

US EPA ARCHIVE DOCUMENT

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DATA EVALUATION RECORD

1. CHEMICAL: Benzoic acid, 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)-amino]carbonyl]amino]sulfonyl]-, methyl ester or DPX-T6376
2. FORMULATION: Purity: 92.9%
3. CITATION: Hall, C.L., F.X. Phillips, and C.D. Litchfiled 1982. 96-hour LC50 to bluegill sunfish. Report No. 154-82. (Unplished study received Feb. 14, 1983 under 352-EUP-RRR prepared by Haskell Laboratory, submitted by E.I. Du Pont De Nemours & Company Inc.
4. REVIEWED BY: Ed Fite  
Wildlife Biologist  
EEB/HED  
15/
5. DATE REVIEWED: 3/23/83
6. TEST TYPE: 96 hour LC50, warm water species
7. REPORTED RESULTS: No mortalities were observed at nominal test concentrations or controls.
8. REVIEWER'S CONCLUSIONS: This study satisfies the registration data requirement for an acute toxicity test for a warmwater fish species.

MRID # 00125817



## 9. Methods and Materials

- A. Procedure: The test material, as a 300 mg/mL stock solution in dimethylformamide (DMF), was introduced into all-glass exposure vessels and diluted with laboratory supply water to yield the desired test concentrations in 15-liter final volumes. An identical vessel, containing only laboratory supply water, was designated as the control. Another vessel, containing laboratory supply water and a concentration of DMF equivalent to the carrier concentration in the highest test material concentration, was designated as the DMF control.

Ten bluegill sunfish (Lepomis macrochirus) with a 3.6 cm mean standard length and 0.87 g mean wet weight were randomly assigned to each test vessel. Fish were not fed for 48 hours prior to nor during the exposure. The test solutions were not aerated and temperature was maintained at 22.2°C. Photoperiod was maintained at 16-hours light: 8-hours dark. Mortality counts and observations were made every 24 hours during the 96-hour exposure period.

Dissolved oxygen was measured in the control, low, medium and high test concentrations at the beginning of the test and at 48-hour intervals during the 96-hour exposure period. The pH was measured in the control, low, medium and high test concentrations at the beginning and end of exposure. Total alkalinity, hardness (EDTA) and conductivity were measured at the beginning of the test in the control. (see table II).

- B. Statistical Analysis

N/A

- C. Discussion and Results

INT-6376-22 was not acutely toxic to bluegill sunfish under static, unaerated test conditions during a 96-hour exposure at test concentrations of 150 ppm (v/v) and less. Table I presents results.

TABLE I

RESULTS OF A 96-HOUR ACUTE TOXICITY TEST  
WITH BLUEGILL SUNFISH EXPOSED TO H-14, 418 (MR 4581-009)

Nominal Test Concentrations (ppm, v/v)	Observed Mortality (%)			
	24 Hr.	48 Hr.	72 Hr.	96 Hr.
150	0	0	0	0
100	0	0	0	0
50	0	0	0	0
25	0	0	0	0
5	0	0	0	0
DMF Control*	0	0	0	0
Control	0	0	0	0

\* 7.5 mL of DMF were added directly to control water. This concentration (0.5) mL DMF/L) represents the U.S. Environmental Protection Agency recommended highest concentration for organic carriers in static, acute testing systems.

TABLE II

RESULTS OF PHYSICAL AND CHEMICAL PARAMETERS  
MEASURED DURING A 96-HOUR ACUTE TOXICITY TEST  
WITH BLUEGILL SUNFISH EXPOSED TO H-14, 418 (MR 4581-009)

Nominal Test Concentrations (v/v)	150 ppm (High)	50 ppm (Medium)	5 ppm (Low)	Control
<u>Dissolved Oxygen (ppm)</u>				
0 Hr.	8.7	8.7	8.7	8.6
48 Hr.	5.8	6.0	6.0	5.3
96 Hr.	4.8	5.1	5.0	5.0
<u>pH</u>				
0 Hr.	7.2	7.5	7.6	7.6
96 Hr.	7.4	7.5	7.5	7.5
<u>Total Alkalinity (mg/L as CaCO<sub>3</sub>)</u>				
0 Hr.	-	-	-	105
<u>EDTA Hardness (mg/L as CaCO<sub>3</sub>)</u>				
0 Hr.	-	-	-	114
<u>Conductivity (umhos)</u>				
0 Hr.	-	-	-	190

## 10. Reviewer's Evaluation

### A. Test Procedures

Test protocol used in this study in general followed those recommended in EPA's Pesticide Assessment Guidelines.

### B. Statistical Analysis

Since no mortalities occurred during this test statistical analysis of the data collected is not necessary.

### C. Discussion and Results

Based on this test the LC50 of DPX-T6376 to Bluegill Sunfish is greater than 150 ppm.

### D. Conclusions

(1) Category: Core

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