TRADE SECRET

Study Title

H-24119: Oral Approximate Lethal Dose (ALD) in Rats

Laboratory Project ID: DuPont-3358

AUTHOR: Carol Finlay, B.A.

STUDY COMPLETED ON: August 19, 1999

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 19714-0050

WORK REQUEST NUMBER: [redacted]

SERVICE CODE NUMBER: [redacted]

CERTIFICATION

I, the undersigned, declare that this report provides an accurate evaluation of the data obtained from this study.

Issued by Study Director: Carol Finlay 19-Aug-1999

Carol Finlay, B.A.
Associate Scientist

Date

Company Sanitized. Does not contain TSCA CBI

STUDY INFORMATION

9th Collective Nomenclature: [redacted]

Synonyms/Codes: • H-24119
[redacted]

Haskell Number: 24119

CAS Registry Number: [redacted]

Submitter's Notebook Number(s): [redacted]

Purity: [redacted]

Known Impurities: [redacted]

Physical Characteristics: [redacted]

Stability: The test substance appeared to be stable under the conditions of the study; no evidence of instability was observed.

Sponsor: E. I. du Pont de Nemours and Company
Wilmington, Delaware 19898
U.S.A.

Study Initiated/Completed: July 14, 1999 / (see report cover page)

In-Life Initiated/Completed: July 15, 1999 / August 19, 1999

STUDY PERSONNEL

Study Director: Carol Finlay, B.A.
Management: Judith C. Stadler, Ph.D.
Primary Technician: Nita Baker

Toxicology Report Preparation: Wanda F. Dinbokowitz

Laboratory Veterinarian: Wanda L. West, D.V.M., A.C.L.A.M.

SUMMARY

H-24119 was administered as a single oral dose by intragastric intubation to male rats. Following dosing, the rats were weighed and observed for mortality and clinical signs of toxicity over a 14-day observation period.

No deaths occurred, and no clinical signs of toxicity or body weight losses were observed during the study.

Under the conditions of this study, the oral ALD for H-24119 was greater than 11,000 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.

INTRODUCTION

The purpose of this test was to determine an approximate lethal dose (ALD) of H-24119 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.

MATERIALS AND METHODS

A. Test Substance

The test substance, H-24119, was supplied by the sponsor as an [redacted] The test substance appeared to be stable under the conditions of the study. No evidence of instability, such as a change in color or physical state, was observed.

B. Animal Husbandry

Male Crl:CD®(SD)IGS BR rats were received from Charles River Laboratories, Inc., 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. The rats were tail-marked, using a water-insoluble marker, with the last 3 digits of the animal number. PMI Nutrition International, Inc. Certified Rodent LabDiet® 5002 and water were available *ad libitum*.

Haskell Laboratory has an animal health monitoring program. This program is monitored and administered by the Laboratory Veterinarian. Water samples are periodically analyzed for total bacterial counts and for the presence of coliforms, lead, and other contaminants. Additionally, samples from freshly washed cages and cage racks are periodically analyzed to ensure adequate sanitation by the cagewashers. Data from this program are maintained separately from study records. Animal feed is certified by the manufacturer to meet specified nutritional requirements and to be free of a list of specified contaminants. On the basis of these analyses, there is no evidence suggesting that contaminants were present in the feed or water in amounts which may have interfered with the results of this study.

Rats were quarantined, weighed, and observed for general health for 6 days. 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 ± 1°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.

C. Protocol

The test substance was administered neat to 1 rat per dose rate by intragastric intubation. The doses were calculated based on the test substance density of [redacted] mg/mL and body weights collected on the day of dosing. Dose rates administered ranged from 2300 to 11,000 mg/kg of body weight in increments of approximately 50%. Additionally, 1 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.

The rats were weighed and observed at least 3 times a week throughout the 14-day observation period. Observations for mortality and signs of illness, injury, or abnormal behavior were made daily throughout the study. Pathological examinations of test animals were not performed.

RESULTS AND DISCUSSION

A. Dosage and Mortality Data

The dosage regimen and the mortality resulting over the 15-day test period are detailed below. No deaths occurred during the study.

Dosage (mg/kg)	Dose Volume (mL)	Density (mg/mL)	Initial Body Weight (g)	Mortality
670	0.16	[redacted]	252	No
2300	0.58		275	No
3400	0.79		252	No
5000	1.2		249	No
7500	1.8		264	No
11,000	2.5		249	No

B. Clinical Signs and Body Weights

No clinical signs of toxicity or body weight losses were observed during the study.

CONCLUSIONS

Under the conditions of this study, the oral ALD for H-24119 was greater than 11,000 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.

RECORDS AND SAMPLE STORAGE

Specimens (if applicable), raw data, and the final report will be retained at Haskell Laboratory, Newark, Delaware, or at Iron Mountain Records Management, Wilmington, Delaware (formerly known as the E. I. du Pont de Nemours and Company Records Management Center).