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ATTN: TSCA 8(e) Coordinator

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Dear Sir or Madam:

On February 15, 1995, FMC Corporation ("FMC") notified EPA pursuant to TSCA §8(e) of preliminary information relative to an Acute Oral Toxicity Study in rats conducted with

The generic name for this chemical is chloroalkyl alcohol. The audited report has just been made available and as indicated in that letter, FMC is hereby providing the Agency with a copy of that report.

FMC continues to claims as confidential the chemical identity of the test substance. A sanitized version of this letter and the report, from which all confidential information has been removed, are also enclosed.

Substantiation of our confidentiality claims were submitted to the Agency in the February 15, 1995 letter.

Sincerely yours,

Linda M Clark

Linda M. Clark
Supervisor, Product Regulatory Affairs

enc.

nm
4/12/95

ACUTE ORAL TOXICITY STUDY IN RATS

AUTHOR: CHRISTINE FREEMAN

REPORT DATE: March 22, 1995

COMPANY SANITIZED

FMC CORPORATION
TOXICOLOGY LABORATORY
BOX 8
PRINCETON, NEW JERSEY 08543

STUDY NUMBER: I94-1967

PROPRIETARY INFORMATION
UNPUBLISHED WORK PROTECTED BY COPYRIGHT
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CERTIFICATION OF GOOD LABORATORY PRACTICE

This study was conducted in compliance with EPA Good Laboratory Practice Standards, FDA Good Laboratory Practice Regulations and OECD Principles of Good Laboratory Practice in all aspects with the following exception:

The purity and stability of the test material have not been determined.

Analyses to determine the homogeneity and concentration of the test material in corn oil were not performed.

CFreeman
Christine Freeman
Laboratory Supervisor and
Study Director

3-22-95
Date

QUALITY ASSURANCE STATEMENT

The various phases of the study were inspected and the findings were reported to the study director and management as follows:

<u>PHASE</u>	<u>DATE INSPECTED</u>	<u>DATE REPORTED</u>
Protocol Audit	14-Dec-94	14-Dec-94
Compound Preparation	05-Jan-95	05-Jan-95
Draft Report Audit	14-Mar-95	17-Mar-95
	to	
	17-Mar-95	
	21-Mar-95	21-Mar-95

The final report and raw data were reviewed for accuracy and compliance with FMC Toxicology Standard Operating Procedures, the study protocol, EPA Good Laboratory Practice Standards, FDA Good Laboratory Practice Regulations, and OECD Principles of Good Laboratory Practice. Findings were discussed with the study director and revisions were made where necessary.

Debbie Lee Ruoff
Quality Assurance Unit

3-22-95
Report Approval Date

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SUMMARY

Groups of Sprague-Dawley rats consisting of five males and five females were orally administered as a 50% (w/v) preparation in corn oil. Observations for toxicity were conducted at 0.5, 1, 2, 3, 4 and 6 hours on the day of dosing and daily thereafter for fourteen days. Body weights were recorded on days 0, 7 and 14 of the study. A gross necropsy was performed on all animals.

The mortality data are summarized below.

<u>MALE</u>		<u>FEMALE</u>	
<u>Dosage Level</u> (mg/kg)	<u>#Dead/#Dosed</u>	<u>Dosage Level</u> (mg/kg)	<u>#Dead/#Dosed</u>
5000	5/5	3000	4/5
3000	3/5	2500	2/5
2500	3/5	2000	1/5
2000	0/5		

Presented below are the LD₅₀ values in mg/kg and the corresponding 95% confidence limits.

Male: 2641 (1881 - 3402) Female: 2536 (2088 - 2984) Combined: 2642 (2195 - 3090)

The most significant clinical signs were ataxia, recumbency, loss of righting reflex, staggered gait and splayed hindlimbs. Other clinical signs noted included abdominal gripping, abdominogenital staining, red oral discharge, oral discharge, chromodacryorrhea, chromorhinorrhea, decreased feces, dehydration, diarrhea, decreased locomotion, dyspnea, lacrimation and unkempt appearance. All signs of toxicity subsided by day 12 of the study. All surviving animals gained weight by day 14 of the study. There were no gross lesions noted in any animal at necropsy

Under the conditions of this study, the LD₅₀ of the test material is 2641 mg/kg in male rats; 2536 mg/kg in female rats and 2642 mg/kg in combined sexes. Based on the FMC internal rating system, the material is considered to be slightly toxic.

OBJECTIVE: The purpose of this study was to determine the oral LD₅₀ value of the test material or to establish a non-lethal dosage level which is equal to or greater than 5000 mg/kg.

- REFERENCES:**
- a) U.S. Environmental Protection Agency Pesticide Assessment Guidelines; Subdivision F, Hazard Evaluation: Human and Domestic Animals, November 1984; 81-1 Acute Oral Toxicity Study.
 - b) OECD Guidelines for Testing of Chemicals, Volume 2; Section 4: Health Effects, 401 - Acute Oral Toxicity, February 24, 1987.
 - c) Official Journal of the European Communities, L383A, Volume 35, 29 December, 1992; Part B.1.
 - d) FMC Acute Oral Toxicity Protocol (Number 26).

SPONSOR: Specialty Chemicals Group - Lithium Division

- MATERIALS:**
- a) Test Material

Identity:	
Formulation:	Not applicable
Reference No:	9361 (472-98)
Storage:	Room temperature
Purity:	GLP analyses were not conducted
Stability:	GLP analyses were not conducted
Chemical Composition:	
FMC-T#:	1172
Date Received:	October 14, 1994
Physical Description:	Green solid
 - b) Vehicle

Identity:	Corn oil
Storage:	Room temperature
Manufacturer:	Mazola
Lot/Batch #:	D27B

METHODS:

General Information - The study was initiated on December 14, 1994, (date protocol signed by Study Director).

Animals - Young adult Sprague-Dawley CD rats were received from Charles River Laboratories. The rats were randomized into their cages from the shipping boxes using a computer generated table of random numbers. All animals were healthy prior to release from acclimation. Fresh tap water and Purina Laboratory Rodent Chow 5001 were available ad libitum. The animals were acclimated for a minimum of 5 calendar days prior to study start. The average daily room temperature was maintained from 69°F to 72°F during the study, while the average daily relative humidity ranged from 44% to 56%. The animals were individually housed in stainless steel suspended rat cages and maintained in a room with a 12 hour fluorescent light and 12 hour dark cycle. Deosorb indirect bedding was used in the litter pans. Animal identification was established by the use of ear tags and cage cards.

Test Material Preparation - Due to the waxy consistency of the test material it was melted in a 45°C water bath, then prepared as a 50% preparation in corn oil. The density of the test

material was determined to be 1.04 g/ml. The test material was mixed on a stir plate prior to and during dosing.

Test Material Administration - The rats were fasted overnight prior to dosing. Immediately prior to dosing, body weights ranged from 213 grams to 298 grams. The test material was introduced directly into the stomach of each animal using a ball-tipped intubation needle. The light/dark cycle was approximately 6:00 am to 6:00 pm. The animals were dosed at approximately 8:45 am to 9:15 am.

EXPERIMENTAL DESIGN

<u>MALE</u>			<u>FEMALE</u>		
<u>Dosage Level</u> (mg/kg)	<u>Animals Tested</u>	<u>Date Dosed</u>	<u>Dosage Level</u> (mg/kg)	<u>Animals Tested</u>	<u>Date Dosed</u>
5000	5	10-Jan-95	3000	5	10-Jan-95
3000	5	05-Jan-95	2500	5	12-Jan-95
2500	5	12-Jan-95	2000	5	05-Jan-95
2000	5	10-Jan-95			

Clinical Signs/Body Weights - The animals were observed for mortality and clinical signs at 0.5, 1, 2, 3, 4 and 6 hours on the day of dosing and daily thereafter for fourteen days. Body weights were recorded on days 0, 7 and 14 of the study. Animals dying intercurrently were weighed upon discovery of death.

Necropsy - Gross necropsies were performed on all animals which died during the study. Survivors were sacrificed by carbon dioxide inhalation on day 14 and submitted to gross necropsy.

LD50 Calculations - The LD50 calculations were performed using a modified Logit-Linear Regression Program written by Jim Gibbons, Texas Instruments Calculator Products Division.

Data Interpretation - Additional assessment of toxicity provided by FMC internal guidelines for an acute oral toxicity study are as follows:

<u>LD50 Value</u>	<u>Toxicity Rating</u>
Greater than 5000 mg/kg	Practically non-toxic
Greater than 500 - 5000 mg/kg	Slightly toxic
Greater than 50.0 - 500 mg/kg	Moderately toxic
Less than or equal to 50.0 mg/kg	Highly toxic

RESULTS:

Mortality - The mortality data are presented below. All deaths occurred within 2 days of dosing.

<u>MALE</u>		<u>FEMALE</u>	
<u>Dosage Level</u> (mg/kg)	<u>#Dead/#Dosed</u>	<u>Dosage Level</u> (mg/kg)	<u>#Dead/#Dosed</u>
5000	5/5	3000	4/5
3000	3/5	2500	2/5
2500	3/5	2000	1/5
2000	0/5		

Based on these data, following LD₅₀ parameters were calculated:

	<u>MALE</u>	<u>FEMALE</u>	<u>COMBINED</u>
Index of fit	.76	.94	.84
Slope	9	15.5	11
Standard error	4.88	8.96	4.28
A Intercept	-30.7	-52.7	-37.7
Standard error	16.88	30.4	14.69
LD ₅₀	2641 mg/kg	2536 mg/kg	2642 mg/kg
Standard error	388.05	228.51	228.41
Upper confidence limit	3402 mg/kg	2984 mg/kg	3090 mg/kg
Lower confidence limit	1881 mg/kg	2088 mg/kg	2195 mg/kg

Clinical Signs - The incidence of clinical signs is noted in Table 1. The most significant clinical signs observed during the study included ataxia, recumbency, loss of righting reflex, staggered gait and splayed hindlimbs. Other clinical signs noted included abdominal gripping, abdominogenital staining, red oral discharge, oral discharge, chromodacryorrhea, chromorhinorrhea, decreased feces, dehydration, diarrhea, decreased locomotion, dyspnea, lacrimation and unkempt appearance.

The onset of signs began approximately 0.5 hours after dosing and continued to be observed until day 12 of the study, at which time all surviving rats had returned to normal.

Body Weights - The mean body weight data are presented in this section. The individual body weight data are shown in Table 2. All survivors gained weight by the end of the study.

Mean Body Weights ± SD
(g)

Dosage Level (mg/kg)	<u>DAY</u>		
	<u>0</u>	<u>7</u>	<u>14</u>
Male 5000	232 ± 18.8	NA	NA
3000	277 ± 8.4	320 ± 28.3	353 ± 33.2
2500	241 ± 6.2	292 ± 2.1	324 ± 12.0
2000	248 ± 23.9	311 ± 14.6	355 ± 14.6

	Dosage Level (mg/kg)	DAY		
		0	7	14
Female	3000	263 ± 21.7	NA	NA
	2500	238 ± 6.4	277 ± 19.0	307 ± 16.7
	2000	251 ± 6.8	276 ± 17.3	287 ± 22.9

Necropsy - The individual rat necropsy findings are noted in Table 3. No gross internal lesions were noted in any animal at necropsy.

Conclusion - Under the conditions of this study, the LD₅₀ of the test material is 2641 mg/kg in male rats; 2536 mg/kg in female rats and 2642 mg/kg in combined sexes. Based on the FMC internal rating system, the material is considered to be slightly toxic.

RAW DATA:

A copy of the final report and the raw data for this study will be maintained by the FMC Toxicology Department, Box 8, Princeton, New Jersey 08543.

SIGNATURES:

Submitted by: Faith A. Cooper 3/23/95
 Faith A. Cooper
 Technician in Charge
 Date

Prepared by: Michelle L. Burkhart 3-23-95
 Michelle L. Burkhart
 Technical Writer
 Date

Approved by: CFreeman 3-22-95
 Christine Freeman
 Laboratory Supervisor and
 Study Director
 Date

TABLE 1
INCIDENCE OF CLINICAL SIGNS
 Dosage Level 5000 mg/kg

MALE

OBSERVATION	TIME AFTER TREATMENT ¹																			
	HOUR						DAY													
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Abdominal Gripping	0	0	0	0	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Abdominogenital Staining	1	0	0	0	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ataxia	1	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromodacryorrhea	0	0	0	0	0	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Diarrhea	1	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Decreased Locomotion	5	2	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Dyspnea	0	2	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss of Righting Reflex	2	2	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Recumbency	4	2	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Staggered Gait	1	1	1	1	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Death (cumulative)	0	2	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 1
INCIDENCE OF CLINICAL SIGNS
 Dosage Level 3000 mg/kg

MALE

OBSERVATION	TIME AFTER TREATMENT ¹																			
	HOUR						DAY													
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ataxia	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decreased Locomotion	0	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of Righting Reflex	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oral Discharge	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recumbency	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staggered Gait	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Death (cumulative)	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 1
INCIDENCE OF CLINICAL SIGNS
 Dosage Level 2500 mg/kg

MALE

OBSERVATION	TIME AFTER TREATMENT ¹																			
	HOUR						DAY													
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Abdominogenital																				
Staining	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Ataxia	0	1	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromodacryorrhea	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Decreased																				
Locomotion	5	5	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyspnea	0	0	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of Righting																				
Reflex	5	4	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recumbency	5	4	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staggered Gait	0	1	2	2	2	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0
Unkempt	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Death (cumulative)	0	0	0	0	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 1
INCIDENCE OF CLINICAL SIGNS
 Dosage Level 3000 mg/kg

FEMALE

OBSERVATION	TIME AFTER TREATMENT ¹																			
	HOUR						DAY													
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Abdominogenital																				
Staining	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Ataxia	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Decreased																				
Locomotion	4	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dehydration	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Dyspnea	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of Righting																				
Reflex	4	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Oral Discharge	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Splayed Hindlimbs	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0
Staggered Gait	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
Recumbency	4	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Death (cumulative)	0	0	1	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 1
INCIDENCE OF CLINICAL SIGNS
 Dosage Level 2500 mg/kg

FEMALE

OBSERVATION	TIME AFTER TREATMENT ¹																			
	HOUR						DAY													
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Abdominal Gripping	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Abdominogenital Staining	0	0	0	0	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0
Ataxia	3	4	4	4	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromodacryorrhea	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Chromorhinorrhea	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0
Decreased Locomotion	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of Righting Reflex	2	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recumbency	2	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Splayed Hindlimbs	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Staggered Gait	3	4	4	4	3	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0
Unkempt	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0
Death (cumulative)	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 1
INCIDENCE OF CLINICAL SIGNS
Dosage Level 2000 mg/kg

FEMALE

OBSERVATION	TIME AFTER TREATMENT ¹																				
	HOUR						DAY														
	0.5	1	2	3	4	6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Abdominogenital																					
Staining	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Abdominal Gripping	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Ataxia	0	3	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromodacryorrhea	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromorhinorrhea	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Decreased Feces	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Decreased																					
Locomotion	3	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dyspnea	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lacrimation	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Feces	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recumbency	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss of Righting																					
Reflex	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Splayed Hindlimbs	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Staggered Gait	0	3	2	3	3	3	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0
Death (cumulative)	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

¹ Time of death indicates time of discovery of death. If discovery was between scheduled observations, death is presented under the next observation time.

TABLE 2
INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 5000 mg/kg

MALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2144M	263	2.6	NA	NA
AD2145M	224	2.2	NA	NA
AD2146M	227	2.3	NA	NA
AD2147M	234	2.3	NA	NA
AD2148M	213	2.1	NA	NA
Mean ± SD	232 ± 18.8		NA	NA

AD - rat
M - male
NA - not applicable

TABLE 2
 INDIVIDUAL BODY WEIGHTS AND DOSES
 DOSAGE LEVEL 3000 mg/kg

MALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2094M	273	1.6	NA	NA
AD2098M	277	1.7	NA	NA
AD2095M	266	1.6	300	329
AD2100M	288	1.7	340	376
AD2099M	282	1.7	NA	NA
Mean	277		320	353
± SD	± 8.4		± 28.3	± 33.2

AD - rat
 M - male
 NA - not applicable

TABLE 2INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 2500 mg/kg

MALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2177M	248	1.2	293	332
AD2178M	236	1.2	290	315
AD2179M	248	1.2	NA	NA
AD2180M	237	1.2	NA	NA
AD2181M	237	1.2	NA	NA
Mean	241		292	324
± SD	± 6.2		± 2.1	± 12.0

AD - rat
M - male
NA - not applicable

TABLE 2
INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 2000 mg/kg

MALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2149M	257	1.0	296	336
AD2150M	238	0.95	315	354
AD2151M	286	1.1	334	377
AD2152M	235	0.94	307	355
AD2153M	226	0.90	303	353
Mean	248		311	355
± SD	± 23.9		± 14.6	± 14.6

AD - rat
M - male

TABLE 2
INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 3000 mg/kg

FEMALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2207F	298	1.8	NA	NA
AD2217F	242	1.5	NA	NA
AD2218F	262	1.6	NA	NA
AD2219F	248	1.5	265	279
AD2220F	263	1.6	NA	NA
Mean	263		NA	NA
± SD	± 21.7			

AD - rat
F - female
NA - not applicable

TABLE 2INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 2500 mg/kg

FEMALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2208F	234	1.2	NA	NA
AD2224F	248	1.2	298	325
AD2221F	232	1.2	272	292
AD2222F	240	1.2	261	304
AD2223F	235	1.2	NA	NA
Mean	238		277	307
± SD	± 6.4		± 19.0	± 16.7

AD - rat
F - female
NA - not applicable

TABLE 2

INDIVIDUAL BODY WEIGHTS AND DOSES
DOSAGE LEVEL 2000 mg/kg

FEMALE

<u>Animal #</u>	<u>Day 0</u> (g)	<u>Dose</u> (ml)	<u>Day 7</u> (g)	<u>Day 14</u> (g)
AD2133F	253	1.0	NA	NA
AD2134F	252	1.0	290	302
AD2135F	239	0.96	260	262
AD2137F	254	1.0	291	310
AD2136F	256	1.0	261	273
Mean	251		276	287
± SD	± 6.8		± 17.3	± 22.9

AD - rat
F - female
NA - not applicable

TABLE 3
INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 5000 mg/kg

MALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2144M	D(2)	232	-31	No Gross Lesions
AD2145M	D(0)	225	+1	No Gross Lesions
AD2146M	D(0)	226	-1	No Gross Lesions
AD2147M	D(0)	234	0	No Gross Lesions
AD2148M	D(0)	213	0	No Gross Lesions

AD - rat
M - male
D() - died (study day)

TABLE 3INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 3000 mg/kg

MALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2094M	D(0)	273	0	No Gross Lesions
AD2098M	D(1)	272	-5	No Gross Lesions
AD2095M	TS(14)	329	+63	No Gross Lesions
AD2100M	TS(14)	376	+88	No Gross Lesions
AD2099M	D(0)	281	-1	No Gross Lesions

AD - rat

M - male

TS() - terminal sacrifice (study day)

D() - died (study day)

TABLE 3INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 2500 mg/kg

MALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2177M	TS(14)	332	+84	No Gross Lesions
AD2178M	TS(14)	315	+79	No Gross Lesions
AD2179M	D(0)	247	-1	No Gross Lesions
AD2180M	D(0)	236	-1	No Gross Lesions
AD2181M	D(1)	235	-2	No Gross Lesions

AD - rat
M - male
TS() - terminal sacrifice (study day)
D() - died (study day)

TABLE 3

INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 2000 mg/kg

MALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2149M	TS(14)	336	+79	No Gross Lesions
AD2150M	TS(14)	354	+116	No Gross Lesions
AD2151M	TS(14)	377	+91	No Gross Lesions
AD2152M	TS(14)	355	+120	No Gross Lesions
AD2153M	TS(14)	353	+127	No Gross Lesions

AD - rat

M - male

TS() - terminal sacrifice (study day)

TABLE 3INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 3000 mg/kg

FEMALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2207F	D(0)	297	-1	No Gross Lesions
AD2217F	D(0)	242	0	No Gross Lesions
AD2218F	D(0)	265	+3	No Gross Lesions
AD2219F	TS(14)	279	+31	No Gross Lesions
AD2220F	D(0)	256	-7	No Gross Lesions

AD - rat
F - female
TS() - terminal sacrifice (study day)
D() - died (study day)

TABLE 3INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 2500 mg/kg

FEMALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2208F	D(0)	230	-4	No Gross Lesions
AD2224F	TS(14)	325	+77	No Gross Lesions
AD2221F	TS(14)	292	+60	No Gross Lesions
AD2222F	TS(14)	304	+64	No Gross Lesions
AD2223F	D(0)	234	-1	No Gross Lesions

AD - rat

F - female

TS() - terminal sacrifice (study day)

D() - died (study day)

TABLE 3INDIVIDUAL NECROPSY FINDINGS
DOSAGE LEVEL 2000 mg/kg

FEMALE

<u>Animal #</u>	<u>Type, Time of Death</u>	<u>Term Body Weight (g)</u>	<u>Body Weight Change (g)</u>	<u>Internal Findings</u>
AD2133F	D(0)	253	0	No Gross Lesions
AD2134F	TS(14)	302	+50	No Gross Lesions
AD2135F	TS(14)	262	+23	No Gross Lesions
AD2137F	TS(14)	310	+56	No Gross Lesions
AD2136F	TS(14)	273	+17	No Gross Lesions

AD - rat
F - female
TS() - terminal sacrifice (study day)
D() - died (study day)

PROTOCOL REVISIONS/DEVIATIONS

This study deviated from the protocol in the following way(s):

1. The test material was heated in a 45C water bath until melted, then mixed with corn oil.
2. The address for the Specialty Chemicals Group - Lithium Division is 449 N. Cox Road, Box 3925, Gastonia, North Carolina, 28054.

Reasons

1. The test material was melted, then mixed with corn oil due to the waxy consistency of the material.
2. The address in the protocol was incorrect.

The deviation(s) did not adversely affect the outcome of the study.