8-27-85

(TDR83R) DATA EVALUATION RECORD PAGE 1 OF

CASE GS0326 TELONE PM PM# 05/18/84

CHEM 029001 1,3-Dichloropropene

BRANCH EEB DISC 40 TOPIC 05050542

FORMULATION 16 - SOLUTION-READY TO USE

FICHE/MASTER ID 00119181 CONTENT CAT 01

Ross, D.; Cameron, M.; Roberts, N. (1977) The Acute Oral Toxicity (LD50) of Vorlex to the Mallard Duck According to E.P.A. Guidelines: SHG 135-WL/77331. (Unpublished study received Nov 29, 1977 under 2139-55; prepared by Huntingdon Research Centre, Eng., submitted by Nor-Am Agricultural Products, Inc., Naperville, IL; CDL:232346-B)

SUBST. CLASS = M; OTHER CHEMS: 068103

DIRECT RVW TIME = 4 hrs (MH) START-DATE 8/6/85 END DATE 8/6/85

REVIEWED BY: XX Richard R. Stevens
TITLE: Biologist
ORG: EEB/HED
LOC/TEL:

SIGNATURE: DATE: 8/7/85

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE: 8/27/85

DATA EVALUATION RECORD

1. Chemical: 1,3-Dichloropropene

2. Formulation: Vorlex (unknown % active ingredient)

3. Study Type: Avian Acute Oral LD_{50}
Mallard Duck (Anas platyrhynchos)

4. Citation: Ross, D.; Cameron, M.; Roberts, N. (1977) The Acute Oral Toxicity (LD_{50}) of Vorlex to the Mallard Duck According to E.P.A. Guidelines: SHG 135-WL/77331. (Unpublished study received November 29, 1977, under 2139-55; prepared by Huntingdon Research Centre, Eng., submitted by Nor-Am Agricultural Products, Inc., Naperville, IL; CDL:232346-B) (00119181).

5. Reviewed by: Richard R. Stevens
Biologist
EEB/HED
Signature:
Date: 8/23/85

6. Approved by: Harry Craven
Head, Section IV
EEB/HED
Signature:
Date:

7. Conclusions:

This study, as reported, is not scientifically sound. The percent active ingredient of the test material is not specified. Also, many details concerning experimental methodology were not reported. With an LD_{50} of 382 (297-492) mg/kg, vorlex is moderately toxic to waterfowl.

8. Recommendations:

N/A

9. Materials and Methods:

a. Test Animals - Mallard ducks (Anas platyrhynchos) from Lincolnshire Pheasantries Ltd.

b. Dose - Five birds of each sex per dose level (0, 87, 158, 259, 347, 401, 633 and 877 mg/kg).

c. Statistics - Litchfield and Wilcoxon (1949).

10. Reported Results:

The study authors found that the acute oral LD_{50} was 382 (297-492) mg/kg.

All ducks vomited within 5 minutes after dosing. Before death the birds lay prostrate, wings paddling, necks arched backwards over their bodies and frequent muscular spasms occurred.

Surviving birds recovered in 2 to 4 days and appeared to remain in good health through termination of the study.

The majority of birds lost weight during the first week after dosing, including controls.

11. Reviewer's Discussion of Study:

a. Test Procedures - Many details were not reported.

b. Statistical Analysis - EEB did not recompute results.

c. Discussion of Results - With an acute oral LD_{50} of 382 (297-492), mg/kg vorlex is moderately toxic to mallards. Since the ducks vomited shortly after dosing the amount of the dose remaining was not known. The LD_{50} is based on administered doses.

Control birds lost approximately 90 g (group mean body weight change). No explanation was given for this.

d. Adequacy of Study -

Validation Category: Invalid.

Rationale: 1. Percent active ingredient not known.

2. Incomplete reporting of methodology.

Repairability: If the above can be supplied, the study will be reevaluated and possibly upgraded.