 9/28/82

CASE GS0102 NALED PM 110 12/22/81

CHEM 034401 Naled (1,2-dibromo-2,2-dichloroethyl d

BRANCH EEB DISC 40 TOPIC 51 3543 GUIDELINE 40 CFR 163.72-6

FORMULATION 90 - FORMULATION NOT IDENTIFIED

FICHE/MASTER ID 00074678 CONTENT CAT 01

Tyler, R.H.; Lunz, G.R.; Hoarigon, C.; et al. (1967) Product Performance Report: Dibrom 14 Concentrate. (Unpublished study received Jul 31, 1967 under unknown admin. no.; prepared in cooperation with Bear's Bluff Marine Laboratory, submitted by Chevron Chemical Co., Richmond, Calif.; CDL:126644-A)

SUBST. CLASS = S.

OTHER SUBJECT DESCRIPTORS
SEC: EEB -4 - 51 3547

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

REVIEWED BY: Kyle Barbehenn
TITLE: Wildlife Biologist
ORG: HED-EEB
LOC/TEL: CM2-1121 / 557-1121

SIGNATURE: Kyle Barbehenn DATE: 2 Feb 82

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE:

BEST AVAILABLE COPY

DATA EVALUATION RECORD

1. Chemical: Naled

2. Formulation: Dibrom 14

3. Citation: Tyler, B.H., R.G. Lunz et. al. 1967. Product performance report: Dibrom 14 concentrate. (Unpubl. study received July 31, 1967 under unknown administration No.; prepared in cooperation with Bear's Bluff Marine Laboratory, submitted by Chevron Chemical Co., Richmond, Calif.; CDL: 128644-A). I.D.# 00074678

4. Reviewed by: Kyle Barbehenn, Wildlife Biologist
Ecological Effects Branch
Hazard Evaluation Division (TS-769)

5. Date Reviewed: September 28, 1982

6. Test type: Aquatic Field Study

7. Reported Results: Dibrom ULV aerial application and ground fogging in tidal salt marshes was not toxic to shrimp, crabs or killifish.

8. Reviewer's Conclusion: Information provided does not permit one to fully evaluate this study. This study does not fulfill any guideline data requirements for naled.

METHODS/MATERIALS

A. Test Procedures

Test Animals: Penaeus aztecus, P. setiferus, Palaemonetes ugio (shrimp), killifish (Fundulus heteroclitus), and Blue Crab (Callinectes sapidus)

Test Location: Bear's Bluff Marine Laboratory, Wadmalaw Island, S.C.

Procedure: Shrimp (sub-adults, post larval and adults), Killifish, and Blue Crab (juveniles) were treated with DIBROM 14 Concentrate applied ULV by air and by ground fog. Rates for ULV were 1 and 2 fl. oz./A and the fogging rate was 1 ft. oz./gal. diesel oil. Tests were made at high and low tide with test animals kept in the test area for 1 hour after treatment. They were then returned and held in laboratory ponds for observations. All specimens were handled 4 times during the test. Mortalities were determined by Abbott's Formula.

Application Dates: 3-28-67, 3-29-67, 4-13-67.

Statisical Analysis: None

Discussion/Results: No treatment related mortality was observed. Authors concluded that DIBROM ULV aerial applications or ground fogging applictions in tidal salt marsh breeding areas are not toxic to juvenile white shrimp, post larval brown shrimp, hard back shrimp adults, killifish, or blue crab. Of 228 animals exposed to DIBROM 14 spray, only 12 (5.37%) were lost, whereas 9 of 89 control specimens (10%) were lost over the observation period.

Reviewer's Evaluations:

A. Procedure. Method of exposing organisms was not indicated, precluding further evaluation. Limiting exposure to one hour after treatment reduces the validity of the test.

B. Statistical Analysis: N/A

C. Discussion/Results: The usefulness of these observations for risk assessment cannot be determined.

Conclusions:

Validation Category: Invalid

Category Rationale: Description of test methods is inadequate

Category Repairability: This test could be upgraded to Supplemental if further details were provided.