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Du Pont HLR 805-88

Study Title

Approximate Lethal Dose (ALD) of [redacted]

Author

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Study Completed On

December 15, 1988

Performing Laboratory

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

[redacted]

Laboratory Project ID

Haskell Laboratory Report No. 805-88

GENERAL INFORMATION

Material Tested:	[redacted]
Medical Research No.:	[redacted]
Haskell No.:	17,503
Physical Form:	White powder
Purity:	[redacted]
Contaminants:	[redacted]
Synonyms:	[redacted]
Other Codes:	[redacted]
Submitter's Notebook No.:	[redacted]
Stability:	The test material was assumed to be stable under the conditions of administration.
Sponsor:	Chemical and Pigments Department E. I. du Pont de Nemours and Company, Inc. Wilmington, Delaware
Material Submitted By:	[redacted] Chemical and Pigments Department E. I. du Pont de Nemours and Company, Inc. Chambers Works, New Jersey
In-Life Phase Initiated - Completed:	11/9/88 - 12/1/88
Notebook:	[redacted]

There are 7 pages in this report.

Distribution: [redacted]

Approximate Lethal Dose (ALD) of

[redacted]

SUMMARY

[redacted]) was administered as a single oral dose by intragastric intubation to male rats. Deaths occurred up to 5 days after dosing. Clinical signs of toxicity were observed in lethally and nonlethally dosed animals. Under the conditions of this test, the ALD was 2300 mg/kg of body weight. This material is considered to be slightly toxic (ALD 500 - 5000 mg/kg) when administered as a single oral dose.

Work by: Anne M. Grandizio
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Reviewed and Approved for Issue: John W. Sarver 12/15/88
John W. Sarver
Study Director

JWS:jjb:HLR22.18

Company Sanitized. Does not contain TSCA CBI

QUALITY ASSURANCE DOCUMENTATION

STUDY: [redacted] Approximate Lethal Dose (ALD) of [redacted] in Rats
H# 17,503

AUDITS:

Items Audited	Audit Dates
Test System Identification and Housing	11/9/88

SHORT-TERM AUDIT REPORT NUMBER: [redacted]
DATE FINDINGS REPORTED TO MANAGEMENT AND STUDY DIRECTOR: 11/10/88

Reported by: William J. Lynam — 12/13/88

William J. Lynam
Quality Assurance Auditor

Date

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 significantly 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, Raleigh, North Carolina. 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° ± 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 material was suspended in Mazola® corn oil and administered to one rat per dose rate by intragastric intubation. Dose rates administered ranged from 450 to 11,000 mg/kg of body weight in increments of approximately 50%. The dosing day was test day one; postexposure day 14 was test day 15. Following administration of the test material, 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 postexposure period. Observations for mortality were made daily throughout the study.

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, Inc., 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 2300 mg/kg. Deaths occurred up to 5 days after dosing. The survival of the animal dosed at 3400 mg/kg is attributed to animal variability, and does not change the ALD.

Dosage (mg/kg)	Dose Volume (mL)	Suspension Concentration (mg/mL)	Initial Body Weight (g)	Mortality
450	0.6	200	264	No
670	1.1	150	256	No
1000	1.3	200	265	No
1500	2.0	200	271	No
2300	4.0	150	264	Yes
3400	4.4	200	259	No
5000	4.1	300	247	Yes
7500	5.9*	300	235	Yes
11,000	8.4*	300	230	Yes

*Administered in 2 portions, approximately 15 minutes apart.

B. Clinical Signs

Nonlethal Doses

The only clinical sign of toxicity observed was yellow-stained perineum in the rat dosed at 3400 mg/kg 4 days after dosing. Moderate to severe weight losses (7 to 19% of initial body weight) were observed in all rats up to 4 days after dosing.

Lethal Doses

The rat dosed at 2300 mg/kg exhibited lethargic behavior, hunched posture, limpness, dry brown nasal and oral discharges and brown-stained perineum on days 3 or 4 after dosing and was found dead 5 days after dosing. The rats dosed at 5000 or 7500 mg/kg died before clinical signs of toxicity were apparent. The rat dosed at 11,000 mg/kg exhibited dry red oral discharge and yellow-stained perineum one day after dosing and was found dead 2 days after dosing. Severe weight losses (up to 35% of initial body weight) were observed in most lethally dosed animals.

CONCLUSION

Under the conditions of this study, the ALD for [redacted] was 2300 mg/kg of body weight. This material is considered to be slightly toxic (ALD 500 - 5000 mg/kg) when administered as a single oral dose to male rats.

