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Du Pont HLR 180-90

Study Title

Approximate Lethal Dose (ALD) by Skin Absorption of [redacted] in Rabbits

Author

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Study Completed On

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Performing Laboratory

E. I. du Pont de Nemours and Company, Inc.
Haskell Laboratory for Toxicology and Industrial Medicine
P. O. Box 50, Elkton Road
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[redacted]

Laboratory Project ID

Haskell Laboratory Report No. 180-90

GENERAL INFORMATION

Material Tested:	[redacted]
Medical Research No.:	[redacted]
Haskell No.:	18,267
Haskell Test Code:	[redacted]
Physical Form:	Amber dispersion
Purity:	[redacted]
Composition:	[redacted]
Synonym:	[redacted]e
Stability:	The test material was assumed to be stable under the conditions of administration.
Sponsor:	Chemicals and Pigments Department E. I. du Pont de Nemours and Company, Inc. Wilmington, Delaware
Material Submitted By:	[redacted] Chemicals and Pigments Department E. I. du Pont de Nemours and Company, Inc. Jackson Laboratory Deepwater, New Jersey
Study Initiated - Completed:	2/16/90 - 5/2/90
In-Life Phase Initiated - Completed:	3/6/90 - 3/20/90
Notebook:	[redacted]

There are 6 pages in this report.

Distribution: [redacted]

Approximate Lethal Dose (ALD) by
Skin Absorption of [redacted] in Rabbits

SUMMARY

[redacted] was applied to the clipped, intact skin of 2 male New Zealand White rabbits and was occluded for 24 hours. Under the conditions of this test, the ALD was greater than 5000 mg/kg of body weight. Observations for clinical signs were made at approximately 24 hours after application of the test material and then daily thereafter for 14 days. This material is considered to have very low toxicity (ALD greater than 5000 mg/kg) when applied to the clipped, intact skin of male rabbits.

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John W. Sarver
Study Director

Acknowledgments: Craig Lightcap, Teresa Bishel, and Maureen Godwin also participated in the conduct of this study.

JWS:alr:HLR41.8

QUALITY ASSURANCE DOCUMENTATION

STUDY: [redacted]
H# 18,267

Approximate Lethal Dose (ALD) by Skin Absorption of [redacted] in Rabbits

AUDITS:

Items Audited	Audit Dates
In-life Observations	3/7/90
STSPS, Records and Final Report	4/12,16/90

SHORT-TERM AUDIT REPORT NUMBER: [redacted]
DATE FINDINGS REPORTED TO MANAGEMENT AND STUDY DIRECTOR: 4/16/90

Reported by: Joseph C. Hamill 4/20/90
Joseph C. Hamill
Quality Assurance Auditor
Date

INTRODUCTION

The purpose of this study was to determine an approximate lethal dose (ALD) by skin absorption of [redacted]. The ALD was defined as the lowest dose of the test material administered that caused the death of a test animal within 14 days of 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

Young adult male New Zealand White rabbits were received from Hare Marland, Hewitt, New Jersey. The rabbits were housed singly in suspended, stainless steel, wire-mesh cages. Each rabbit was assigned a unique identification number which was recorded on a card affixed to the cage. Purina Certified Rabbit Chow® #5325 and water were available ad libitum. Rabbits were quarantined, weighed and observed for general health for approximately 2 weeks. 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 20°C ± 2°C and relative humidity of 50% ± 10%. Any excursions outside these ranges were of small magnitude and/or brief duration and did not adversely affect the validity of the study.

B. Protocol

On the day prior to study initiation, the hair of each rabbit was closely clipped to expose the back from the scapular to the lumbar region. The rabbits were then fitted with plastic collars to prevent ingestion of the test material or disruption of the wrappings.

The test material was applied to the intact skin of 2 male rabbits. The rabbits were dosed at 5000 mg/kg, the maximum feasible dose. The test material was spread evenly over the entire exposed skin of each animal. The rabbits' body weights ranged from 2884 - 2897 grams on the day of dosing.

After application of the test material, sterile gauze pads (9" x 3") were applied to the treated site. The rabbits were then wrapped with successive layers of plastic film, stretch gauze bandage and elastic adhesive bandage. After wrapping, the rabbits were returned to their cages.

Approximately 24 hours after application of the test material, the rabbits were removed from their cages and the wrappings were removed. Excess test material was washed from the animals' back with warm water and the skin dried with a paper towel. The animals were weighed, observed for clinical signs of toxicity and returned to their cages. Observations for clinical signs were made approximately 24 hours after application and then daily thereafter for 14 days (excluding weekends). Observations for mortalities were made daily throughout the study. The animals were weighed on days 1, 7 and 14 following treatment.

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

Two rabbits were previously treated with this test material; however, because the test sites were not occluded, the test was considered invalid and the data is not included in this report. Two additional rabbits were treated. The dosage regimen and the mortality resulting over the 14-day test period are detailed below.

Dosage (mg/kg)	Dose (mL)	Initial Body Weight (g)	Mortality
5000	13.2	2884	No
5000	13.2	2897	No

B. Clinical Signs

No clinical signs of toxicity were observed during the study.

CONCLUSION

Under the conditions of this study, the ALD for [redacted] was greater than 5000 mg/kg of body weight. This material is considered to have very low toxicity (ALD greater than 5000 mg/kg) when applied to the clipped, intact skin of male rabbits.