DATA EVALUATION REPORT

Citation:

Acute Oral Toxicity of Trifluralin (HOE 38474 OH AT 204) to the Male Rat, Dr. Hollander, Dr. Weigand, Pharma Forschung Toxicologie, Hoechst, Frankfurt, Germany, November 8, 1979, Report No. 706/79.

Materials:

Test Material: HOE 38474 OH AT204, a red-orange crystalline substance 25 percent solution in sesame oil. The purity of the substance was not given.

Animals: Male Wistar rats (strain HOE WISKf SPF71) from Hoescht breeding stock, weighing 174 - 202 g.

Methods:

The animals were allowed Altromin 1324 diet and tap water. The animals were fasted for 16 hr. prior to dosing and for an additional two hours post dosing. Ten rats (5 of each sex) per dosage group (1250, 1600, 2000, 3150, and 5000 mg/kg given in a single dose by gavage) were observed for 14 days.

The signs of toxicity, mortality rate, and time of death were recorded. The animals were weighed weekly. The animals that died on test were discarded after macroscopic examination.

The LD_{50} was determined by probit analysis.

Results:

As tabulated in the report the results are as follows:

Dose mg/kg	%trifluralin solution	Mortalities/No. of Animals
1250	25	0/10
1600	25	1/10
2000	25	6/10
3150	25	10/10
5000	25	10/10

Symptoms:

The mortalities occurred within 1 to 3 days of treatment with the following symptoms: motor unrest, squatting position, bristled hair, loss of equilibrium, trembling, Dalrymple's sign, mydriasis, exophthalmos, and increased lacrimation. The survivors at 48 hours had no clinical symptoms, at 48 hours after treatment. For the remainder of the 14 day survival period the behavior and body weight changes were found to be as expected for untre animals.

Macroscopic pathology of the mortalities revealed some translucence of the liver and spleen, discernible markings of the lobules of the liver, orange to yellow discoloration of fat in the abdomen, gastrointestinal tract filled with an orange substance, and blood red excretions from mouth and nose.

Conclusion:

The oral median LD_{50} for the male rat was 1930 mg/kg (p = 0.05, 1750 - 2380 mg/kg).

Toxicity Category: III

Classification: Core Minimum

Reviewed by: Stephanie P. April, Ph.D. Stephanie P April

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Date: