

DP Barcode : D224636  
 PC Code No : 083601  
 EEB Out : JUN 25 1996

To: Jack Housenger  
 Product Manager 60  
 Special Review and Reregistration Division (7508W)

From: Anthony F. Maciorowski, Chief  
 Ecological Effects Branch/EFED (7507C)

Attached, please find the EEB review of...

Reg./File # :  
 Chemical Name : Triphenyltin hydroxide  
 Type Product : fungicide  
 Product Name :  
 Company Name :  
 Purpose : Review Agrevo response to fish life cycle review.

Action Code: 811  
 Reviewer: Dennis McLane

Date Due: 5/26/96

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1 (A)			72-2 (A)			72-7 (A)		
71-1 (B)			72-2 (B)			72-7 (B)		
71-2 (A)			72-3 (A)			122-1 (A)		
71-2 (B)			72-3 (B)			122-1 (B)		
71-3			72-3 (C)			122-2		
71-4 (A)			72-3 (D)			123-1 (A)		
71-4 (B)			72-3 (E)			123-1 (B)		
71-5 (A)			72-3 (F)			123-2		
71-5 (B)			72-4 (A)			124-1		
72-1 (A)			72-4 (B)			124-2		
72-1 (B)			72-5			141-1		
72-1 (C)			72-6			141-2		
72-1 (D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur  
 P=Partial (Study partially fulfilled Guideline but additional information is needed)  
 S=Supplemental (Study provided useful information but Guideline was not satisfied)  
 N=Unacceptable (Study was rejected)/Nonconcur

DP BARCODE: D224636

*EEBfiles*

CASE: 838542  
SUBMISSION: S502900

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 03/27/96  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: SPECIAL REVIEW ACTION: 811 RISKASSESSMENT  
CHEMICALS: ~~056801 Carbaryl~~ (ANSI) 100.00 %  
*TPTH*

ID#: ~~056801~~

COMPANY:

PRODUCT MANAGER: 60 JACK HOUSENGER 703-308-8010 ROOM: CS1 2H2  
PM TEAM REVIEWER: JACK HOUSENGER 703-308-8010 ROOM: CS1 2H2  
RECEIVED DATE: 03/20/96 DUE OUT DATE: 05/19/96

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 224636 EXPEDITE: N DATE SENT: 03/27/96 DATE RET.: / /

CHEMICAL: ~~056801 Carbaryl~~ (ANSI)

DP TYPE: 001 Submission Related Data Package

CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT	ADMIN DUE DATE: 05/26/96
DIV : EFED	<i>3 28 96</i>	/ /	NEGOT DATE: / /
BRAN: EEB	<i>3 12 96</i>	/ /	PROJ DATE: / /
SECT: RS1	/ /	JUN/25/1996	
REVR :	/ /	/ /	
CONTR:	/ /	/ /	

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Please review Agrevo response to EPA's review requiring a repeat of their fish life cycle study. Agrevo believes the study should be upgraded to core. If they are still to repeat the fish study, the due date is 9/30/97. TPTH will be moving to the RED queue soon, as most data are in and reviewed, including data needed to close out the Special Review. Dennis McLane did the original review. Review of this submission should be provided to Jude Andreasen in J. Housenger's branch.

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 25 1996

OFFICE OF  
PREVENTION, PESTICIDES, AND  
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: AgrEvo's March 19, 1996 Letter; Full Life-Cycle Toxicity of Triphenyltin Hydroxide (TPTH) Hoe 029664 to the Fathead Minnow (*Pimephales promelas*) Under Flow-Through Conditions, ABC Study #39443; HRAVC Study #91-0023; MRID No.:43490101; D224636.

FROM: Anthony Maciorowski, Chief *AM*  
Ecological Effects Branch *6/20/96*  
Environmental Fate and Effects Division (7507C)

TO: Jack Housenger, Product Manager 60,  
Special Review and Reregistration Division (7508W)

Attached to the subject letter was ABC Laboratories response which adequately addressed Ecological Effects Branch's (EEB) concerns with the exception of the NOEC determination. EEB believes that effects did occur at the lowest level tested (0.0654 ppb) for parental generation 84-day post hatch mean wet weight and mean percent survival of the F1 generation after 56 days of exposure (see figures 1 and 2 below). To insure that the risk assessment does not overlook a potential chronic risk, EFED defines the NOEC as the lowest concentration tested which does not show effects. Because effects were seen at 0.0654 ug/L lowest level and EFED believes retesting would not significantly change the NOEC from 0.0654 ug/L, the lowest level tested. EFED will agree that the study fulfills the guideline requirements based on, 0.0654 ppb, as the NOEC and 0.161 ppb as the LOEC.

Figure 1. TPTH Fathead Life-Cycle  
Parental 84 Day Wet Weights

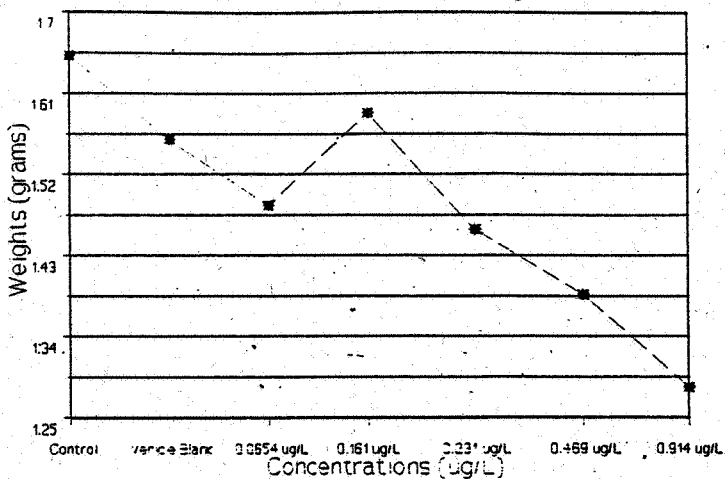
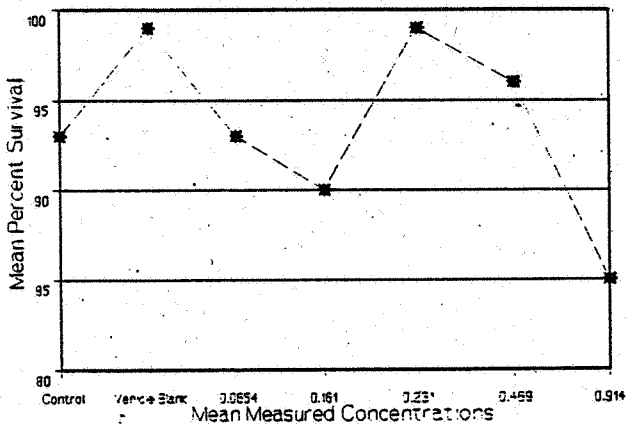


Figure 2: Mean Percent Survival of F1  
Fathead Minnows after 55 Days



Attached is the addendum to the Data Evaluation Record.

Please contact Dennis McLane of EEB if any further information is needed (305-5096).

DATA EVALUATION RECORD  
ADDENDUM  
FISH LIFE-CYCLE TOXICITY TEST  
GUIDELINE 72-5

1. CHEMICAL: TPTH Shaughnessey #: 083601
2. TEST MATERIAL: Triphenyltin Hydroxide Purity: 97.9%
3. CITATION:

Authors: Jon E. Rhodes  
Title: Full Life-Cycle Toxicity of Triphenyltin Hydroxide (TPTH) (HOE 029664 00 ZB99 0055 and HOE 029664 00 ZD97 0004) to the Fathead Minnow (Pimephales promelas) Under Flow-Through Conditions

Study Completion Date: 6/16/93  
Laboratory: ABC Laboratories, Inc.  
Laboratory Report ID: 39443  
Project ID Number: 91-0023  
Sponsor: AgrEvo USA, Company, Wilmington, Delaware  
MRID No.: 43490101

4. REVIEWED BY:

Dennis J. McLane, Wildlife Biologist EEB, EFED, U.S.EPA  
Signature: *D. J. McLane* Date: 6-25-96

5. APPROVED BY:

Les W. Touart, Section 1 Chief EEB, EFED, U.S.EPA  
Signature: *L. W. Touart* Date: 6-27-96

6. Study Parameters:

Test Species: Pimephales promelas  
Age or Weight:  $\leq$ 24 hours  
Duration of Test: 183 days  
Study Method: Flow-through  
Type of Concentration: measured conc.

7. CONCLUSIONS:

This study appears to be scientifically sound and fulfills guideline requirements. The 84 day parental generation weight was reduced at the lowest concentration (0.0654 ug/L). Survival, parental generation egg hatchability, and reproduction show no statistical difference from the control. F1 generation survival,

after 56 days of growth, was significantly reduced at 0.914 ug/L. F1 generation growth, as measured by standard length and blotted wet weight at 56 days post-hatch, was not significantly reduced at any test concentration. Although, effects were seen at the lowest level for parental weight, it is not likely repeating the test would significantly lower the NOEC (0.0654 ug/L). Therefore, based on the NOEC of 0.0654 ug/L and LOEC of 0.161 ug/L, the MATC is 0.1026 ug/L.

The results of the bioconcentration study indicate that the highest BCF was 19,700. Value of over 1,000 are of concern.

96-Hour Acute Study LC<sub>50</sub>: 9.6 µg/L

8. ADEQUACY OF THE STUDY:

A. Classification: Core

B. Rationale: Fulfills guideline requirements.

C. Reparability: N/A