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DATA EVALUATION RECORD

PAGE _____ OF _____

CASE GS _____

PM _____ / _____ / _____

CHEM 083601

MR10025273

BRANCH EEB DISC. _____ TOPIC _____FORMULATION _____ - ACTIVE INGREDIENT TECHNICAL
97.3%FICHE/MASTER 10 Touatrog CONTENT CAT _____

WILSON, B.F. ET AL. (1982) THE TOXICITY OF TRIPHENYLTIM 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 UNPUBLISHED STUDY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: _____

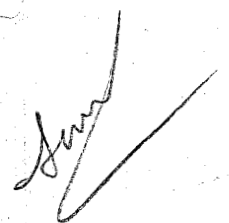
SIGNATURE: Les TouartDATE: 3/6/84

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: _____

DATE: _____

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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 Unpublished study prepared by EG&G, Bionomics for Thompson-Hayward Agriculture & Nutrition Co., Inc.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 TPH for fathead minnow embryos and larvae was estimated to be $>0.48 <1.1 \mu\text{g/l}$.
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 $>0.48 \mu\text{g/l}$ and a LEL $<1.1 \mu\text{g/l}$.

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.

<u>Mean Measured Concentration (µg/l)</u>		<u>%Hatch</u>	<u>30 day old larvae</u>		<u>Avg. Weight (mg)</u>
			<u>%Survival</u>	<u>Total length</u>	
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. Rationale: N/A
3. Repairability: N/A