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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. 329-81 [REDACTED]

Material Tested
Octanoic acid, pentadecafluoro-,
ammonium salt*

Haskell No.
12,037

Other Codes
C-8

Study Initiated/Completed
5/20/81 - 6/17/81

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

ORAL LD50 TEST IN MICE

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 CDO-1 mice, 10 per group. The surviving mice 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:

Males

<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>
4,000†	38	15	1.01	10/10	457 mg/kg
2,000†	38	10	0.76	10/10	
1,000	38	4	0.95	10/10	
750	31	3	0.76	10/10	
500	36	2	0.89	4/10	
250	30	1	0.75	1/10	

Results:

<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>
Females:					
4,000†	35	15	0.94	10/10	457 mg/kg
2,000†	34	10	0.67	10/10	
1,000	33	4	0.82	10/10	
750	25	3	0.62	10/10	
500	33	2	0.82	4/10	
250	24	1	0.60	1/10	

Clinical Signs:

Males: Stained and/or wet perineal area, weakness and weight loss in all surviving mice, eyes half closed at 1,000 and 250 mg/kg. Ruffled fur at 250 and 500 mg/kg. Ataxia at 1000, 500 and 250 mg/kg. Tremors at 500 and 750 mg/kg. All deaths occurred within 6 days after dosing.

Females: Stained and/or wet perineal area, weakness and weight loss in all surviving mice. Eyes half closed, stained face and tremors at 750 mg/kg. Ataxia at 500 mg/kg. Ruffled fur at 750 and 250 mg/kg. All deaths occurred within 7 days after dosing.

Summary: Ammonium perfluorooctanoate is moderately toxic when administered orally to young adult CD-1 male and female mice; its LD50 for males and females is 457 mg/kg of body weight. Clinical signs included: stained and/or wet perineal area, ataxia, tremors, weakness, ruffled fur, eyes half-closed and weight loss. All deaths occurred within 7 days after dosing.

* Synonyms: o Ammonium perfluorooctanoate

{
o C-8
}

Purity: { }

Contaminants: { }

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

*** 95% Confidence Limits:

Males:
Lower: 344 mg/kg
Upper: 560 mg/kg
Slope: 6.6

Females:
Lower: 344 mg/kg
Upper: 560 mg/kg
Slope: 6.6

† 4000 and 2000 mg/kg dose levels male and female were not calculated in LD50 data due to limitations of computer.

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