12-16-82

CASE GS0097 CHLOROTHALONIL PM 400 ~~08/03/82~~

CHEM 081901 Chlorothalonil (tetrachloroisophthalon

BRANCH EEB DISC 40 TOPIC 05100542

FORMULATION 00 = ACTIVE INGREDIENT

FICHE/MASTER ID 00030389 CONTENT CAT 01

Shults, S.K.; Killeen, J.C., Jr.; Heilman, R.D. (1979) Chlorothalonil (Technical) Eight-Day Dietary (LC=50) Study in Mallard Ducks. (Unpublished study received Feb 19, 1980 under 677-313; prepared in cooperation with Wildlife International, Ltd., submitted by Diamond Shamrock Agricultural Chemicals, Cleveland, Ohio; CDL:099247-B)

SUBST. CLASS = S.

DIRECT RVW TIME = (MH) START-DATE END DATE

REVIEWED BY:
TITLE: Daniel Rieder
ORG: Wildlife Biologist
LOC/TEL: EEB/HED
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SIGNATURE: Daniel Rieder DATE: 12/16/82

APPROVED BY:
TITLE:
ORG:
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SIGNATURE: DATE:

DATA EVALUATION SHEET

1. CHEMICAL: Bravo 500

2. FORMULATION: Chlorothalonil

3. CITATION

Fink, Robert, 1979. Chlorothalonil Eight-day Dietary Acute Toxicity Test on Mallard Duck. An unpublished report prepared by Wildlife International Ltd. for Diamond Shamrock Chemical Company. (Accession Number 099247).

4. REVIEWED BY: Daniel Rieder
Wildlife Biologist
EEB/HED

5. DATE REVIEWED: March 6, 1980

6. TEST TYPE: Eight-day Dietary Acute Toxicity

A. Test Species: Mallard Ducks

B. Test Material: Chlorothalonil (96%)

7. REPORTED RESULTS

No LC_{50} was calculated. Two mortalities occurred at intermediate dosage level, these were considered accidental and not compound related. No other mortalities occurred.

8. REVIEWERS CONCLUSION

A. Validation Category: Core

B. Discussion

The acute eight-day dietary LC_{50} for chlorothalonil was estimated to be higher than 10,000 ppm. Therefore it is considered practically non-toxic to mallard ducks. This study was scientifically conducted and meets the requirements in the EPA proposed guidelines.

METHODS/RESULTS

A. Test Procedure

Protocol essentially followed EPA proposed guidelines of July 10, 1978. 14-day old birds were used. Fifty birds were used for the control. Five levels of concentration were used; 1000, 1780, 3160, 5620 and 10,000 ppm. Two sets of ten birds each were tested at each control level simultaneously. Body weights and food consumption were recorded but not provided in the report.

B. Statistical Analysis

No LC_{50} was calculated as there was no mortalities in the higher concentration levels.

C. Discussion/Results

Two birds died at the 1,000 ppm concentration level. These deaths were not considered compound related. Other than that all test birds appeared normal through the test period.

REVIEWERS EVALUATION

A. Test Procedure

The test fulfilled most requirements for the EPA proposed guidelines. Adequate numbers of birds were tested, and they were the proper age. However the report failed to indicate the dates of the test, body weights of test organisms, relative humidity and lighting conditions of the housing pens, and total food consumption. However it did indicate the decrease in body weight at the 10,000 ppm concentration level was slight.

B. Statistical Analysis

No LC_{50} was calculated as there were no compound related deaths.

C. Discussion:

The two deaths that occurred at the 1,000 ppm concentration level were probably accidental, the other deficiencies are considered minor.

D. Validation

1. Category: Core

2. Rationale

Failure to report such things as the dates of testing, and specific body weights when general and minimal weight increases or decreases are reported, would not disqualify this test.

3. Repairability: N/A