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. Litchfield. 1982. 48-hour LC50 to Daphnia magna. Report No. 157-82. (Unpublished study received Feb 14, 1983 under 352-EUP-RRR prepared by Haskell Laboratory, submitted by E.I. DuPont De Nemours & Company Inc.

MRID # 00125818

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

5. DATE REVIEWED: 3/23/83

6. TEST TYPE: 48-hour LC50, Freshwater aquatic invertebrate

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 a freshwater aquatic invertebrate acute toxicity test.

9. Methods and Materials

A. Procedure: The test material, prepared as a 300 mg/mL stock solution in dimethylformamide (DMF), was diluted with laboratory mass culture water to yield the desired exposure concentrations. After mixing, 200 mL of each concentration were introduced into each of two separate 250-mL glass exposure vessels. Two identical jars, containing only laboratory mass culture water, were designated as controls. Two identical jars, containing laboratory mass culture water and a concentration of DMF equivalent to the carrier concentration in the highest test material concentration, were designated as DMF controls.

Ten daphnids (Daphnia magna) less than 24-hours old were randomly assigned into each vessel. Food was not provided during the test. Test solutions were not aerated and temperature was maintained at 20.2°C. Photoperiod was maintained at 16-hours light:8-hours dark. Mortality counts and observations were made at 24 and 48 hours after the exposure was initiated.

Dissolved oxygen and pH were measured in the control, low, medium and high exposure solutions at the beginning and end of exposure. The total alkalinity, hardness (EDTA) and conductivity were measured at the beginning of the exposure in the control. (see table II).

B. Statistical Analysis

N/A

C. Discussion and Results

INT-6376-22 was not acutely toxic to Daphnia magna under static, unaerated test conditions during a 48-hour exposure at test concentrations of 150 ppm (v/v) and less. Table I presents results.

TABLE I

RESULTS OF A 48-HOUR ACUTE TOXICITY TEST
WITH DAPHNIA MAGNA EXPOSED TO h-14, 418 (MR 4581-009)

Nominal Test Concentrations (ppm, v/v)	Observed Mortality (%)			
	24 Hours		48 Hours	
	A*	B*	A*	B*
150	0	0	0	0
100	0	0	0	0
50	0	0	0	0
25	0	0	0	0
DMF Control**	0	0	0	0
Control	0	0	0	0

* Replicate exposure chambers containing 10 daphnids each.
** The highest concentration used was 0.5 mL DMF/L. This is the highest concentration for organic carriers recommended by the U.S. Environmental Protection Agency for static, acute testing systems.

TABLE II

RESULTS OF PHYSICAL AND CHEMICAL PARAMETERS
MEASURED DURING A 48-HOUR ACUTE TOXICITY TEST
WITH *DAPHNIA MAGNA* EXPOSED TO H-14, 418 (MR 4581-009)

Nominal Test Concentrations (v/v)	150 ppm (High)	50 ppm (Medium)	5 ppm (Low)	Control
Dissolved Oxygen (ppm)				
0 Hr.	8.0	7.9	7.8	7.7
48 Hr.	7.5	7.5	7.5	7.4
pH				
0 Hr.	7.4	7.5	7.8	7.7
48 Hr.	7.9	7.9	7.9	7.8
Total Alkalinity (mg/L as $CaCO_3$)				
0 Hr.	-	-	-	118
EDTA Hardness (mg/L as $CaCO_3$)				
0 Hr.	-	-	-	160
Conductivity (umhos)				
0 Hr.	-	-	-	240

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 during this test statistical analysis of the data is not applicable.

C. Discussion and Results

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

D. Conclusions

(1) Category - Core