

ORIGINAL

TSCA NON-CONFIDENTIAL BUSINESS INFORMATION

DOCUMENT DESCRIPTION	DOCUMENT CONTROL NUMBER	DATE RECEIVED
8EHQ-92-13197	89110000131	2/24/11

COMMENTS: COMMUN S (DECLASS)

DOES NOT CONTAIN CBI



Andrea V. Malinowski
Corporate Counsel

DuPont Legal
Wilmington Office Buildings D-7078
1007 Market Street
Wilmington, DE 19898
302-774-6443 Tel 302-774-4812 Fax
andrea.v.malinowski@usa.dupont.com E-mail

MR# 333429

February 18, 2011

VIA CERTIFIED MAIL

Attn: TSCA Declassification Coordinator
U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Document Control Office (7407M)
Washington, D.C. 20460

Re: Declassification Activity-TSCA §8(e) Submission
8EHQ Number: 8EHQ-1092-13197s (Bar Code 88920011000)
Supplemental Submission - Revised Public Copy of Submission

RECEIVED
EPA
11 FEB 24 PM 1:02

Dear TSCA Declassification Coordinator:

This submission is submitted in connection with the EPA 2010 CBI Declassification Challenge program.

Please find enclosed a revised public copy of the above-identified submission. Any information still claimed as confidential business information (CBI) in the attached revised public copy has been redacted and replaced by brackets. The originally assigned 8EHQ number has been added by the submitter to the first page of the enclosed revised public copy of the submission. The test substance description, as identified in an Index provided to submitter by EPA, is provided on the Attachment to this letter.

Very truly yours,


Andrea V. Malinowski

Attachment – Test Substance Description (1 page)
Enclosure – revised public copy of report HLR 44-85



CONTAINS NO CBI

Attachment

8EHQ Number: 8EHQ-1092-13197s (Bar Code 88920011000)

Test Substance identified in EPA Index – Mixture of:

<u>CAS Number</u>	<u>Chemical Name</u>
107-41-5	HEXYLENE GLYCOL
50-00-0	FORMALDEHYDE
65545-80-4	TELOMER B ALCOHOL ETHOXYLATE
68551-12-2	POE(15)MONO-C12-C16-ALKYL ETHER
7732-18-5	WATER
9038-95-3	OXIRANE METHYL-, POLYMER WITH OXINANE MONOBUTYL ETHER
	POE(15)MONO-C12-C16-ALKYL ETHER

FOR DUPONT USE ONLY

cc: M. D. Marder (4)
N. K. Agarwal (1)
G. L. Kennedy, Jr. (1)

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

HASKELL LABORATORY REPORT NO. 44-85

MR NO. 7242-001

<u>Material Tested</u>	<u>Haskell No.</u>
Finish SFX-407	15,405

APPROXIMATE LETHAL CONCENTRATION BY INHALATION (ALC) OF
FINISH SFX-407 FORMULATED WITHOUT MPD-5737D

SUMMARY

Groups of 6 male CrI:CD®(SD)BR rats were exposed to aerosol atmospheres of SFX-407 formulated without MPD-5737D (a 19% suspension in water) for single, 4-hour periods. Under the conditions of this test, the ALC for Finish SFX-407 formulated without MPD-5737D was 99 mg/m³ of particulate. This material is considered highly toxic by inhalation.

INTRODUCTION

The purpose of this study was to determine a 4-hour inhalation ALC in male rats for Finish SFX-407 formulated without MPD-5737D. Finish SFX-407 is highly toxic by inhalation (ALC = 80 mc/m³; HLR 43-85). Finish SFX-407 formulated without MPD-5737D was tested to determine whether MPD-5737D ("ZFM/CHPM") is responsible for Finish SFX-407's toxicity. The ALC was defined as the lowest atmospheric concentration generated that caused the death of 1 or more rats either on the day of exposure or within 14 days post exposure.

MATERIALS AND METHODS

A. Animal Husbandry

Young adult male CrI:CD®(SD)BR rats were received from Charles River Breeding Laboratories, Kingston, New York. Each rat was assigned a

unique 6-digit identification number which corresponded to a numbered card affixed to the cage. Rats were quarantined for one week prior to testing, and were weighed and observed twice during the quarantine period. During the test, rats were housed in pairs in 9" x 14" x 8" suspended, steel-mesh cages in rooms maintained at 38-58% relative humidity and 23-27°C on a timer-controlled 12 hour/12 hour light/dark cycle. The rat assigned the lower number in each cage was identified by a slash in the right ear. Rats' tails and cage cards were color-coded with water-insoluble markers so that individual rats could be identified after exposure. Except during exposure, Purina Certified Rodent Chow® #5002 and water were available ad libitum.

B. Exposure Protocol

Groups of 6 rats, 8 weeks old and weighing between 225 and 254 grams, were restrained in perforated, stainless steel cylinders with conical nose pieces. Each group was exposed nose-only for a single, 4-hour period to an aerosol atmosphere of Finish SFX-407 formulated without MPD-5737D in air. Rats were weighed prior to exposure, and were observed for clinical signs during exposure. Surviving rats were weighed and observed daily for 14 days post exposure, weekends excluded except when deemed necessary by the rats' condition.

C. Test Material

Composition: An aqueous suspension containing:
17.5% Ucon 50HB-5100
0.7% Merpol® HCS
0.7% Zonyl® FSN
500 ppm Formaldehyde
- Triethanolamine (to adjust the pH to 7.0)

Other Code: N-312

Stability: The test material was assumed to be stable throughout the exposure phase of the study.

Submitted by: N. K. Agarwal
Textile Fibers Department
Seaford Plant

D. Atmospheric Generation

Liquid Finish SFX-407 formulated without MPD-5737D was pumped into a Spraying Systems® nebulizer. Air introduced at the nebulizer aerosolized the test material, and swept the aerosol stream through a cyclone elutriator. The cyclone removed non-respirable particles by inertial impaction, while aerodynamic particles passed through the cyclone and into the exposure chamber.

E. Analytical

The atmospheric concentration of Finish SFX-407 formulated without MPD-5737D was determined at approximately 30-minute intervals by drawing

measured volumes of chamber atmosphere through preweighed, glass-fiber filters. Filters were weighed on a Cahn 26 Automatic Electrobalance[®]. Atmospheric concentration of particulate was calculated from the filter weight differential before and after sampling.

Particulate size (mass median diameter and percent respirable) were determined by a Sierra[®] cascade impactor during each exposure. Chamber temperature was measured with a thermometer, chamber oxygen content was measured with a BioMarine[®] Model 225 oxygen analyzer, and relative humidity was measured with a Bendix[®] Model 566 psychrometer.

F. Records Retention

All raw data and the final report will be stored in the archives of Haskell Laboratory for Toxicology and Industrial Medicine or in the DuPont Hall of Records, E. I. du Pont de Nemours and Co., Inc., Wilmington, Delaware.

RESULTS

A. Exposure Conditions and Mortality

Chamber temperatures ranged between 22-24°C, relative humidity ranged from 41-56%, and chamber oxygen content was maintained at 21%. Atmospheric characterization and mortality data are summarized below.

Atmospheric Characterization and Mortality Data of Finish SFX-407 formulated without MPD-5737D

Particulate Concentration (mg/m ³) ^a			% Respirable ^b	Mass Median Diameter (um)	Mortality					
Mean	S.D.	Range			# deaths/day post exposure)					
								Total		
51	4.3	42- 56	97	2.1	0	0	0	0	0	0/6
99	18	68-120	98	2.0	0	0	0	1	1	2/6
280	25	240-310	98	2.0	0	0	4	0	1	5/6

^a Represents active ingredient concentration (water and volatiles excluded).

^b Percent by weight of particles with aerodynamic diameter less than 10 um.

B. Clinical Observations

During or immediately following exposure, rats exposed to 99 and 280 mg/m³ had red nasal discharge.

During the recovery period, surviving rats in all groups had slight weight loss (less than 5%) for up to 5 days post exposure. Some rats in all groups had rapid breathing and/or red nasal discharge. Some rats exposed to 280 mg/m³ had red facial discharges and diarrhea. The majority of clinical signs were observed 2-5 days after exposure. All other clinical signs were incidental and non-dose-dependent.

CONCLUSION

Under the conditions of this study, the inhalation ALC for Finish SFX-407 formulated without MPD-5737D was 99 mg/m³ of particulate. This material is considered highly toxic by inhalation (ALC between 80 and 200 mg/m³). MPD-5737D does not appear to be causing the high toxicity of Finish SFX-407.

¹ Calculation described in Sierra Instruments, Inc., Bulletin 7-79-219IM, Instruction Manual: Series 210 Ambient Cascade Impactors and Cyclone Preseparators.

Acknowledgement: Bruce A. Burgess also participated in this study.

Work by:

Mark A. Hartsky
Mark A. Hartsky
Technician

Report by:

John W. Sarver
John W. Sarver
Supervisor, Chronic Investigations

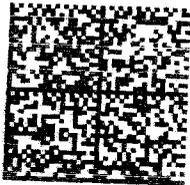
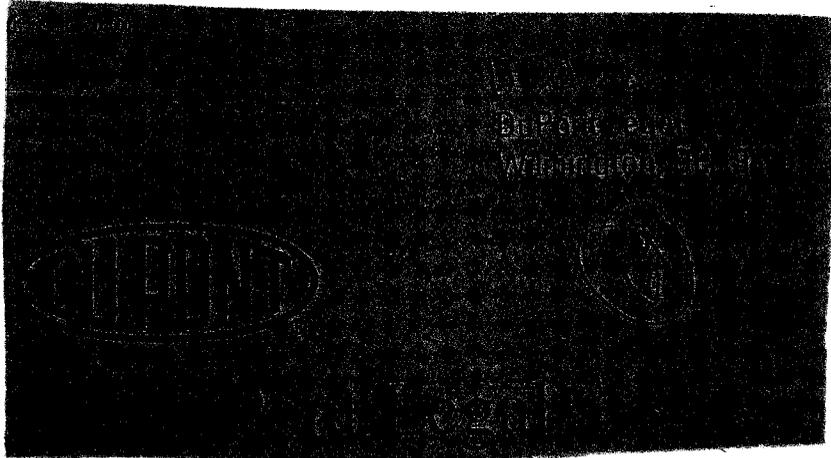
Study Director:

Laura A. Kinney 1/31/85
Laura A. Kinney
Chemist

Approved by:

Nancy C. Chromey 1/31/85
Nancy C. Chromey Ph.D.
Section Supervisor
Acute Investigations

LAK:sgl:8.10
Date Issued: January 31, 1985
Study Initiated/Completed: 5/22/84-6/18/84
Notebook E-35881, pp. 54-81
Haskell Laboratory Report No. 44-85
Number of pages in this report: 4



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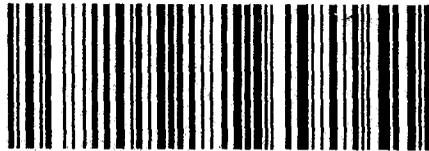
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