

8EHQ-0904-15674

September 24, 2003 SEP 27 AM 9:15

**By Hand Delivery**

Document Processing Center (7407)
Office of Pollution, Prevention and Toxics
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460
Attention: Section 8(e) Coordinator

Re: **TSCA Section 8(e) Submissions**

Dear Sir/Madam:

3M Company ("3M") requests that EPA place the attached studies in the TSCA Section 8(e) docket. We have included a master index for these studies identifying the study title, test substance and CAS number. A Confidential Business Information (CBI) version of this index and the studies also is being submitted today pursuant to EPA procedures. 3M has not provided CBI substantiation with this submission, but would be willing to do so at the Agency's request.

3M has concluded that data in these studies may not be, strictly speaking, "corroborative" of previously reported or published information as defined in EPA's reporting guidance or otherwise potentially may warrant 8(e) submission based on EPA's reporting guidance.

3M appreciates EPA's attention to this matter. Please contact the undersigned if you have any questions or require further information regarding this submission.



Very truly yours,

Katherine E. Reed (9.24)

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**Master Index to Studies Submitted Under TSCA 8(e) by 3M Company on September 24, 2004
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Study	Substance	Chemical Name
Primary Eye Irritation Study - Rabbits	[REDACTED]	[REDACTED]
Guinea Pig Contact Dermal Irritation/Sensitization	20% solids (Ethomeen S/12 1.0M with diethyl sulfate 0.94M); 80% water [Ethomeen S/12 = R-N(Et)-(C ₂ H ₄ OH) ₂ where R=C18 with 1-2 double bonds]	20% (61791-24-0 with 64-67-5); 80% 7732-18-5
Primary Eye Irritation Study - Rabbits	Butanoic acid, heptafluoro-, calcium salt	2366-98-5
Acute Oral Toxicity Screen with T-2712CoC in Albino Rabbits	perfluorohexanoic acid	307-24-4
Primary Skin Irritation Test with T-2725Ec (Repeat Application) in Albino Rabbits	[REDACTED]	[REDACTED]
Acute Ocular Irritation Test with T-2725Ec in Albino Rabbits	[REDACTED]	[REDACTED]
Sensitization Study with T-2741AC in Albino Guinea Pigs	[REDACTED]	[REDACTED]
Oral Rangefinder Study of T-3140BS in Pregnant Rats	1-[3'-(perfluorooctanesulfonate) anilino amide]-2-potassium 3,4,5,6-tetrachlorophthalate	57589-85-2
Oral Rangefinder Study of T-3139BS in Pregnant Rats	80% 1-[3'-(perfluorooctanesulfonate) anilino amide]-2-potassium 3,4,5,6-tetrachlorophthalate; 5% C7 homolog; 5% C5 homolog; 5% C4 homolog; 5% C6 homolog	80% 57589-85-2; 5% 68541-01-5; 5% 68541-02-6; 5% 68568-54-7; 5% 68815-72-5
Acute Ocular Irritation Test with T-2997CoC in Albino Rabbits	perfluoroethylcyclohexylsulfonic acid diethanol amine salt	salt of 133201-07-7 and 111-42-2
Sensitization Study with T-3386 in Albino Guinea Pigs	[REDACTED]	[REDACTED]
In Vitro Microbiological Mutagenicity Assays of 3M Company's Compound T-3411	[REDACTED]	[REDACTED]

COMPANY SANITIZED

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Acute Oral Toxicity Screen with T-3448 in Albino Rats	68% poly(oxy-1,2-ethanediyl), alpha-[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]-omega-hydroxy-; 12% polyethylene glycol; 7% water; 4.86% poly(oxy-1,2-ethanediyl), alpha-[2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl]-omega-hydroxy-; 4% residual organic fluorochemical; 3% heptadecafluoro-1-octanesulfonic acid; 0.81% poly(oxy-1,2-ethanediyl), alpha-[2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl]-omega-hydroxy-; 0.3% 1,4-dioxane; 0.2% n-ethylperfluorooctanesulfonamidoethyl alcohol; 0.03% linear n-ethyl perfluorooctanesulfonamide	68% 29117-08-6; 12% 25322-68-3; 7% 7732-18-5; 4.86% 56372-23-7; 4.05% 68298-79-3; 3.24% 68298-81-7; 3% 1763-23-1; 0.81% 68298-80-6; 0.3% 123-91-1; 0.2% 1691-99-2; 0.03% 4151-50-2
In Vitro Microbiological Mutagenicity Assays of 3M Company's Compound T-3516		
Acute Dermal Toxicity Study with T-3451 in Albino Rabbits	C8F17SO2N(CH3).Na	Unknown
Acute Oral Toxicity - Method, Summary, Pathology; Primary Dermal Irritation - Method, Summary; Primary Eye Irritation - Method, Summary; Guinea Pig Maximization - Method, Summary		
Acute Oral Toxicity - Method, Summary, Pathology; Primary Dermal Irritation - Method, Summary; Primary Eye Irritation - Method, Summary;		
Dermal Sensitization Study in Guinea Pigs, Maximization Test - Method, Summary		
4 Hour Acute Aerosol Inhalation Toxicity Study with T-3825 in Rats		
Primary Eye Irritation/Corrosion Study in Rabbits		
4-Hour Acute Aerosol Inhalation Toxicity Study with T-3825 in Rats		

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T-3820: Acute Inhalation Toxicity Test	[REDACTED]	[REDACTED]
T-3821: Acute Inhalation Toxicity Test	[REDACTED]	[REDACTED]
T-3845 Acute Inhalation Toxicity Test	heptafluorobutyl chloride	375-16-6
Evaluation of the Acute Inhalation Toxicity of T-3920 in the Rat	[REDACTED]	[REDACTED]
Primary Eye Irritation Study in Rabbits - Method, Summary	Decanoic acid, nonadecafluoro-, ammonium salt	3108-42-7
Acute Oral Toxicity Study in Rats (OECD Guidelines)	95% ammonium perfluorodecanoate; 5% ammonium perfluorooctanoate	5% 3825-26-1
Acute Inhalation Toxicity Study with T-4129 in the Rat	[REDACTED]	[REDACTED]
Acute Inhalation Toxicity Study with T-4130 in the Rat	[REDACTED]	[REDACTED]
Acute Oral Toxicity Study in Rats; Acute Dermal Irritation Study in Rabbits; Acute Eye Irritation Study in Rabbits	[REDACTED]	[REDACTED]
Dermal Sensitization Study in Guinea Pigs - Maximization Test	[REDACTED]	[REDACTED]
Mutagenicity Test on T- 4413 [REDACTED] Mouse Lymphoma Forward Mutation Assay with Duplicate Cultures	[REDACTED]	[REDACTED]
Acute Inhalation Toxicity Study with T-4354 in the Rat	[REDACTED]	[REDACTED]
Primary Dermal Irritation/Corrosion Study in Rabbits	[REDACTED]	[REDACTED]
Acute Inhalation Toxicity Study in the Rat with T-4397	[REDACTED]	[REDACTED]
Primary Eye Irritation/Corrosion Study of T-5261 in Rabbits	lithium tetrafluoroethane-1,2-disulfonimide	Unknown
Acute Inhalation Toxicity Evaluation on T-5231 in Rats	[REDACTED]	[REDACTED]
4-Hour, Acute Inhalation Toxicity Study with T-5305 in Rats	[REDACTED]	[REDACTED]
4-Hour, Acute Inhalation Toxicity Study (Limit Test) with T-5343.1 in Rats	[REDACTED]	[REDACTED]

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Study Title	Chemical Name	Study Number
4-Hour, Acute Inhalation Toxicity Study With T-5306 in Rats		
4-Hour, Acute Inhalation Toxicity Study (Limit Test) with T-5357.1		
Acute Dermal Toxicity Study of T-4201 in Rabbits	Lithium Bis(Trifluoromethanesulfonyl)imide	90076-65-6
Subacute 28-Day Oral Toxicity with T-2816 by Daily Gavage in the Rat Followed by a 14 Day Recovery Period		
Subacute 28-Day Oral Toxicity with T-2816 by Daily Gavage in the Rat Followed by a 14-Day Recovery Period		
Acute Inhalation Toxicity Evaluation on T-5187 in Rats		
T-4240 4-Week Oral Toxicity Study in Rats		
Dermal Sensitization Study of T-5473 in Guinea Pigs - Maximization Test		
4-Hour, Acute Inhalation Toxicity Study With T-5698 in Rats		
Acute Inhalation Toxicity Evaluation On T-5708 in Rats		
T-5486 Assessment of Cardiac Sensitization Potential in Dogs	octafluoropropane	76-19-7
Acute Inhalation Toxicity Evaluation on T-5655 in Rats		
T-4201 4 Week Oral Toxicity Study in Rats with 2-Week Recovery Period	Lithium Bis(Trifluoromethanesulfonyl)imide	90076-65-6
T-5658: Eye Irritation to the Rabbit		
Acute Inhalation Toxicity Evaluation on T-5715 in Rats		
Acute Inhalation Toxicity Evaluation on T-5716 in Rats		
Acute Inhalation Toxicity Study of T-5724 in Rats		
Acute Inhalation Toxicity Study of T-5725 (Resin Solution) in Rats		

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Study Title	Chemical Name	CAS No.
Acute Inhalation Toxicity Study (Limit Test) of T-5927 in Rats		
Acute Inhalation Toxicity Study of T-5928 in Rats (LC50)		
Acute Inhalation Toxicity Evaluation on T-5829 in Rats		
Single-Dose Intravenous Pharmacokinetic Study of T-5963 in Rabbits		
Single-Dose Intravenous Pharmacokinetic Study of T-6030 in Rabbits		
5-Daily Dose Dermal Absorption/Toxicity Study of T-6029 and T-6032 in Rabbits	87-93% fluorinated alkyl alkoxylates; 4-10% linear N-ethyl perfluorooctanesulfonamide; 2-4% poly(oxy-1,2-ethanediyl), .alpha.-[2-[ethyl[(pentadecafluoroheptyl)sulfonyl]amino]ethyl]-.omega.-methoxy-; 0-4% residual organic fluorochemicals; 0-2% c8 sulfonamide; 0.1-1% 1-heptanesulfonamide, N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-; miscellaneous components (each less than 1%)	87-93% 68958-61-2; 4-10% 4151-50-2; 2-4% 68958-60-1; 0-2% 31506-32-8; 0.1-1% 68957-62-0
Single-Dose Intravenous Pharmacokinetic Study of T-6061 in Rabbits		
Single-Dose Intravenous Pharmacokinetic Study of T-6065 in Rabbits		
Single Dose Intravenous Pharmacokinetic Study of T-6063 in Rabbits		
Acute Inhalation Toxicity Study of T-6235 in Rats		
Primary Dermal Irritation/Corrosion Study of T-6402 in Rabbits		
Dermal Sensitization Study of T-6402 in Guinea Pigs- Maximization Test (EC Guidelines)		
Acute Eye Irritation/Corrosion Study with T-6318 in the Rabbit	1-Butanesulfinic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, Sodium Salt	102061-82-5

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Primary Skin Irritation / Corrosion Study with T-6567 in the Rabbit (4-Hour Semi-occlusive Application)		
Assessment of Contact Hypersensitivity to T-6318 in the Albino Guinea Pig (Maximization Test)	1-Butanesulfinic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, Sodium Salt	102061-82-5
Single-Dose Intravenous Pharmacokinetic Study of T-6502 in Rabbits		
Single-Dose Intravenous Pharmacokinetic Study of T-6504 in Rabbits		
Single Dose Intravenous Pharmacokinetic Study of T-6506 in Rabbits		
A Study for Effect on Embryofoetal Development of the Rat (Inhalation Administration)	20-80% methyl nonafluoroisobutyl ether; 20-80% methyl nonfluorobutylether	20-80% 163702-08-7; 20-80% 163702-07-6
Bacterial Reverse Mutation Test of T-6695		
5-day Inhalation Toxicity of Perfluorocyclohexene ([]; T-6878) in Rats	70% crude perfluorocyclohexene; 30% perfluoromethylcyclopentene	70% 355-75-9
5-Daily Dose Dermal Absorption/Toxicity Study of T-6502 and T-6503 in Rabbits		
Primary Eye Irritation/Corrosion Study of T-6786 in Rabbits	Lithium Bis(perfluoroethylsulfonyl)imide	132843-44-8
Primary Dermal Irritation/Corrosion Study of T-6804 in Rabbits	Lithium Bis(perfluoroethylsulfonyl)imide	132843-44-8
5-Day Inhalation Toxicity Screen of HFE []	c-C6F11OCH3	4943-08-2
Primary Eye Irritation/Corrosion Study of T-6804 in a Rabbit (OECD Guidelines)	Lithium Bis(perfluoroethylsulfonyl)imide	132843-44-8
Acute Oral Toxicity Study of T-6804 in Rats (OECD Guidelines)	Lithium Bis(perfluoroethylsulfonyl)imide	132843-44-8
Dermal Sensitization Study of T-6908 in Guinea Pigs, Mazimization Test (EC Guidelines)		

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Eye Irritation/Corrosion Study of T-4127 in the Rabbit	N-Me Fos Amide-Triphenylbenzyl Phosphonium Chloride Complex; D-1624	31506-32-8
Single-Dose Intravenous Pharmacokinetic Study of T-6924 in Rabbits		
Dermal Sensitization Study of T-6924 in Guinea Pigs- Maximization Test (EC Guidelines)		
Dermal Sensitization Study of T-7003 in Guinea Pigs - Maximization Test (EC Guidelines)		
Report of Sera and Liver Data for [] Monoester - Preliminary ADME Study in Rats	N-ethyl heptadecafluoro-N[2-(phosphonoxy)ethyl] octanesulfonamide diammonium salt	67969-69-1
[] Diester-Pharmacokinetic Study in Rats (Study No. T-7043.1, DT-26)	ammonium bis[ethyl(perfluorooctane)sulfonyl]phosphate	30381-98-7
Single Dose Intravenous Pharmacokinetic Study with T-7082 in Rabbits		
[] Monoester - Pharmacokinetic Study in Rats (Study No. T-6997.2)	N-ethyl heptadecafluoro-N[2-(phosphonoxy)ethyl] octanesulfonamide diammonium salt	67969-69-1
Determination of PFOS Presence and Concentration in Serum from the Dermal Absorption Studies of T-7106 and T-7107 in Hra:(NZW)SPF Rabbits		
Dermal Sensitization Study of T-7285.5 in Guinea Pigs - Maximization Test (EPA/OECD Guidelines)		
Twenty-eight Day Repeated-Dose Oral Toxicity Study of T-6861 in Rats	Lithium Bis(perfluoroethylsulfonyl)imide	132843-44-8
Twenty-eight Day Repeated Dose Oral Toxicity Study of T-7005 in Rats		

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Study Title	Chemical Name	Study Number
Acute (4-Hour) Inhalation Toxicity of Test Atmospheres Obtained after Heating [] in Rats	[]	[]
Toxicokinetic Study of Perfluorooctanesulfonamidoacetate ([]; T-7071.2) in Rats	perfluorooctanesulfonamido carboxylic acid	2806-24-8
Acute Nose-Only Inhalation Toxicity Study of T-7087, T-7088, T-7089 and T-7090 in Rats (Limit Test)	[]	[]
Acute Ocular Irritation Study of T-7485 Applied to New Zealand White Rabbits	potassium nonafluorobutanesulfonate	29420-49-3
Toxicokinetic Study of Perfluorooctane Sulfonamide (PFOSA; T-7132.2) in Rats	perfluorooctanesulfonamide	754-91-6
Acute Four-Hour Inhalation Study in Rats	Perfluorobutanesulfonyl Fluoride (96-98%) And Perfluorosulfolane (2-4%)	96-98% 375-72-4; 2-4% 42060-64-0
Primary Eye Irritation/Corrosion Study of T-7508.2 in Rabbits	[]	[]
MV31 K-Salz; Test for Primary Dermal Irritation in the Rabbit	[]	[]
Assessment of Acute Oral Toxicity with T-7560 In The Rat (Acute Toxic Class Method)	[]	[]
Acute Eye Irritation/Corrosion Study with T-7560 in the Rabbit	[]	[]
[] Potassium bis-(perfluorobutanesulfonyl)imide Repeat Dose ADME Study in Rats	Potassium bis(perfluorobutanesulfonyl)imide	129135-87-1
Toxicity Study by Repeat Dose Inhalation Administration to CD Rats for 4 Weeks	Perfluorobutanesulfonyl Fluoride (96-98%) And Perfluorosulfolane (2-4%)	96-98% 375-72-4; 2-4% 42060-64-0
A Sub-acute(28 Day) Inhalation Toxicity Study, Including a Recovery Study, with T-7479 in Rats	1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone	756-13-8
Xenochemical Receptor trans-Activation by Perfluorooctane-based Chemicals	perfluorooctanesulfonamide	754-91-6

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	84% 1-octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt; 5.5% potassium (perfluorohexyl)sulfonate; 4% potassium nonafluorobutanesulfonate; 4% potassium perfluoroheptanesulfonate; 2% potassium perfluoropentanesulfonate; 0.5% unknown	84% 2795-39-3; 5.5% 3871-99-6; 4% 29420-49-3; 4% 60270-55-5; 2% 3872-25-1
	95% N-ethylperfluorooctanesulfonamidoethyl alcohol; 5% 1-heptanesulfonamide N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-N-(2-hydroxyethyl)-	95% 1691-99-2; 5% 68555-73-7
Acute Inhalation Toxicokinetic Study of Perfluorooctanesulfonyl Fluoride (POSF) T-7098.4	perfluorooctanesulfonyl fluoride	307-35-7
Five-Day Inhalation Toxicity Study of HFE [] in Male CD Rats	c-C6F11-CF2-O-CH3	181214-67-5
Acute Toxicity Screen of Perfluorocyclohexene (T-6878) in Rats	70% crude perfluorocyclohexene; 30% perfluoromethylcyclopentene	70% 355-75-9
[] (T-7056) Toxicokinetic Study in Rats	[]	[]
Assessment of Acute Oral Toxicity with T-7601.3 in the Rat (Acute Toxic Class Method)	N-Methyl Perfluorobutylsulfonamide = 95% 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-Nonafluoro-n-Methyl; 5% N-Methyl-4-Hydroxy-Perfluorobutylsulfonamide	68298-12-4
Subchronic 90-Day Oral Toxicity Study with T-7320 By Daily Gavage in the Rat Followed by a 28-Day Recovery Period	[]	[]
Protein Binding of Perfluorobutane Sulfonate, Perfluorohexane Sulfonate, Perfluorooctane Sulfonate and Perfluorooctanoate to Plasma (Human, Rat, and Monkey), and Various Human-Derived Plasma Protein Fractions	84% 1-octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt; 5.5% potassium (perfluorohexyl)sulfonate; 4% potassium nonafluorobutanesulfonate; 4% potassium perfluoroheptanesulfonate; 2% potassium perfluoropentanesulfonate; 0.5% unknown	84% 2795-39-3; 5.5% 3871-99-6; 4% 29420-49-3; 4% 60270-55-5; 2% 3872-25-1
	potassium nonafluorobutanesulfonate	29420-49-3
	potassium (perfluorohexyl)sulfonate	3871-99-6

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	potassium perfluorooctanoate	2395-00-8
Five Day Inhalation Toxicity Study of [] Monochloride, [], and HCFC225cb in Male CD Rats	C4F9-OCH2Cl	205367-42-6 (n-isomer) and 221617-86-3 (l-isomer)
	c-C6F11-CF2-O-CH3	181214-67-5
	CF2ClCF2CHClF	507-55-1
Toxicokinetic Screen of [] (T-7483) in Rats	C7F15C(O)N(H)CH3	89685-56-3
Low Level Oral Perfluorooctanesulfonate (PFOS) Dose Toxicokinetic Study in Rats: Serum and Liver PFOS	84% 1-octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt; 5.5% potassium (perfluorohexyl)sulfonate; 4% potassium nonafluorobutanesulfonate; 4% potassium perfluoroheptanesulfonate; 2% potassium perfluoropentanesulfonate; 0.5% unknown	84% 2795-39-3; 5.5% 3871-99-6; 4% 29420-49-3; 4% 60270-55-5; 2% 3872-25-1

Acute Oral Toxicity Screen

with T-2712CoC

in Albino Rats

Experiment No.:

0479AR0680

Conducted At:

Safety Evaluation Laboratory
Riker Laboratories, Inc.,
St. Paul, Minnesota

Dates Conducted:

December 7, 1979 to December 26, 1979

Conducted By:


K. L. Ebbens, BS Date
Supervisor, Acute Toxicology
Study Director

Summary

An acute oral toxicity screen with T-2712CoC was conducted from December 7, 1979 to December 26, 1979 at Riker Laboratories, Inc., St. Paul, Minnesota using male albino rats ranging in body weight from 159 to 270 grams. The test article was administered by gastric intubation at dosage levels of 5,000, 1,000 and 500 mg/kg body weight with mortalities of 5/5, 5/5 and 1/5 noted respectively. The untoward behavioral reactions which occurred during the 14 day observation period generally consisted of ataxia, dyspnea, emaciation, hypoactivity, salivation, prostration, and unkempt appearance. The onset of the reactions occurred from 1-30 minutes to 5 days post dose and all reactions subsided by day 5 or death precluded recovery. Body weight losses were noted for 3/4 animals from the 500 mg/kg dose group which survived the 14 day test period. Gross necropsies performed at the end of the 14 day study generally revealed hemorrhagic vas deferens and one incidence of atrophic testes. Chemical burns of the stomach and intestines were generally noted in the animals which died acutely, however, autolysis precluded gross tissue evaluation of two animals. The approximate oral LD50 of T-2712CoC is less than 1,000 mg/kg and greater than 500 mg/kg in fasted male albino rats.

Introduction

The objective of this study^a was to approximate the acute oral LD50 of T-2712CoC in fasted male albino rats. The study, which was initiated at Riker Laboratories, Inc., St. Paul, Minnesota on December 7, 1979 and completed on December 26, 1979, was not conducted to support a government submission or marketing permit, and is therefore not regulated by the Good Laboratory Practices Act of 1978. The raw data generated by the Study Director and final report are stored in the conducting laboratory's archives.

^a Riker Toxicity Experiment No.: 0479AR0680, Test Method 605A

Method and Results

Young albino rats^a were used in this test. All animals were held under quarantine for several days prior to testing with only animals which appeared to be in good health and suitable as test animals at the initiation of the study used. The rats were housed in suspended, wire-mesh cages in temperature and humidity controlled rooms and permitted a standard laboratory diet^b plus water ad libitum except during the 16 - 20 hour period immediately prior to gastric intubation when food was withheld.

The rats were administered the test article at pre-selected dosage levels. All doses were administered directly into the stomachs of the rats using a hypodermic syringe equipped with a ball-tipped intubating needle^c.

After gastric administration of the test article, the rats were returned to their cages and observed for the following 14 days. Initial and final body weights, mortalities (Table 1) and adverse reactions (Table 2) were recorded. A necropsy was conducted on all animals that died during the study as well as those euthanatized at the end of the 14 day observation period (Table 1). The protocol, principle personnel involved in the study, composition characteristics, and Quality Assurance statement are contained in Appendices I - IV.

^a Charles River Breeding Laboratories, Inc., Wilmington, Massachusetts
^b Ralston Purina Laboratory Chow, Ralston Purina, St. Louis, Missouri
^c Popper and Sons, Inc., New Hyde Park, New York

TABLE 1
ACUTE ORAL TOXICITY SCREEN - ALBINO RATS
with T-2712CoC
Mortality, Necropsy and Body Weight Data

Dose ^a (mg/kg)	Sex	Animal Number	Individual Body Weights (g)			Percent Dead
			Test Day Number:		Number Dead Number Tested	
			0	14		
5,000	M	9R21177	179	(1 Hour)	5/5	100
		9R21178	168	(2 Hours)		
		9R21179	180	(1-30 Minutes)		
		9R21180	178	(1 Hour)		
		9R21181	174	(1 Hour)		
1,000	M	9R21184	183	(2 Days)	5/5	100
		9R21185	181	(3 Days)		
		9R21186	167	(2 Days)		
		9R21187	191	(6 Days)		
		9R21188	159	(2 Days)		
500	M	9R20680	247	(5 Days)	1/5	20
		9R20681	243	186		
		9R20682	250	171		
		9R20683	254	289		
		9R20684	270	205		

Note: Figures in parentheses indicate time of death
The approximate acute oral LD50 is less than 1000 mg/kg and greater than 500 mg/kg in fasted-male mice.

^a The test article was administered undiluted

Necropsy Findings:

Necropsy of the animals which died acutely generally revealed chemical burns of the stomach and intestines, however, autolysis precluded gross tissue evaluation of two animals. Necropsy of the animals which survived the 14 day observation period revealed an atrophic testicle (1/4), and hemorrhagic vas deferens (3/4).

TABLE 2
ACUTE ORAL TOXICITY SCREEN - ALBINO RATS
with T-2712CoC

Summary of Reactions

Dose (mg/kg)	Sex	Reaction	<u>Number Affected</u> <u>Number Dosed</u>	Time of Onset <u>a</u> Following Dose Administration	Cessation of Reaction <u>b</u> Following Dose Administration	Time of Death Following Dose
5,000	M	Dyspnea	4/5	1 Hour	Until Death	1-30 Minutes-2 Hours
		Hypoactivity	5/5	1-30 Minutes	Until Death	
		Salivation	4/5	1-30 Minutes	Until Death	
1,000	M	Dyspnea	5/5	1-30 Minutes	2 Days	2 - 6 Days
		Emaciation	1/5	4 Days	Until Death	
		Hypoactivity	5/5	1-30 Minutes	5 Days	
		Prostration	1/5	5 Days	Until Death	
		Salivation	5/5	1-30 Minutes	1 Day	
		Unkempt	1/5	4 Days	Until Death	
		Appearance				
500	M	Ataxia	5/5	1 Day	3 Days	5 Days
		Dyspnea	2/5	1-30 Minutes	Until Death	
		Hypoactivity	5/5	1 Day	Until Death	
		Mucous in mouth	1/5	3 Days	Until Death	
		Salivation	5/5	1-30 Minutes	1 Day	
		Unkempt	1/5	3 Days	Until Death	
		Appearance				
		Vocalization	1/5	1 Day	2 Days	

a Time indicates when first animal in the dose group exhibits the reaction.

b Time indicates when no animal in the dose group exhibits the reaction.

APPENDIX I
PROTOCOL

5.

TEST: Acute Oral Toxicity

SPONSOR: 3M Company Common Chemical Division

CONDUCTED BY: Safety Evaluation Laboratory, Riker Laboratories, Inc., St. Paul, Minnesota

TEST ARTICLE: T-2712 C.C.

CONTROL ARTICLE: N/A

PROPOSED STARTING/COMPLETION DATE OF TEST: 12/19 - 2/80

TEST SYSTEM AND SOURCE: Rhodes-Ross Breeding Laboratories - RIR

Sex: ♂

Number: 5

Weight Range: 150-300

OBJECTIVE: The objective of this test will be to characterize the acute ORAL toxicity of the test article in albino Rats. Rats were selected as a test system for reproducibility of response, historical use, ease in handling and general availability.

METHOD: The animals will be housed in stainless steel suspended wire mesh cages in temperature and humidity controlled rooms during both the quarantine and test periods, with food^a and water offered ad libitum^b. Each animal will be identified by color coding, according to the laboratory's standard operating procedure, which will correspond to a card affixed to the outside of the cage. A single dosage of 5000 mg/kg will be administered to each animal. The test article will be administered to the animals in the form received from the sponsor, after which the animals will be returned to their cages and observed for any untoward behavioral reactions for the following 14 days. Initial and final body weights will be recorded. A gross necropsy which will include, but not be limited to; heart, lungs, liver, kidneys and general gastrointestinal tract will be conducted on all animals which die during the conduct of the test as well as the animals surviving the test period. Any gross abnormalities which are observed during the conduct of the necropsy will be recorded with specific mention to the organ and/or site observed. All raw data and the final report will be stored in the Riker Laboratories Archives, St. Paul, Minnesota.

^a Purina Laboratory Chow, Ralston Purina, St. Louis, Missouri

^b Except during the 14 day test period, animals will be provided with food and water ad libitum.

William T. Garrison III
Sponsor
Date 12/6/79

Date

Study Director

Date

APPENDIX I (concluded)
Amendment to Protocol

6.

1. Additional design levels will be administered to further define the toxicity of the compound. Body weight scores will be expanded to include completion of the study.

[Signature] 12/12/79
Study Director Date

2.

[Signature]
Study Director Date

3.

[Signature]
Study Director Date

4.

[Signature]
Study Director Date

5.

[Signature]
Study Director Date

6.

[Signature]
Study Director Date

7.

[Signature]
Study Director Date

8.

[Signature]
Study Director Date

APPENDIX II

Principle Participating Personnel Involved in the Study

Name	
K. L. Ebbens, BS	Supervisor, Acute Toxicology Study Director
K. D. O'Malley, BS	Advanced Toxicologist Technical Writer
J. A. Skroms	Acute Toxicology Senior Laboratory Technician
G. C. Pecore	Coordinator Animal Laboratory

APPENDIX IIIComposition Characteristics

This study is not regulated by the Good Laboratory Practice Act of 1978 and therefore information pertaining to composition characteristics is not applicable for inclusion in this study.

APPENDIX IVQuality Assurance Statement

This study is not regulated by the Good Laboratory Practice Act of 1978 and therefore a statement signed and prepared by the Quality Assurance group is not applicable. This study was, however, audited by the Quality Assurance group.

In addition to the data audit, different significant phases for studies underway in the Biocompatibility Laboratory are inspected weekly on a recurring cycle, and the facilities are examined by Laboratory Quality Assurance on a three month schedule.