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., C.F. Muska and, Carol D. Litchfield. 1982. 96-hour LC50 to rainbow trout. Report No. 515-82. (Unpublished study received Feb 14, 1983 under 352-EUP-RRR prepared by Haskell Laboratory, submitted by E.I. DuPont De Nemours & Company Inc. MRID# 00125816

4. REVIEWED BY: Ed Fite
Wildlife Biologist
EEB/HED /S/

5. DATE REVIEWED: 3/23/83

6. TEST TYPE: 96 hour LC50, cold water species

7. REPORTED RESULTS: "No mortalities were observed at nominal test concentrations up to 150 mg/L during the 96-hour exposure period. At the 150 mg/L test concentration, three of the fish showed erratic swimming, rapid breathing and were lying on the bottom of the test container 24 hours after the test was initiated. At 48 hours two of the three fish had completely recovered; the third fish was affected throughout the entire study."

8. REVIEWER'S CONCLUSIONS: This study satisfies the registration data requirement for an acute toxicity test for a coldwater fish species.

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 well water to yield the desired test concentrations in 15-liter final volumes. Two identical vessels, one containing only laboratory well water and the other containing laboratory well water supplemented with DMF at a concentration equivalent to that in the high test concentration, served as the controls.

Ten rainbow trout (Salmo gairdneri) with a 2.8 cm mean standard length and 0.17 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 12.2°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 well water control. (see table II).

B. Statistical Analysis

N/A

C. Discussion & Results

INT-6376-22 (DPX-T6376) was not acutely toxic to rainbow trout under static, unaerated test conditions during a 96-hour exposure period at nominal test concentrations up to 150 mg/L. Due to the low water solubility and the limited solubility in carrier solvents of the test material, higher concentrations were not tested so as to comply with a maximum recommended solvent concentration of 0.5 mL/L† for static acute tests. Table I presents results.

TABLE I

RESULTS OF A 96-HOUR ACUTE TOXICITY TEST
WITH RAINBOW TROUT EXPOSED TO H-14, 418 (MR 4581-009) or (DPX-T6376)

Nominal Test Concentrations (mg/L)	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
H_2O Control	0	0	0	0

* 0.5 mL DMF/L of Haskell Laboratory well water.

TABLE II

RESULTS OF PHYSICAL AND CHEMICAL PARAMETERS
MEASURED DURING A 96-HOUR ACUTE TOXICITY TEST
WITH RAINBOW TROUT EXPOSED TO H-14,418 (MR 4581-009) or (DPX-T6376)

Nominal Test Concentrations	150 mg/L (High)	50 mg/L (Medium)	5 mg/L (Low)	H_2O Control
Dissolved Oxygen (ppm)				
0 Hr.	9.6	9.5	9.6	9.5
48 Hr.	8.7	8.7	8.8	8.5
96 Hr.	8.4	8.4	8.2	7.8
pH				
0 Hr.	6.9	7.2	7.5	7.5
96 Hr.	7.2	7.3	7.3	7.3
Total Alkalinity (mg/L as $CaCO_3$)				
0 Hr.	-	-	-	106
EDTA Hardness (mg/L as $CaCO_3$				
0 Hr.	-	-	-	110
Conductivity (umhos)				
0 Hr.	-	-	-	160

10. Reviewer's Evaluation

A. Test Procedures

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

B. Statistical Analysis

Since no mortalites occurred at any of the concentrations tested, no statistical analysis is nessessary.

C. Discussion and results

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

D. Conclusions

1. Category: Core