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E. I. du Pont de Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine
Elkton Road, Newark, Delaware 19711

HASKELL LABORATORY REPORT NO. 295-81 [REDACTED]

Material Tested
Octanoic acid, pentadecafluoro-,
ammonium salt*

Haskell No.
12,037

Other Codes
[REDACTED]

Study Initiated/Completed
5/20/80 - 6/17/80

Material Submitted by
[REDACTED]
CR&D Department
Haskell Laboratory

ORAL LD50 TEST IN RATS

Procedure: The test material, as a suspension in corn oil, was administered by intragastric intubation in single doses to 6 groups of male and 6 groups of female young adult Crl:CD® rats, 10 per group. The surviving rats were weighed and observed during a 14-day recovery period and then sacrificed. The LD50 value was calculated from the mortality data using the method of D. J. Finney.**

Results:

<u>Males</u>					
<u>Dose</u> <u>(mg/kg)</u>	<u>Average Bod -</u> <u>Weight (g)</u>	<u>Suspension</u> <u>(%)</u>	<u>Average</u> <u>Dose (mL)</u>	<u>Mortality</u> <u>Ratio</u>	<u>LD50***</u>
1,000	264	10	2.64	10/10	470 mg/kg
670	252	10	1.69	9/10	
500	253	10	1.27	6/10	
450	241	10	1.09	4/10	
400	257	5	2.05	3/10	
200	247	1	4.93	2/10	

Results:

<u>Females</u> <u>Dose</u> <u>(mg/kg)</u>	<u>Average Body</u> <u>Weight (g)</u>	<u>Suspension</u> <u>(%)</u>	<u>Average</u> <u>Dose (mL)</u>	<u>Mortality</u> <u>Ratio</u>	<u>LD50***</u>
1,000	189	10	1.89	10/10	482 mg/kg
670	182	10	1.22	9/10	
500	195	5	1.95	7/10	
450	212	5	1.91	5/10	
400	197	5	1.57	0/10	
200	228	1	4.56	0/10	

Clinical Signs:

Males: Stained and/or wet perineal area, weakness and weight loss at all levels tested.

Chromodacryorrhea at 1,000 and 500 mg/kg.

Stained face at 1,000, 670, 500 and 450 mg/kg.

Moribundity, eyes half-closed and gasping at 670 mg/kg.

Humped posture at 500 mg/kg.

All deaths occurred within 4 days after dosing.

Females: Stained and wet perineal area and weight loss at all levels tested.

Stained face at all levels tested except 200 mg/kg.

Weakness at 1,000, 670, 450, and 400 mg/kg.

Chromodacryorrhea, eyes half-closed and ataxia at 670 mg/kg.

Humped posture at 670 and 450 mg/kg.

Alopecia at 400 mg/kg.

All deaths occurred within 3 days after dosing.

Summary: Ammonium perfluorooctanoate is moderately toxic when administered orally to young adult CrI:CD® male and female rats; its LD50 for males is 470 mg/kg and females is 482 mg/kg of body weight. Clinical signs for males and females included: stained and wet perineal area, stained face, weakness, chromodacryorrhea, and weight loss. All deaths occurred within 4 days after dosing.

* Synonyms: [REDACTED]

o C-8

o Ammonium perfluorooctanoate

Purity: [REDACTED]

Contaminants: [REDACTED]

CAS Registry No.: [REDACTED]

** Finney, D. J., Probit Analysis, 3rd Ed., 1971, Cambridge University Press.

*** 95% Confidence Limits:

Males

Lower: 403 mg/kg
Upper: 536 mg/kg
Slope: 8.6

Females

Lower: 438 mg/kg
Upper: 541 mg/kg
Slope: 12.3

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