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Du Pont HLR 632-91

Study Title

Approximate Lethal Dose (ALD) of [redacted] in Rats

Author

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Study Completed On

February 11, 1992

Performing Laboratory

E. I. du Pont de Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine
Elkton Road, P. O. Box 50
Newark, Delaware 19714

Medical Research No.

[redacted]

Laboratory Project ID

Haskell Laboratory Report No. 632-91

GENERAL INFORMATION

Substance Tested:	[redacted]
Medical Research No.:	[redacted]
Haskell No.:	19,101
Haskell Test Code:	[redacted]
Physical Form:	Light yellow liquid
Composition:	[redacted]
Contaminants:	[redacted]
Purity:	[redacted]
Synonyms:	[redacted]
CAS Registry No.:	[redacted]
Stability:	In the absence of visible evidence to the contrary, the test substance was assumed to be stable under the conditions of administration.
Sponsor:	Du Pont Fibers E. I. du Pont de Nemours and Company Wilmington, Delaware
Substance Submitted By:	[redacted] Du Pont Fibers E. I. du Pont de Nemours and Company Chattanooga, Tennessee
Study Initiated - Completed:	8/9/91 - 2/11/92
In-Life Phase Initiated - Completed:	8/12/91 - 9/10/91
Notebook:	[redacted]

There are 7 pages in this report.

Distribution: [redacted]

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SUMMARY

[redacted] was administered as a single oral dose by intragastric intubation to male rats. Clinical signs of toxicity were observed in lethally and nonlethally dosed animals. Deaths occurred up to one day after dosing. Surviving animals were observed for clinical signs of toxicity for up to 14 days after dosing. Under the conditions of this test, the ALD was 7500 mg/kg of body weight. This substance is considered to be very low in toxicity (ALD greater than 5000 mg/kg) when administered as a single oral dose.

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Study Director

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QUALITY ASSURANCE DOCUMENTATION

AUDITS:

Items Audited	Audit Dates
Protocol, conduct	8/12/91
Records, final report	1/23/92

DATE FINDINGS REPORTED TO STUDY DIRECTOR: 1/23/92
DATE FINDINGS REPORTED TO MANAGEMENT: 2/6/92

Reported by: James Mackay II — 2/6/92
James Mackay II — Date
Quality Assurance Auditor

INTRODUCTION

The purpose of this test was to determine an approximate lethal dose of [redacted] when administered as a single oral dose to male rats. The ALD was defined as the lowest dose administered which caused death either on the day of dosing or within 14 days post exposure. This study was conducted according to the applicable EPA Good Laboratory Practice Regulations. Areas of noncompliance are documented in the study records. No deviations existed that affected the validity of the study.

MATERIALS AND METHODS

A. Animal Husbandry

Male Crl:CD®BR rats, approximately 7 weeks old, were received from Charles River Breeding Laboratories, Kingston, New York. Rats were housed singly in suspended, stainless steel, wire-mesh cages. Each rat was assigned a unique identification number which was recorded on a card affixed to the cage. Purina Certified Rodent Chow® #5002 and water were available ad libitum. Rats were quarantined, weighed, and observed for general health for approximately one week prior to testing. Animal rooms were maintained on a timer-controlled, 12-hour light/12-hour dark cycle. Environmental conditions of the rooms were targeted for a temperature of 23°c ± 2°c and relative humidity of 50% ± 10%. Excursions outside these ranges were of small magnitude and/or brief duration and did not adversely affect the validity of the study.

B. Protocol

The test substance was dispersed in Mazola® corn oil and administered to one rat per dose rate by intragastric intubation. Dose rates administered ranged from 2300 to 11,000 mg/kg of body weight in increments of approximately 50%. Additionally, one rat was dosed at 670 mg/kg. The dosing day was test day 1; postexposure day 14 was test day 15. Following administration of the test substance, rats were observed for clinical signs of toxicity. Surviving rats were weighed and observed daily until signs of toxicity subsided, and then at least 3 times per week throughout the 14-day recovery period. Observations for mortality were made daily throughout the study. Pathological examinations of test animals were not performed.

C. Records Retention

All raw data and the final report will be stored in the archives of Haskell Laboratory for Toxicology and Industrial Medicine, E. I. du Pont de Nemours and Company, Newark, Delaware or in the Du Pont Records Management Center, Wilmington, Delaware.

RESULTS

A. Dosage and Mortality Data

The dosage regimen and the mortality resulting over the 15-day test period are detailed below. The lowest dose of [redacted] which resulted in the death of a test animal was 7500 mg/kg. Deaths occurred up to one day after dosing.

Dosage (mg/kg)	Dose Volume (mL)	Emulsion Concentration (mg/mL)	Initial Body Weight (g)	Mortality
670	1.1	150	245	No
2300	3.8	150	246	No
3400	2.6	350	265	No
5000	3.9	350	270	No
7500	5.5[a]	350	255	Yes
11,000	8.4[a]	350	266	Yes

[a] Administered in two portions approximately 15 minutes apart.

B. Clinical Signs

Nonlethal Doses

No clinical signs of toxicity were observed in the rats dosed at 670, 2300, or 3400 mg/kg. Slight weight losses (up to 2% of initial body weight) occurred in rats dosed at 2300 and 3400 mg/kg one day after dosing. The rat dosed at 5000 mg/kg had diarrhea and severe weight loss (10% of initial body weight) one day after dosing.

Lethal Doses

The rats dosed at 7500 or 11,000 mg/kg had low posture and were lethargic one hour after dosing. Death occurred on the day of dosing in the rat dosed at 11,000 mg/kg and one day after dosing in the rat dosed at 7500 mg/kg.

CONCLUSION

Under the conditions of this study, the ALD for [redacted] was 7500 mg/kg of body weight. This substance is considered to be very low in toxicity (ALD greater than 5000 mg/kg) when administered as a single oral dose to male rats.