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E. I. du Pont de Nemours and Company
Haskell Laboratory for Toxicology and Industrial Medicine

HASKELL LABORATORY REPORT NO. 246-71 [REDACTED]

Material Tested: [REDACTED]

Haskell No.: 6919

Material Submitted by: [REDACTED]

Organic Chemicals Department
Jackson Laboratory

Other Codes: [REDACTED]

ACUTE ORAL TEST

Procedure: The test material, as an aqueous suspension, was administered by intragastric intubation to young adult CD-1 male rats in single doses. Survivors were sacrificed 14 days later; the livers were removed for gravimetric analysis.

Results:

Suspension (%)	Dose (mg/kg)	Mortality*	Weight When Killed (g)		L.W./B.W. X 100	Clinical Signs	ALD
			Body	Liver			
25	17,000†	S - 14 d.	332	17.50	5.3	None	> 17,000 mg/kg
25	11,000†	S - 14 d.	321	17.85	5.6		
25	7,500†	S - 14 d.	347	19.00	5.5		
25	5,000	S - 14 d.	346	17.40	5.0		
25	3,400	S - 14 d.	346	17.38	5.0		
12	2,250	S - 14 d.	320	15.20	4.8		
12	670	S - 14 d.	349	17.00	4.9		

* S - () d. = Sacrificed () days after dosing

† Administered in divided doses

TEN-DOSE ORAL SUBACUTE TEST

Procedure: The test material was administered by intragastric intubation, as a 15% aqueous suspension, to six young adult ChR-CD male rats, five times a week for two weeks; in addition, six rats served as controls and were intubated with corn oil. Three test and three control rats were sacrificed four hours and 14 days after the last dose.

Results:

Dose (mg/kg/day)	Mortality	Weight of Liver (g)		L/W./B.W. X 100		Gross Pathology* on Liver		Histopathology* on Liver	
		Animals Killed:		Animals Killed:		Animals Killed:		Animals Killed:	
		After 10th Dose	14 Days After 10th Dose	After 10th Dose	14 Days After 10th Dose	After 10th Dose	14 Days After 10th Dose	After 10th Dose	14 Days After 10th Dose
2200	0/6	22.2	20.6	7.4	5.2	1	1	B	B
		23.5	17.6	7.7	4.6	1	-	B	B
		25.2	21.6	8.4	5.1	1	1	B	B
0 (Control)	0/6	12.5	13.5	4.1	3.5	-	-	-	-
		14.8	14.7	4.8	4.1	-	-	-	-
		14.2	19.8	4.6	4.1	-	-	-	-

In addition, the following tissues were examined histologically: kidney, testis, epididymis, lung, trachea, brain, eyes, stomach, duodenum, thymus, spleen, bone marrow, pancreas, and adrenal; no compound-related changes were noted in any of these organs.

* Gross and histopathologic code

- = No abnormality detected
- 1 = Large and heavy
- B = Reduction in number of centrilobular cytoplasmic vesicles

Summary: [REDACTED] has low acute toxicity for the male rat when administered orally in single doses, its Approximate Lethal Dose (ALD) being greater than 17,000 mg/kg of body weight; single doses of 7500 mg/kg and above caused large livers 14 days after dosing.

Given at a repeated dose rate of 2200 mg/kg/day for a total of ten days over a two-week period, the test compound caused gross and gravimetric evidence of liver enlargement; histologically, there was a reduction in the number of centrilobular cytoplasmic vesicles. These changes were apparently not reversible after the 14 day-recovery period.

An evaluation of the results reported here and in [REDACTED] appears to indicate that listing of the three compounds in order of increasing toxicity is as follows:
[REDACTED]

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[REDACTED]
LSW:pgh

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