

ORIGINAL

TSCA NON-CONFIDENTIAL BUSINESS INFORMATION

DOCUMENT DESCRIPTION	DOCUMENT CONTROL NUMBER	DATE RECEIVED
8EHQ-92-12379	89110000124	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 # 333419

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

RECEIVED
EPA/PPPT/CPI/C
11 FEB 24 PM 1:02

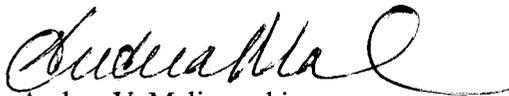
Re: Declassification Activity-TSCA §8(e) Submission
8EHQ Number: 8EHQ-1092-12379s
BarCode: 88920010588
Supplemental Submission - Revised Public Copy of Submission

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 285-85



CONTAINS NO CBI

Attachment

8EHQ Number: 8EHQ-1092-12379s

BarCode: 88920010588

Test Substance identified in EPA Index – Mixture of:

<u>CAS Number</u>	<u>Chemical Name</u>
00-00-0	PERFLUOROALKYL CARBAMATE
000-00-0	LAURYL TRIMETHYL AMMONIUM CHLORIDE
0000-00-0	PERFLUOROALKYL ETHOXYLATE
105-60-2	CAPROLACTAM
25155-30-0	SODIUM DODECYL BENZENE SULFONATE
7732-18-5	WATER
9082-00-2	OLEATE CAPPED CASTOR OIL
96-24-2	CONTAMINANT 3-CHLORO-1, 2-PROPANEDIOL

Revised Public Copy
Originally Assigned 8EHQ Number: 8EHQ-1092-12379s
Company Sanitized - No CBI

FOR DU PONT USE ONLY

Approximate Lethal Concentration by Inhalation (ALC) of
Finish K-5855

Haskell Laboratory Report No. 285-85

MR No. 7272-002

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

Date Issued: May 31, 1985

CONTAINS NO CBI

~~Company Sanitized~~
18

Approximate Lethal Concentration by Inhalation (ALC) of
Finish K-5855

SUMMARY

Groups of 6 male Crl:CD®(SD)BR rats were exposed to aerosol atmospheres of Finish K-5855 for a single, 4-hour period. Under the conditions of this test, the ALC for Finish K-5855 was 80 mg/m³. This material is considered extremely toxic by inhalation.

Work by: L. A. Kinney in G. L. Poindexter / 5/28/85
Gregory L. Poindexter
Technician

Thomas A. Kegelman 5/28/85
Thomas A. Kegelman
Technician

Study Director: Laura A. Kinney, 5/28/85
Laura A. Kinney
Chemist

Approved by: Nancy C. Chromey 5/31/85
Nancy C. Chromey, Ph.D.
Section Supervisor,
Acute Investigations

TAK:LAK:smk:HLR9.11

Haskell Laboratory report No. 285-85

MR No. 7272-002

Haskell No. 15,752

Material Tested: Finish K-5855

Sponsor: Textile Fibers Department
E. I. du Pont de Nemours and Company
Wilmington, Delaware

Material Submitted By: Nirmal K. Agarwal
Textile Fibers Department
E. I. du Pont de Nemours and Company
Seaford, Delaware

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

Study Initiated/Completed: 3/14/85 - 4/8/85

Notebook E-38772, pp. 86-125

There are 7 pages in this report.

Distribution:

M. D. Marder	(4)
W. A. Fintel	(1)
N. K. Agarwal	(1)
H. C. Chromey	(1)
L. A. Kinney	(1)
T. A. Kegeleman	(1)

INTRODUCTION

The purpose of this study was to determine a 4-hour inhalation ALC for Finish K-5855 in male rats. The ALC was defined as the lowest atmospheric concentration tested that caused the death of 1 or more rats either on the day of exposure or within 14 days post exposure. Except as documented in the study records, this study was conducted according to the applicable Good Laboratory Practice Regulations.

MATERIALS AND METHODS

A. Animal Husbandry

Young adult male Crl: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 pairs in 8" x 14" x 8" suspended, stainless steel, wire-mesh cages. The rat assigned the lower number in each cage was identified by a slash in the right ear. Prior to exposure, 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 239 and 273 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 a aerosol atmosphere of Finish K-5855 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 and holidays excluded except when deemed necessary by the rats' condition.

C. Test Material

Physical Form: Liquid
Composition: An aqueous emulsion containing 18.85% total solids at pH 5.5 ± 0.2. The emulsion is made by mixing the following in water:
13.00% Synlube® 6277A
3.25% MPD-5905A (Lot# 1) fluorochemical
1.625% Zonyl®FSO
0.975% Caprolactam

Other Codes: K-5855
Stability: The test material was assumed to be stable throughout the test.

D. Atmosphere Generation

Aerosol atmospheres of Finish K-5855 were generated by pumping the test material into a Spraying System nebulizer. High pressure air introduced at the nebulizer aerosolized the test material, and carried the aerosol particles directly into a size-reducing glass cyclone. The cyclone removed large particles by impaction, while aerodynamic particles passed through the cyclone and into the exposure chamber.

E. Analytical

The atmospheric concentration of Finish K-5855 was determined at approximately 30-minute intervals by drawing calibrated volumes of chamber atmosphere through pre-weighed Gelman glass fiber filters. Filters were weighed on a Cahn 26 Automatic Electrobalance®. The atmospheric concentration of particulate was determined by the filter weight differential before and after sampling.

Particle size (mass median aerodynamic diameter and percent respirable) were determined with a Sierra model 210 cascade impactor during most exposures. During each exposure, chamber temperature was measured with a mercury thermometer, relative humidity was measured with a Bendix Model 566 psychrometer, and chamber oxygen content was measured with a BioMarine model 225 oxygen analyzer.

F. Records Retention

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

RESULTSA. Exposure Conditions and Associated Mortality

Chamber temperature ranged between 22-24°C, relative humidity ranged from 25-39%, and chamber oxygen content was 21%. Atmospheric characterization and mortality data are summarized below.

Characterization of Finish K-5585 Atmospheres
and Associated Rat Mortality

Particulate ^a Concentration (mg/m ³)			% Respirable ^b	MMD(um) ^c	Mortality (# deaths/# exposed)
Mean	S.D.	Range			
22	8.5	12 - 36	97	1.8	0/6
53	8.8	40 - 66	99	1.6	0/6
80	9.4	68 - 94	97	1.3	1/6
110	24	82 - 164	98	1.6	5/6
550	64	430 - 640	-	-	6/6

^a Represents the active ingredient concentration only (water excluded).

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

^c Mass median aerodynamic diameter.

B. Clinical Observations

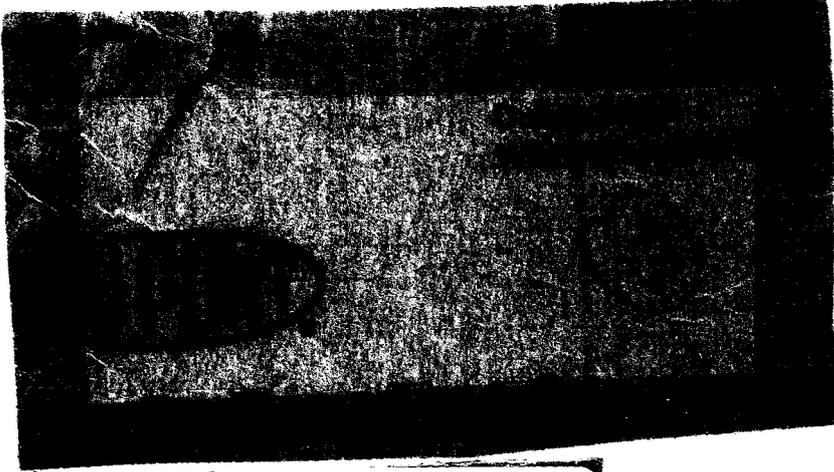
During or immediately following exposure, some rats in all groups had red nasal discharge. Rats exposed to 110 mg/m³ and rats exposed to 550 mg/m³ had slightly labored breathing and a diminished startle response. At 110 mg/m³, 1 rat died during exposure, and at 550 mg/m³, 6 rats died during exposure.

During the postexposure period, surviving rats from all groups had minimal weight loss one day after exposure, followed by normal weight gain. One rat exposed to 80 mg/m³ lost 10% of initial body weight 1 day after exposure, and was found dead 2 days after exposure. At 110 mg/m³, 4 rats died 1 day after exposure. One rat exposed to 80 mg/m³ had slight diarrhea 1 day after exposure and slight lung noise on the 3rd day after exposure. No other adverse clinical signs were observed during the postexposure period.

CONCLUSION

Under the conditions of this study, the ALC for Finsh K-5855 was 80 mg/m³. This material is considered extremely toxic by inhalation (ALC less than 80 mg/m³).

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



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



IC

To: Document Control

Mailstop: 7407M

Department:

Mailcode:

PKG Condition

US POSTAL



70051820000423648626