroxisomes counted.

Z16313. Liver. Hepatocyte. Two medium-sized and several smaller lipid droplets are evident in the cytoplasm. At the bottom left of the photograph are some interstitial collagen fibers. A bile canaliculus is present at the top right margin of the cell. There is slight dilatation of the endoplasmic reticulum, especially the RER, and the nuclear envelope. A large lysosome is present in close proximity to the noted bile canaliculus; it contains some electron-dense material. Fourteen (14) peroxisomes counted.

Conclusions: Essentially normal hepatocytes. No substantial increase in lipid droplets noted. Average 17.0 peroxisomes per hepatocyte.

III. Transmission Electron Micrographs

Draft Ancillary Pathology Report Covance Study No. 6329-223

Figure Legends

Magnification. Print magnification is indicated on the back of each photograph. The measurement bar on each photomicrograph equals one micron (0.001mm).

<u>Figure 1.</u> Liver. Hepatocyte showing normal cytoplasmic organelles. Some peroxisomes are identified and other normal organelles. Ventrally the microvillous border extends into the perisinusoidal space. Animal No. I05517, 0 mg/kg/day (control male), 10,920X magnification.

<u>Figure 2.</u> Liver. Hepatocyte. Several lipid droplets are present. There is slight artifactual dilatation of some rough endoplasmic reticulum. Some extracellular collagen is present in the interstitium in the upper right corner. An endothelial cell nucleus is present lining the sinusoid in the lower right corner of the photograph. Animal No. 105544, 0 mg/kg/day (control female), 11,200X magnification.

<u>Figure 3.</u> Liver. Hepatocyte. Mitochondria showing outer membrane, cristae, matrix and granules. These granules within the mitochondrial matrix are normal and are sites of calcium accumulation. Animal No. I05519, 0 mg/kg/day (control male), 112,000X magnification.

Figure 4, Liver. Hepatocyte showing increased lipid droplet accumulation. Lipid droplets vary from small to very large. Several residual bodies are present. Peroxisomes are scare. Animal No. I05507, 0.75 mg/kg/day (high-dose male), 10,920X magnification.

<u>Figure 5.</u> Liver. Hepatocyte showing numerous lipid droplets and peroxisomes. Several peroxisomes are labeled. Animal No.I05512, 0.75 mg/kg/day (high-dose male), 10,920X magnification.

<u>Figure 6.</u> Liver. Hepatocyte with many small to large lipid droplets. Representative peroxisomes are labeled. Desmosomes and a bile canaliculus is evident at the right. Animal No.I05536, 0.75 mg/kg/day (high-dose female), 11,200X magnification.

<u>Figure 7.</u> Liver. Hepatocyte with multiple lipid droplets and abundant glycogen granules in the cytoplasm. Animal No. I05540, 0.75 mg/kg/day (high-dosc female), 11,200X magnification.

Figure 8. Liver. Hepatocyte containing numerous "pockets" of glycogen. Animal No. I05551, 0.75 mg/kg/day (high-dose female), 11,200X magnification.

Draft Ancillary Pathology Report Covance Study No. 6329-223

Figure 9. Liver. Hepatocyte. Mitochondria showing outer membrane, cristae and matrix. Small lipid droplets are present in the surrounding cytosol. Animal No. I05512, 0.75 mg/kg/day (high-dose male), 112,000X magnification.

Figure 10. Liver. Hepatocyte. Mitochondria showing outer membrane, cristae, matrix, and granules. The nucleus is present on the right. Animal No. I05534, 0.75 mg/kg/day (high-dose female), 95,200X magnification.

Figure 11. Liver. Hepatocyte. There is moderate accumulation of small to medium-sized lipid droplets in this hepatocyte. Only a small nuclear profile is evident in this cell. The endoplasmic reticulum is slightly dilated. Animal No. 105514, 0.03 mg/kg/day (low-dose male), 11,200X magnification.

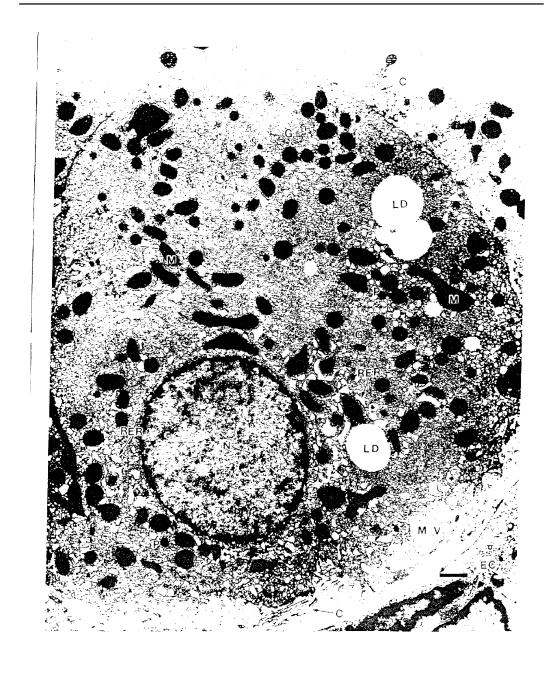
Figure 12. Liver. Hepatocyte. Mitochondria, endoplasmic reticulum and some residual bodies make up the majority of this hepatocyte's cytoplasm. A few small dark mitochondria are present, but no clearly identifiable peroxisomes are present. No lipid droplets are present in this cell, although a single lipid droplet is present in the subjacent cell at the bottom of the photograph. Animal No. I05545, 0.15 mg/kg/day (mid-dose female), 11,200X magnification

Draft Ancillary Pathology Report Covance Study No. 6329-223

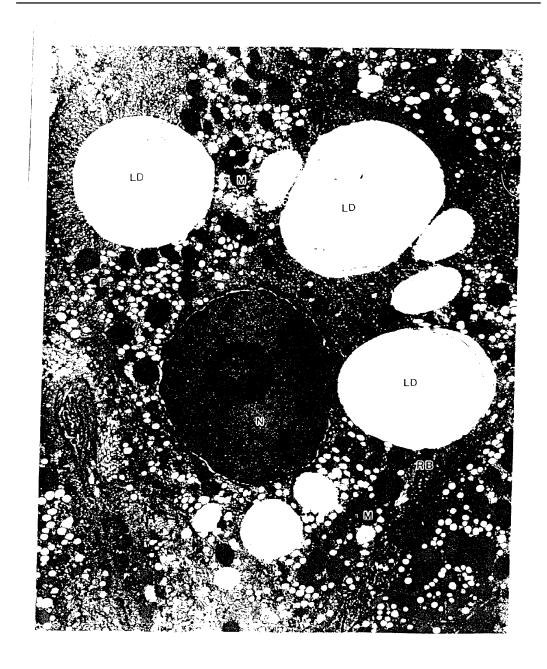
Index of Labels for Ultrastructural Structures

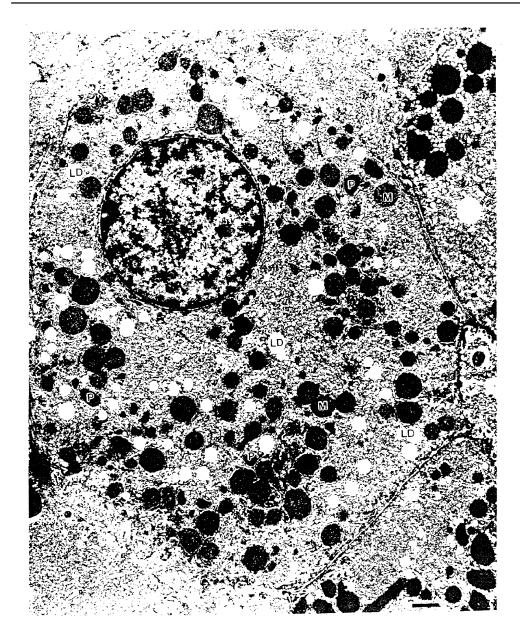
Abbreviation	Structure
BC	Bile canaliculus
CO	Collagen
CR	Cristae
D	Desmosome
EC	Endothelial cell
G	Glycogen
GR	Granules
LD	Lipid droplet
M	Mitochondria
MV	Microvilli
MX	Matrix
N	Nucleus
OM	Outer membrane
P	Peroxisome
RB	Residual body
RER	Rough endoplasmic reticulum
SER	Smooth endoplasmic reticulum

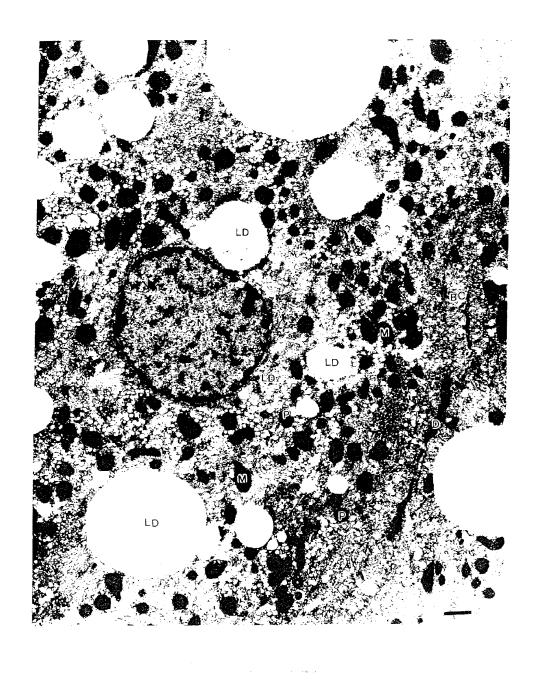


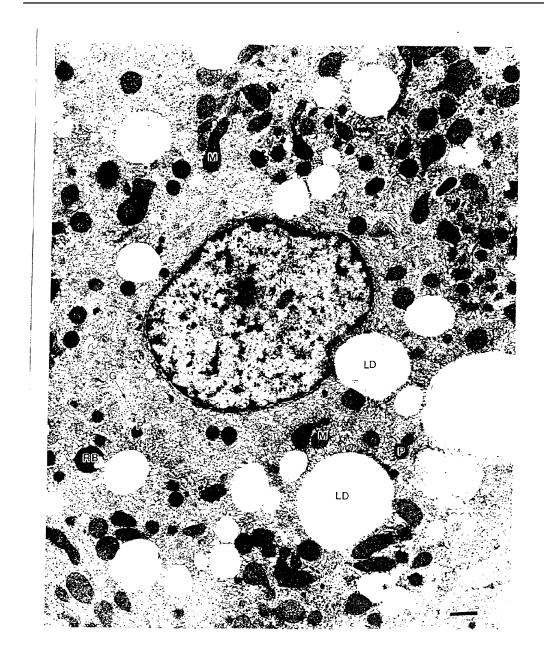


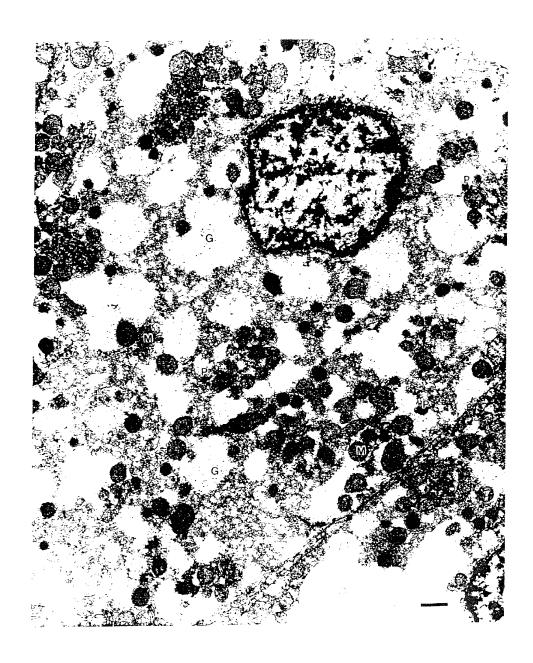


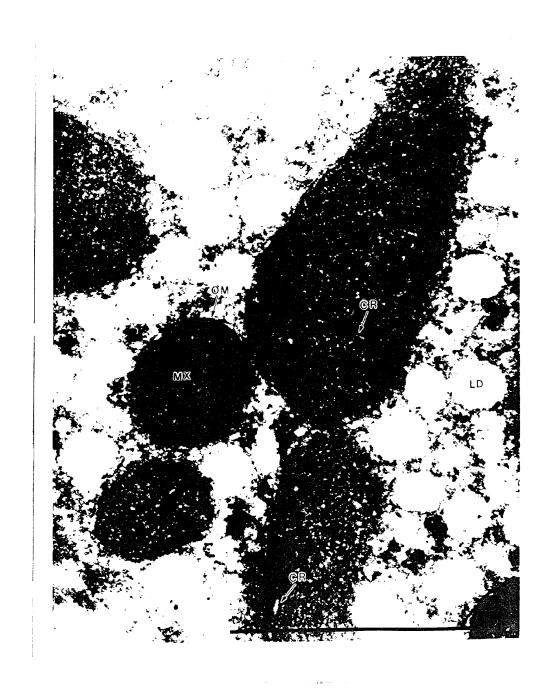


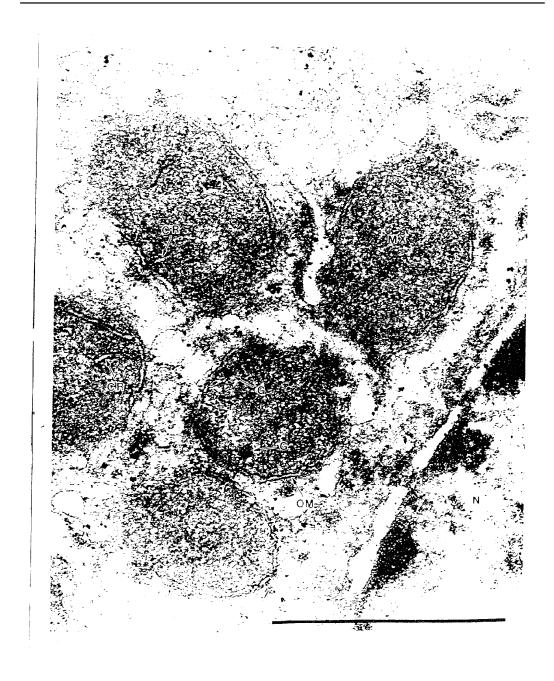


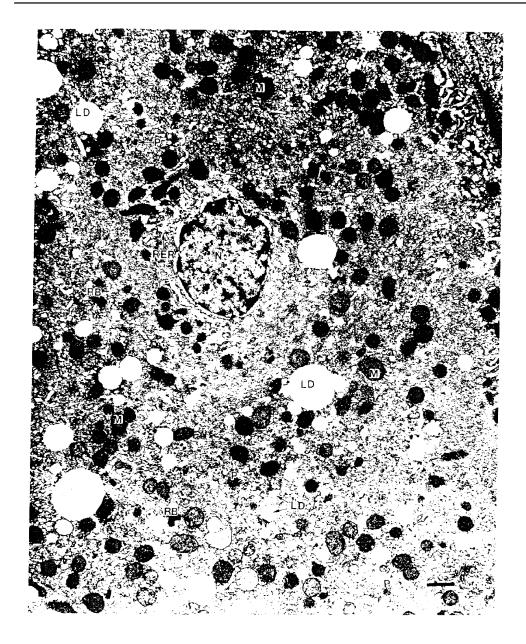


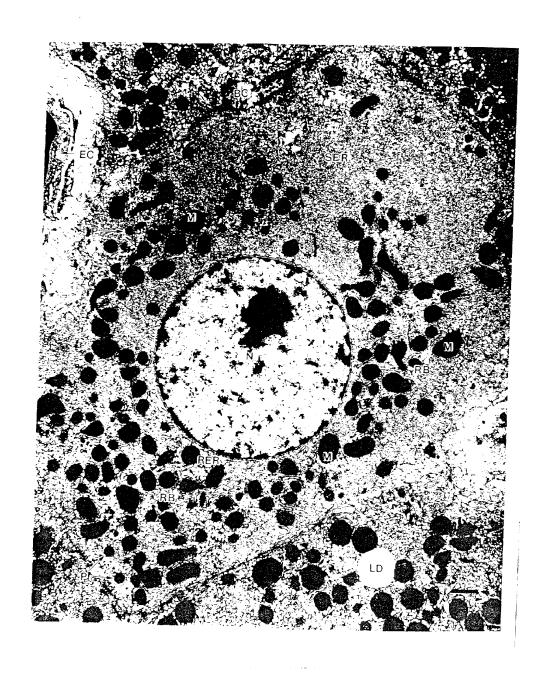












IV. Quality Assurance Statement



Pathology Associates International



A Company of Science Applications International Corporation

QUALITY ASSURANCE STATEMENT

This electron microscopy study has been inspected and audited by the Quality Assurance Unit as required by the Good Laboratory Practices Regulations promulgated by the U.S. Food and Drug Administration. PAI has a functioning and responsive Quality Assurance Unit which reports directly to management. The following is a record of inspections/audits and their resulting reports:

Date of Inspection	Phase Inspected	Date Findings Reported to Management and Study Director
4/1, 2/99	Data Audit	4/2/99
4/2/99	Draft Report Audit	4/2/99
7/13/99	Audit of Data from Additional Groups	7/13/99
7/13/99	Final Report Audit	7/13/99

deanne deWard, B.S., RQAP-GLP Quality Assurance Specialist

Sponsor: 3M Corporate Toxicology

Test Article: PFOS

Study Number: 6329-223, PAI Study EM-99.76

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APPENDIX 9

Urobilinogen Analysis Report

Note: The report in this appendix was supplied by the Sponsor, based on data supplied by the Mayo Clinic. The analysis at the Mayo Clinic was not done in compliance with Good Laboratory Practice Regulations and was not audited by a Quality Assurance Unit.

Urobilinogen Analysis Report for Study title: 26-Week Capsule Toxicity Study with Perfluorooctanesulfonic Acid Potassium Salt (PFOS) in Cynomolgus Monkeys Covance 6329-223, (3M Medical Dept number: T- 6295.7).

Author: Andrew M. Seacat

Final Report Date: 3/1/01

Introduction

In an effort to understand the lowering of bilirubin in the blood of the PFOS high dose (0.75 mg/kg/day) Cynomolgus monkeys, the potential excretion of urobilinogen was evaluated. The hypothesis being tested is that increased fecal urobilinogen excretion is responsible for the observed lowering of bilirubin in the blood in the high dose animals. The null hypothesis would state that the is no significant difference between the control and high dose fecal urobilinogen values.

Method summary

Six-hour fecal samples were collected from the cages of the control and high dose male and female monkeys and were sent to Dr. Joe McConnell at Mayo Clinic for fecal urobilinogen analysis (1).

Results

The urobilinogen values obtained from the six hour fecal samples collected were not significantly different between the control and high dose groups of male and female Cynomolgus monkeys (Table 1). Therefore the null hypothesis cannot be rejected. The urobilinogen values were within the assay detection limits, but were very low compared to the typical human range of urobilinogen values. This could be due to a true physiological species difference or possibly due to analytical difficulties encountered with a new matrix.

Reference:

 Urobilinogen (UB) Analysis Results from Dr Joseph P. McConnell., Porphyrins and nutritional Biochemistry lab, Dept of Laboratory Medicine and Pathology. Mayo Clinic, Rochester MN.

Urobilinogen Report

Table 1 Urobilinogen results:

Animal#	Dose level	Sex	mg UB/g feces	mg/OB/24 bours	Dunnetts J-Test	Durinetis T-Test
					Female control Vs Female high dose PFOS, mg UB/g Feces	Female control Vs female high dose PFOS, mg UB/24 hour Feces
165529	0 m.g/kg/d	F	0.142	5.68	0.68	0.27
105530	0 mg/kg/d	F	0.245	7 84		
105531	0 mg/kg/d	F	0.156	5 62		
105535	0 mg/kg/d	F	0.277	4.42		
105544	0 mg/kg/d	F	0.133	4,25		
105549	0 mg/kg/d	F	0.227	5,44		
	Avg		0.197	5,542		
	SD		0.061	1,434		
105533	0.75 mg/kg/d	F	0.288	14.996		
105534	0.75 mg/kg/d	F	0.175	6.308		
105536	0.75 mg/kg/d	F	0.435	29 86		
105546	0.75 mg/kg/d	F	0.188	7.52		
105542	0.75 mg/kg/c	ŀ	9,123	2,94		
105551	0.75 ± g/kg/d	F	0.135	2.70		
	Avg		0.224	9.221		
	SD		0.128	7,452		1
					Male Contro. Vs male high dosc PFOS, ing UB/g Faces	Male Control Vs male high dose PFOS, mg UB/24 hous Feces
105508	0 mg/kg/d	M	0.415	9,92	0,41	0.1
105517	0 mg/kg/c	M	0 150	6.00	<u> </u>	
105519	0 mg/kg/d	M	0.216	6.91		
105520	0 mg/kg/d	М	0.214	8.56		
105526	0 m.g/kg/d	M	0.165	4.62	ļ	
105527	0 mg/kg/d	M	0.151	4.82		
	Avg	<u> </u>	0.218	6.805		
	SD		0.033	:.62:		
105506	0.75 mg/kg/d	М	0.212	6 77	1	
105507	0.75 mg/kg/d	М	0.156	1.87		
105511	0.75 mg/kg/d	M	0.183	7.32		
105512	0.75 mg/kg/d	M	0.168	3,36		
105522	0.75 mg/kg/d	M	0.175	4.90		
	Avg		0.179	4,844		
	SD		C.021	2.285	T	

2

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APPENDIX 10

Dose Confirmation Analysis Report Compound Stability Report Analytical Laboratory Report Certificate of Analysis Quality Assurance Statement

Note: This appendix contains information supplied and audited by the Sponsor.

Dose Confirmation Analysis Report for Study title: 26-Week Capsule Toxicity Study with Perfluorooctanesulfonic Acid Potassium Salt (PFOS) in Cynomolgus Monkeys Covance 6329-223, (3M Medical Dept number: T- 6295.7).

Author: Andrew M. Seacat

Final Report Date: 3/1/01

Introduction

Dose confirmation analysis were performed on samples of perfluorooctanesulfonic acid potassium salt (KPFOS) triturated in lactose at dilutions of 1:499 and 1:39 w:w. The low dose group (0.03 mg/kg/day of PFOS) received 15 mg/kg/d of the 1:499 w:w dilution in gelatin capsules. The mid-dose (0.25 mg/kg/day PFOS) and the high-dose (0.75 mg/kg/day) groups received 6 and 30 mg/kg/day respectively of the 1:39 w:w dilution in gelatin capsule. Samples from the top, middle and bottom of each mixture were collected on day -15 prior to the in-life phase of the study for homogeneity analysis and sent to 3M Environmental lab. Samples collected from the middle of the preparations were collected prestudy and at the end of the treatment phase for material content analysis to assess compound stability in the dosing vehicle.

Method summary

The dose confirmation data were collected according to a method described fully in the Analytical Laboratory Report (1). Briefly, dose confirmation was performed by diluting the lactose dose samples 1000-fold with Milli-Q water, which were then extracted using the ion-pair reagent tetrabutylammonium hydrogen sulfate according to the procedure (1). The extracts from the 1:499 and the 1:39 dilutions were then diluted 1:5 and 1:50, respectively, to bring the PFOS levels in the linear range of the instrument. For each sample, (top, middle and bottom), the average PFOS spiked matrix extract value was used as correction factor for calculating the percent recovery. In all cases, samples were analyzed versus an unextracted curve using HPLC-ESMS/MS.

Results

The results indicated that the 1:499 dilution used for the 0.03 mg/kg/day dose group was $86\pm4\%$ of the target concentration, and that the 1:39 dilution used for the 0.75 and 0.15 mg/kg/day dose groups were $113\pm31\%$ of the target concentration (Table 1)

The stability samples were obtained from the middle of each mixture and were received on 5-07-99. The stability sample for the 1:499 was 100 ± 4 % of the target concentration, and the stability sample for the 1:39 was 69 ± 0 % of the target concentration (Table 2).

Dose Analysis Report

Reference:

1. Hansen K. J. Analytical Laboratory Report from the 26-Week Capsule Toxicity Study with Perfluorooctanesulfonic Acid Potassium Salt (PFOS) in Cynomolgus Monkeys on the Determination of the Presence and Concentration of Perfluorooctanesulfonate (PFOS) in Liver and Serum Samples. Project Identification: Covance 6329-222, 6329-223, 3M Medical Dept number: T- 6295.7, Analytical study: FACT TOX030, 3M Laboratory request No. U2279. 214 pp, 2000.

Dose Analysis Report

Appendix

<u>Table 1.</u> Dose sample analysis

:39 Dose (2)	5000 ppm PFOS)			Expected	Actual		MS Average Recovery	Corrected
	Expected Conc.	Actual Conc.	% Recovery	Conc.	Calculated Conc.	% Recovery	Corrected Conc.	% Recovery
	ng/m L	ng/mL	for ng/mL	ug/g	ug/g	for ug/g	ug/g	for ug/g
ор	580	479	83	25000	20647	83	23619	94
liddle	500	550	130	25090	32537	130	37210	149
ottom	500	422	84	25980	21108	84	24145	97
vg							28328	113
D G							7705	31
:499 Dose	2000 ppm PFOS)			Expected	Actual		MS Average Recovery	Corrected
	Expected Conc.			Conc.	Calculated Conc.	% Recovery	Corrected Conc.	% Recovery
	ng/mL	ng/mL	for ng/mL	ug/g	ug/g	for ug/g	ug/g	lor ug/g
ор	410	305	74	2000	1490	74	1795	90
Middle	404	287	71	2003	1425	71	1716	86
3 ottom	400	272	68	2000	1361	68	1639	82
Avg							1717	86
Avg so					MS) Conc Actual Backgr accounts for the wide diffe	erences in recovery	78	86 4
vg SD	5000 ppm PFOS)		MIS)	Spiked too low which	accounts for the wide diffe	erences in recovery Actual	78 Expected times 100	
Avg so	Expected Conc.	Actual Conc.	MS) . % Recovery	Spiked too low which Calculated Conc.	accounts for the wide difference Expected Conc.	Actual Calculated Conc.	78 Expected times 100 % Recovery	
Avg SD 1:39 Dose (2	Expected Conc. ng/mL	Actual Conc. ng/mL	MS) . % Recovery for ng/mL	Spiked too low which Calculated Conc. ug/g	accounts for the wide diffe Expected Conc. ug/g	arences in recovery Actual Calculated Conc. ug/g	78 Expected times 100 % Recovery for ug/g	
Avg sD 1:39 Dose (2	Expected Conc. ng/mL 604	Actual Conc. ng/mL 507	MS) • % Recovery for ng/mL 84	Spiked too low which Calculated Conc. ug/g 21858	Expected Conc. ug/g 10.8	Actual Calculated Conc. ug/g 12.1	78 Expected times 100 % Recovery for up/g 112	
Avg SD 1:39 Dose (2 Top Middle	Expected Conc. ng/mL 604 524	Actual Conc. ng/mL 507 485	MS) % Recovery for ng/mL 84 92	Spiked too low which Calculated Conc. ug/g 21858 24252	Expected Conc. ug/g 10.8 12.5	Actual Calculated Conc. ug/g 12.1 -82.8	78 Expected times 100 % Recovery for ug/g 112 -864*	
Avg SD 1:39 Dose (2 Top Middle Bottom	Expected Conc. ng/mL 604	Actual Conc. ng/mL 507	MS) • % Recovery for ng/mL 84	Spiked too low which Calculated Conc. ug/g 21858	Expected Conc. ug/g 10.8	Actual Calculated Conc. ug/g 12.1	76 Expected times 100 % Recovery for up/g 112 -864* 65	
Avg SD 1:39 Dose (2 Top Middle Bottom	Expected Conc. ng/mL 604 524	Actual Conc. ng/mL 507 485	MS) % Recovery for ng/mL 84 92	Spiked too low which Calculated Conc. ug/g 21858 24252	Expected Conc. ug/g 10.8 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82	78 Expected times 100 % Recovery for upig 112 -864* 65 87	
Avg so	Expected Conc. ng/mL 604 524	Actual Conc. ng/mL 507 485	MS) % Recovery for ng/mL 84 92	Spiked too low which Calculated Conc. ug/g 21858 24252	Expected Conc. ug/g 10.8 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82	76 Expected times 100 % Recovery for up/g 112 -864* 65	
Avg SD 1:39 Dose (2 Top Middle Bottom	Expected Conc. ng/mL 604 524	Actual Conc. ng/mL 507 485	MS) % Recovery for ng/mL 84 92	Spiked too low which Calculated Conc. ug/g 21858 24252 21889	Expected Conc. ug/g 10.8 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82	78 ixpected times 100 % Recovery for upig 112 -864* 63 63 * an outlier, not used in any c	
Avg 30 1:39 Dose (2 Top Middle Bottom Avg	Expected Conc. ng/mL 604 524	Actual Cone. ng/mL 507 485 438	MS) % Recovery for ng/mL 84 92	Spiked too low which Calculated Conc. ug/g 21858 24252 21889	Expected Conc. ug/g 10.3 12.5 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82	78 ixpected times 100 % Recovery for upig 112 -864* 63 63 * an outlier, not used in any c	
Avg 30 1:39 Dose (2 Top Middle Bottom Avg	Expected Conc. ng/mL 504 524 524 524	Actual Cone ng/mL 507 485 438	MS) % Recovery for ng/mL B4 92 83	Calculated Cont. ug/g 21658 24252 21889 Actual Matrix Spike C	Expected Conc. ug/g 10.8 12.5 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82	78 Expected times 100 Secondary for upig 112 -864 65 87 an outlier, not used in any cotted times 100	
Avg 30 1:39 Dose (2 Top Middle Bottom Avg	Expected Conc. ng/mL 604 524 524	Actual Cone ng/mL 507 485 438	MS) % Recovery for ng/mL B4 92 83	Spiked too low which Calculated Conc. ug/g 21658 24252 21889 Actual Matrix Spike C	Expected Conc. ug/g 10.8 12.5	Actual Calculated Conc. ug/g 12.1 -82.8 7.82 Conc. divided by Expec	78 Expected times 100 % Recovery for up/g 112 -864* 63 *an outlier, not used in any cotted times 100 % Recovery	
lvg Dose (2 Top Widdle Bottom Avg	Expected Conc. ng/mL 604 524 524 524 (2000 ppm PFOS) Expected Conc.	Actual Conc. ng/mL 507 485 438	MS) % Recovery for ng/mL 64 92 83	Calculated Cont. ug/g 21658 24252 21889 Actual Matrix Spike C	accounts for the wide difference of Conc. ug/g 10.8 12.5 12.5 conc Actual Background Expected Conc.	Actual Calculated Conc. usig 12.1 -82.5 -7.82 Conc. divided by Expec	78 Expected times 100 Secondary for upig 112 -864 65 87 an outlier, not used in any cotted times 100	
Avg 1:39 Dose (2 Top Middle Bottom Avg	Expected Conc. ng/mL 804 524 524 (2000 ppm PFOS) Expected Conc. ng/mL	Actual Conc. ng/mL SG7 485 438	MS) % Recovery for ng/mL 84 92 83	Calculated Conc. ug/g 21658 24252 21889 Actual Matrix Spike C Calculated Conc.	Expected Conc. ug/g 10.8 12.5 12.5 cenc Actual Background Expected Conc. ug/g	Actual Calculated Conc. usig 12.1 -82.8 -7.82 Conc. divided by Expec Actual Calculated Conc.	78 Expected times 100 % Recovery for up/g 112 -564* 65 87 an outlier, not used in any cotted times 100 % Recovery for up/g	
Avg SD 1:39 Dose (2 Top Middle Bottom Avg	Expected Conc. ng/mL 524 524 524 (2000 ppm PFOS) Expected Conc. ng/mL 606	Actual Conc. ng/mL 507 485 438 MS Actual Conc. ng/mL 475	MS) % Recovery for ng/mL 84 92 83 % Recovery for ng/mL 78	Spiked too low which Calculated Conc. ug/g 21658 24252 21889 Actual Matrix Spike C Calculated Conc. ug/g 2320	Expected Conc. ug/g 10.8 12.5 12.5 conc Actual Background Expected Conc. ug/g 9.77	Actual Calculated Conc. ug/g 12.1 -82.5 7.82 Conc. divided by Expec Actual Calculated Conc. ug/g 3.30	78 Expected times 100 % Recovery for up/g 112 -864 65 *an outlier, not used in any cuted times 100 % Recovery for up/g 85	

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Dose Analysis Report

Table 2. Stability Sample analysis

Group Dose	Sample#	Expected Conc. PFOS ng/mL	PFOS-Bekgrnd Conc. ng/mL	PFOS % Recovery Accuracy
		ng/un/	ng/mr.	Accuracy
Method Blk	Lact091800-WBlk-1	0.00	NA	NA
Ì	Lact091800-WBlk-2	0.00	NA	NA
QC	Lact091800-(1:39)-MS1	25	6.21	25%
	Lact091800-(1:39)-MSD1	25	-17.89	-71%
	Lact091800-(1:499)-MS1	200	236.6	118%
	Lact091800-(1:499)-MSD1	200	177.4	89%
Dosc	Lact091800-(1:39)-1	515	NΛ	69%
	Lact091800-(1:39)-2	515	NA	69%
	Avg			69%
	Lact091800-(1:499)-1	414	NA	103%
-	Lact091800-(1:499)-2	414	NA NA	98%
1	Avg			100%

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Dose Analysis Report

Example calculations

Calculating conc. (Top 1:39) ug/g:

 $\frac{(479.02 \text{ ng/mL} \times 100 \text{ mL} \times 1 \text{ mL})}{(0.02 \text{ mL} \times 0.116 \text{ g} \times 1000 \text{ ng/ug})}$

= 20647 ug/g

Expected concentration (Top 1:39) ug/g:

(50 ug/mL x 0.025 mL) 0.1160 g = 10.8 ug/g

Actual Calculated Conc. (Top 1:39) ug/g:

 $\frac{(507 \text{ ng/mL} \times 100 \text{ mL} \times 1 \text{ mL})}{(0.02 \text{ mL} \times 0.116 \text{ g} \times 1000 \text{ ng/ug})} - \frac{(479.02 \text{ ng/mL} \times 100 \text{ mL} \times 1 \text{ mL})}{(0.02 \text{ mL} \times 0.116 \text{ g} \times 1000 \text{ ng/ug})}$

= 12.1 ug/g

The number is divided by 100 since the sample was diluted 1:100, 1.0 mL of diluted sample removed, then spiked with standard.

5

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Corporate Health Physics Corporate Occupational Medicine Corporate Product Responsibility Corporate Toxicology 3M Medical Department 3M Center, 220-2E-02 PO Box 33220 St. Paul, MN 55133-3220 651 733 1110

September 6, 2000



Peter J. Thomford, Ph.D. Study Director, Toxicology Covance Laboratories Inc. 3301 Kinsman Blvd. Madison WI 53704

Re. Covance 6329-222 (T-6295.6), 6329-223 (T-6295.7). Perfluorooctanesulfonate Compound Stability Report

Peter:

The perfluorooctanesulfonic acid potassium salt (PFOS, FC-95 Lot 217) used in Covance 6329-222, 6329-223, has remained stable for the entire duration of the study. A Certificate of Analysis (C of A) dated March 9, 2000 (1), identified the compound as being 90.49% C8F17SO3-K+ by a combination of LC/MS, ¹H-NMR, ¹⁹F-NMR, and elemental analysis techniques. Previously, on December 1st 1997, ¹⁹F-NMR was used to characterize FC-95 lot 217 and showed that the isomer distribution was identical to the C of A sent to you earlier this year (2). Additionally, ¹⁹F-NMR and 1H NMR conducted on August 24th 2000 (3) were compared to the ¹⁹F-NMR completed on December 1st 1997 and indicated that there was no significant differences in the composition of this lot of PFOS over intervening 3 and a half year time period. Thus, PFOS, FC-95 Lot 217 used was stable for greater the time period during which these studies were conducted.

Sincerely,

Andrew M. Seacat Ph.D. Toxicology Specialist

andrew M. Seacat

Peter Thomford, Ph.D. Page 2 September 6, 2000

References:

- 1. Payfer R.M. Certificate Of Analysis FC-95, Lot 217. 3M Specialty Chemicals Division. March 9, 2000
- 2. Kestner T. Fluorochemical Isomer Distribution by ¹⁹F-NMR Spectroscopy. FC-95, lot 217 Analytical Request 53030 . SA&C Analytical Lab. December 1, 1997
- Kestner T. Chemical Characterization of PFOS (FC-95, lot 217) by ¹H-NMR & ¹⁹F-NMR Spectroscopy. Comparison to FC-95/217 analysis from Req.#53030-Request No. 61886. 3M SA&C Analytical Lab 236-2B-11. August 24, 2000.

3M Medical Department Study: T-6295.7

Report No. FACT TOX-030 Laboratory Request Number-U2279

ANALYTICAL LABORATORY REPORT

FROM THE

26-Week Capsule Toxicity Study with Perfluorooctanesulfonic Acid Potassium Salt (T-6295) in Cynomolgus Monkeys

ON THE

Determination of the Presence and Concentration of Perfluorooctanesulfonate (PFOS) in Liver and Serum Samples

Project Identification

3M Medical Department Study: T-6295.7 Covance In-Life Study: #6329-223

Analytical Study: FACT TOX-030 3M Laboratory Request No. U2279

Study Completion Date

At signing

Total Number of Pages 233

3M Environmental Laboratory

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3m Medical Department Study: T-6295.7

Report No. FACT TOX-030 laboratory Request Number-U2279

3M Medical Department Study: T-6295.7

Report No. FACT TOX-030 Laboratory Request Number-U2279

GLP COMPLIANCE STATEMENT

Study Title:

Analytical Laboratory Report from the 26-Week Capsule Toxicity Study with Perfluorooctanesulfonic Acid Potassium Salt (T-6295) in Cynomolgus Monkeys on the Determination of the Presence and Concentration of Perfluorocctanesulfonate (PFOS) in Liver and Serum Samples

Study Identification Number:

FACT TOX-030, T-6295.7, Covance #6329-223

This study was conducted in compliance with United States Environmental Protection Agency Good Laboratory Practice (GLP) Standards 40 CFR Part 792, with the exceptions in the bulleted list below. All raw data and samples for this study are retained in archives at the 3M Lab and will be retained for a period of at least ten years. The analytical phase completed at the 3M Lab was performed in accordance with 3M ET&SS Standard Operating Procedures.

Exceptions to GLP compliance:

- There were two study directors in this study. This study was designed as two separate studies. The in-life phase study was considered to end at the generation and shipment of specimens. The analytical study was considered to start at the receipt of these specimens for analysis. This resulted in having two separate study directors, one for each phase of the same study. However, since the technical performance of each phase was entirely separate, no effect is expected from this exception.
- On a few occasions, data were not recorded or corrected exactly as required by the GLPs.
- The 3M TOX 030 protocol states in the Regulatory Compliance section that "This study will be conducted in accordance with the United States Environmental Protection Agency Good Laboratory Practices Standards, 40 CFR 792, with the exception that analysis of the test material mixture for concentration, solubility, homogeneity, and stability will not be conducted, and is the responsibility of the Sponsor." Analyses were, however, completed on the concentration and homogeneity of the test material mixture, according to non-GLP validated methods, and are included in this report. As per the protocol, solubility and stability determinations were not conducted.

Study Director Date

9/19/00

9dur L. Butenheff 19 SEPT 2000

3M Environmental Laboratory

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3M Environmental Laboratory

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3m Medical Department Study: T-6295.7

Report No. FACT TOX-030 laboratory Request Number-U2279

3M Medical Department Study: T-6295.7

Report No. FACT TOX-030 Laboratory Request Number-U2279

GLP STUDY—QUALITY ASSURANCE STATEMENT

Study Title:

Analytical Laboratory Report from the 26-Week Capsule Toxicity Study with

Perfluorooctanesulfonic Acid Potassium Salt (T-6295) in Cynomolgus Monkeys on the Determination of the Presence and Concentration of Perfluorooctanesulfonate (PFOS)

in Liver and Serum Samples

Study Identification Number:

FACT TOX-030, T-6295.7, Covance #6329-223

The analytical phase of this study has been inspected by the 3M Lab Quality Assurance Unit (QAU) as indicated in the following table. The findings were reported to the study director and management.

B. Communication	Posts	Dati Re≃	OKTED TO Shill Decome
December 01/98	Sample receipt	1/17/00	1/17/00
March 19,22,23/99	Analysis	3/25/99	3/25/99
October 14/99	Extraction	10/20/99	10/20/99
May 3,8-12,15-19,22-26,29-31/00, June 1,2,5,7,8/00	Data	6/14/00	6/14/00
June 1,5,7,12–16/00	Draft report	6/16/00	6/16/00
September 14/00	Draft report	9/14/00	9/14/00

QAU Representative

Date

3M Environmental Laboratory

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3M Environmental Laboratory

Page 3

INTERIM CERTIFICATE OF ANALYSIS

Revision 1(9/7/00)

Centre Analytical Laboratories COA Reference #: 023-018A 3M Product: PFOS, Lot 217

Reference #: SD-018 Purity: 86.9%

Test Name Specifications		Result	
Purity ¹		86.9%	
Appearance	White Crystalline Powder	Conforms	
Identification			
NMR		Positive	
Metals (ICP/MS)			
1. Calcium		1. 0.005 wt./wt.%	
2. Magnesium		2. 0.001 wt./wt.%	
3. Sodium		3. 1.439 wt./wt.%	
4. Potassium ²		4. 6.849 wt./wt.%	
5. Nickel		5. <0.001 wt./wt.%	
6. Iron		6. 0.005 wt./wt.%	
7. Manganese		7. <0.001 wt./wt.%	
Total % Impurity (NMR)		1.93 wt./wt.%	
Total % Impurity		8.41 wt./wt.%	
(LC/MS)			
Total % Impurity		None Detected	
(GC/MS)			
Related Compounds -			
POAA		0.33 wt./wt.%	
Residual Solvents (TGA)		None Detected	
Purity by DSC		Not Applicable ³	
Inorganic Anions (IC)			
1. Chloride		1. <0.015 wt./wt.%	
2. Fluoride		2. 0.59 wt./wt.%	
3. Bromide		3. <0.040 wt./wt.%	
4. Nitrate		4. <0.009 wt./wt.%	
5. Nitrite		5. <0.006 wt./wt.%	
6. Phosphate		6. <0.007 wt./wt.%	
7. Sulfate ⁴		7. 8.76 wt./wt.%	
Organic Acids 5 (IC)			
1. TFA		1. <0.1 wt./wt.%	
2. PFPA		2. <0.1 wt./wt.%	
3. HFBA		3. 0.10 wt./wt.%	
4. NFPA		4. 0.28 wt./wt.%	
Elemental Analysis ⁶ :			
1. Carbon	1. Theoretical Value = 17.8%	1. 12.48 wt./wt.%	
2. Hydrogen	2. Theoretical Value = 0%	2. 0.244 wt./wt.%	
3. Nitrogen	3. Theoretical Value = 0%	3. 1.74 wt./wt.%	
4. Sulfur	4. Theoretical Value = 5.95%	4. 8.84 wt./wt.%	
5. Fluorine	5. Theoretical Value = 60%	5. 54.1 wt./wt.%	

COA023-018A Page 1 of 3

INTERIM CERTIFICATE OF ANALYSIS

Centre Analytical Laboratories COA Reference #: 023-018A

Date of Last Analysis: 08/31/00

Expiration Date: 08/31/01

Storage Conditions: Frozen ≤-10°C

Re-assessment Date: 08/31/01

¹Purity = 100% - (sum of metal impurities, 1.45% +LC/MS impurities, 8.41%+Inorganic Fluoride, 0.59%+NMR impurities, 1.93%+organic acid impurities, 0.38%+POAA, 0.33%)

Total impurity from all tests = 13.09%Purity = 100% - 13.09% = 86.9%

5TFA Trifluoroacetic acid
HFBA Heptafluorobutyric acid
NFPA Nonofluoropentanoic acid
PFPA Pentafluoropropanoic acid

This work was conducted under EPA Good Laboratory Practice Standards (40 CFR 160).

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²Potassium is expected in this salt form and is therefore not considered an impurity.

³Purity by DSC is generally not applicable to materials of low purity. No endotherm was observed for this sample.

⁴Sulfur in the sample appears to be converted to SO₄ and hence detected using the inorganic anion method conditions. The anion result agrees well with the sulfur determination in the elemental analysis, lending confidence to this interpretation. Based on the results, the SO₄ is not considered an impurity.

⁶Theoretical value calculations based on the empirical formula, C₈F₁₇SO₃-K⁺ (MW=538)

INTERIM CERTIFICATE OF ANALYSIS

Centre Analytical Laboratories COA Reference #: 023-018A

LC/MS Purity Profile:

Impurity	wt./wt. %	
C4	1.22	
C5	1.33	
C6	4.72	
C7	1.14	
Total	8.41	

Note: The C4 and C6 values were calculated using the C4 and C6 standard calibration curves, respectively. The C5 value was calculated using the average response factors from the C4 and C6 standard curves. Likewise, the C7 value was calculated using the average response factors from the C6 and C8 standard curves.

Prepared By:	David S. Bell	Date
	Scientist, Centre Analytical Laboratories	2 4.2
Reviewed By		
•	John Flaherty	Date
	Laboratory Manager, Centre Analytical Laboratorie	es

COA023-018A Page 3 of 3

Sponsor Protocol No.: FACT-TCR001 Centre Study No.: 023-018

QUALITY ASSURANCE STATEMENT

Centre Study Number 023-018, entitled, "Characterization Study of PFOS, Lot 217 and Lot 171" was reviewed by Centre Analytical Laboratories' Quality Assurance Unit. All reviewed phases were reviewed for conduct according to Centre Analytical Laboratories' Standard Operating Procedures, the Study Protocol, and all applicable Good Laboratory Practice Standards. All findings were reported to the Study Director and to management.

Phase	Date Inspected	Date Reported to Study Director and Centre Management	Date Reported to Sponsor Management
1. Protocol Review	5/19/00	5/19/00	7/14/00
2. Label Checks (solubility)	7/14/00	7/17/00	Pending
3. Standard Solution Preparation and analysis by instrumentation	6/20,21/00 6/22/00	6/22/00 6/22/00	7/14/00 7/14/00
4. Raw Data Review (NMR)	7/11-13/00	7/15/00	Pending
5. Standard Solution Preparation (Solubility)	7/14/00	7/20/00	Pending
6. Standard Solution Preparation	6/29, 30/00 7/26/00	6/30/00 7/27/00	7/14/00 Pending
7. Report Review (DSC/TGA)	8/8/00	8/8/00	Pending
8. Data Review and Interim Report Review	8/8,9/00	8/9/00	Pending
Jan V /a	5		8-9-00
Lisa Manning			Date

Lisa Manning Date Quality Assurance Officer

" THIS IS AN EXACT COPY OF THE ORIGINAL DOCUMENT"

DATE 12/4/01 Centre Analytical Laboratories, Inc. Page 3 of 59