



FC-128

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Project Number - 77-1108A

Submitted to:

3M Company
3M Center
St. Paul, Minnesota
55101

Material:

3M Company - T-1983CoC

Sample Received:

11/2/77 Study Initiated: 11/18/77 Study Completed: 12/15/77

Date of Report:

1/5/78

Test:

Acute Oral Toxicity - Rats

Object of Test:

To study the acute oral toxicity in rats of the subject material.

Procedure:

Four groups of 5 male & 5 female albino rats of the Sherman-Wistar Strain weighing between 200 and 300 gm were employed in this study. The rats were deprived of food but not water for 24 hours prior to dosing. Each animal was weighed and dosed by direct administration of the experimental material into the stomach by means of a syringe and dosing needle.

The sample was dosed as a 50% w/v suspension in water.

The following dosage levels were administered:

1.25 ml/kg.
2.50 ml/kg.
5.0 ml/kg.
10.0 ml/kg.

Following administration the animals were allowed food and water ad libitum for the 14 day observation period during which time the rats were observed for signs of toxicity and mortalities.

Results:

See Table 1.

Conclusion:

The subject material when studied in male and female albino rats has an acute oral LD50 of approximately 2.5 ml/kg of a 50% w/v suspension in water or 1.25 gm/kg. of the original sample.

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Director

TABLE 1
Acute Oral Toxicity

Material: 3M Company - T-1983CoC, as a 50% w/v suspension in water.

Dosage Level ml/kg	Number of Animals Dosed	Mortalities Days														Total Dead 14 Days	Total Survived 14 Days	Initial Weight gm	Final Weight gm
		1	2	3	4	5	6	7	8	9	10	11	12	13	14				
1.25	5 males	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	230	260
1.25	5 females	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	250	275
2.50	5 males	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	3	250	215
2.50	5 females	0	2	0	0	0	0	0	0	1	0	0	0	0	0	3	2	240	220
5.0	5 males	5	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0	235	-
5.0	5 females	4	1	-	-	-	-	-	-	-	-	-	-	-	-	5	0	250	-
10.0	5 males	5	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0	240	-
10.0	5 females	5	-	-	-	-	-	-	-	-	-	-	-	-	-	5	0	265	-

The LD₅₀ is approximately 2.5 ml/kg. of a 50% w/v suspension in water
or 1.25 gm/kg. of the original sample.

At 1.25 ml/kg. (0.625 gm/kg.) the animals were slightly lethargic for 24 hours and then appeared normal. At 2.5 ml/kg. (1.25 gm/kg.) the animals were depressed after 2 hours and did not regain normalcy throughout the observation period. Some deaths occurred as noted and the survivors were dehydrated and had lost weight. At 5.0 ml/kg. and 10.0 ml/kg. (2.5 gm/kg. & 5.0 gm/kg.) the animals were severely depressed after 30 minutes and comatose within 2 hours. Gross pathologic examination revealed nothing remarkable.