5-6-83

CASE GS0697 CHLOROTHALONIL PM 400 ~~08/03/82~~

CHEM 081901 Chlorothalonil (tetrachloroisophthalon

BRANCH EEB 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 An unpublished study submitted to EPA by Diamond Shamrock.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 = S.

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

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

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SIGNATURE: DATE:

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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 An unpublished study submitted to EPA by Diamond Shamrock.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

Conc (ppb)	Number tested	Mortality %
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.