

US EPA ARCHIVE DOCUMENT

CASE GS0097

CHLOROTHALONIL

PM 400

5-6-83

08/03/82

CHEM 081901

Chlorothalonil (tetrachloroisophthalon

BRANCH EEM DISC 40 TOPIC 05103043

FORMULATION *Technical*

FICHE/MASTER ID RIOCHL07

CONTENT CAT

Ward, G. Scott, 1982, Acute Toxicity of T-117-11 (chlorothalonil) to sheepshead minnow (Cyprinodon variegatus). An unpublished study submitted to EPA by Diamond Shamrock. Data Acc # 071552.

SUBST. CLASS = 5.

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

REVIEWED BY:
TITLE: Daniel Rieder
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DATE: 5/6/83

APPROVED BY:
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DATE:

DATA EVALUATION SHEET

1. CHEMICAL: Chlorothalonil

2. FORMULATION: Technical

Shaughnessy Number: 081901

3. CITATION: Ward, G. Scott, 1982, Acute Toxicity of T-117-11 (chlorothalonil) to sheepshead minnow (Cyprinodon variegatus). An unpublished study submitted to EPA by Diamond Shamrock. Data Acc # 071552.

4. REVIEWER: Daniel Rieder
Wildlife Biologist
EEB/HED

5. REVIEW DATE: 5/6/83

6. TEST TYPE: 96 hour LC50 for marine fish

A. Species: Sheepshead minnow (Cyprinodon variegatus)

B. Material: Technical chlorothalonil

7. RESULTS: 96-hr LC50 = 32 ppb with 95% C.L. of 30-36 ppb

8. REVIEWERS CONCLUSION:

Category: Core

This study fulfills the guideline requirements for a marine/estuarine fish acute toxicity test. It shows that chlorothalonil is very highly toxic to fish.

METHODS

Twenty sheepshead minnows (3 to 7 days old) were tested in each of 5 concentrations (20, 30, 45, 65 and 90 ppb) and in a solvent control (acetone) and an untreated control. Test containers were 3.8 liter (containing 3 liters of natural filtered seawater) glass jars. Lighting was continuous, temperature was 21 to 22°C, do remained adequate throughout study. Loading factor was about 2 mg/liter.

The LC50 was calculated with the moving average angle analysis.

RESULTS

<u>Conc (ppb)</u>	<u>Number tested</u>	<u>Mortality %</u>
Control	20	0
Sol. Cont.	20	0
20	20	0
30	20	30
45	20	100
65	20	100
90	20	100

96 hr LC50 = 32 ppb with 95% CL of 30-36 ppb
Slope (probit method) = 0.08

CONCLUSION

Category: Core

Chlorothalonil is very highly toxic to marine/estuarine fish.