CORE

TDMS ____ DATA EVALUATION RECORD PAGE ___ OF ___

CASE GS _____ PM ___ __/__/__

CHEM 083601 MRID 00125273

BRANCH EEB DISC. ____ TOPIC ____

FORMULATION __ - ACTIVE INGREDIENT TECHNICAL 97.3%

FICHE/MASTER ID TOXOTR06 CONTENT CAT ____

WILSON, B.F. ET AL. (1982) THE TOXICITY OF TRIPHENYLTIN HYDROXIDE (TPTH) TO FATHEAD MINNOW (PIMEPHALES PROMELAS) EMBRYOS AND LARVAE. UNPUBLISHED STUDY PREPARED BY EG&G, BIONOMICS FOR THOMPSON-HAYWARD AGRICULTURE & NUTRITION CO., INC.

SUBST. CLASS = ___

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

REVIEWED BY: LES TOUART
TITLE: FISHERIES BIOLOGIST
ORG: EEB/HED
LOC/TEL:

SIGNATURE: Les Touart DATE: 3/6/84

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE:

2027835

DATA EVALUATION RECORD

1. CHEMICAL: Triphenyltin hydroxide

2. FORMULATION: Technical (97.3%)

3. CITATION: Wilson, B.F., et al. (1982) The toxicity of triphenyltin hydroxide (TPTH) to fathead minnow (Pimephales promelas) embryos and larvae. Unpublished study prepared by EG&G, Bionomics for Thompson-Hayward Agriculture & Nutrition Co., Inc.

4. REVIEWED BY: Les Touart
Fisheries Biologist
EEB/HED

5. DATE REVIEWED: 5/6/83

6. TEST TYPE: Fish early life-stage toxicity study

A. TEST SPECIES: Fathead minnow

7. REPORTED RESULTS: The MATC OF TPTH for fathead minnow embryos and larvae was estimated to be >0.48 <1.1 µg/l.

8. REVIEWERS CONCLUSIONS: The study is scientifically sound and does fulfill the guidelines requirement for an acceptable fish early life stage toxicity study. The study indicates a NOEL of >0.48 µg/land a LEL <1.1 µg/l.

Materials/Methods

Test Procedures

The test methods are consistent with current EPA Guidelines for conducting a fish early life-stage toxicity study. Specifically: Age at initiation of study - embryos ≤ 48 hours after fertilization; duration - 30 days post-hatch; test vessels - glass aquaria, with 15 liters of solution; test design - flow through proportional diluter with syringe delivery; turnover - 6.4 replacements/day; number tested - 120 embryos/level, 80 larvae/level; temperature- 25°C; solvent- triethylene glycol.

Statistical Analysis

Not reported.

Discussion/Results

Based on the reduced growth of fathead minnow larvae exposed to a mean measured TPTH concentration of 1.1 µg/l, the MATC of this compound for the fathead minnow was estimated to be >0.48 <1.1 µg/l.

Mean Measured Concentration (µg/l)		%Hatch	30 day old larvae %Survival	Total length	Avg. Weight (mg)
4.3	A	95	0*	-	-
	B	97	0	-	-
2.0	A	97	2*	15*	30*
	B	98	0	-	-
1.1	A	98	95	22*	110*
	B	100	88	23	120
0.48	A	97	88	24	140
	B	98	100	24	120
0.30	A	98	92	24	130
	B	98	88	24	140
Solvent Control	A	100	88	24	150
	B	95	92	25	150
Control	A	98	85	24	140
	B	100	88	25	150

* Significantly (P=.05) different from control and solvent control.

Reviewer's Evaluation

A. Test Procedures

The test generally followed EPA recommended procedures.

B. Statistical Analysis

See attached

C. Discussion/Results

The data support the conclusions drawn

D. Conclusions

1. Category: Core
2. Ratinale: N/A
3. Repairability: N/A