11-7-84

Data Evaluation Record

1. Chemical: H # 15,172
   2-Thiophenecarboxylic acid, 3[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]-amino] sulfonyl]-, methyl ester

2. Formulation: 95.6% (Estimated)

3. Citation: C. Litchfield, D. Hutton, J. Wetzel, 1983. 48-Hour LC_{50} to Daphnia magna, Haskell Laboratory for Toxicology and Industrial Medicine, Report No. 468-83, submitted by E.I. du Pont de Nemours and Co. Inc., Newark, Delaware, Acc No. 072845, 072846.

4. Study Type: 48-Hour LC_{50} on Daphnia magna

5. Reviewed by: Ken Clark
   Agronomist
   EED/HED
   Date: 11-1-84
   Review time: 3 hrs.
   Signature: Ken Clark

6. Approved by: Raymond W. Mathey 11/7/84

7. Reported Results: LC_{50} greater than 1000 mg/L

8. Reviewers Conclusion: This study appears to be scientifically sound and meets the guideline requirements with a LC_{50} of greater than 1000 mg/L. This chemical is considered "practically non-toxic" to Daphnia magna.

9. Materials/Methods (Excerpted from submission)

   Test Procedure

   Procedure: The test material, prepared as a 1 mg/mL stock solution in mass culture well water adjusted to pH 9 with 1N NaOH solution, was diluted with mass culture water to yield the desired exposure concentrations. After mixing, 200 mL volumes of each concentration were introduced into each of two separate 250 mL glass exposure vessels. Two identical jars, containing only laboratory test water, were designated as H_2O controls. Two identical jars, containing laboratory mass culture water and a concentration of NaOH sufficient to raise the pH to 9 were designated as NaOH 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 between 20.0 and 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 measure in the control, low, medium and high exposure solutions at the beginning and end of exposure. The total alkalinity, hardness (EDTA) and conductivity of the control, low, medium and high exposure solutions were measured at the beginning of the exposure.

10. Statistical Analysis

The concentration which is lethal to 50% of the test population during the specified time period was not reached, therefore, statistical analysis was not performed.

11. Discussion/Results (Excerpted from submission)

See next page for mortality chart.

TABLE I

RESULTS OF A 48-HOUR ACUTE TOXICITY TEST
WITH DAPHNIA MAGNA EXPOSED TO INM-6316-20 (MR 4581-154)

Nominal Test Concentrations (mg/L)	Observed Mortality (%)			
	24 Hours		48 Hours	
	A*	B*	A	B
1000	10	10	20	30
750	0	0	10	20
560	0	0	0	10
420	0	0	0	0
320	0	0	0	10
240	0	0	10	0
180	0	0	0	0
130	0	0	0	0
100	0	0	0	0
H_2O Control	0	0	0	30
NaOH Control	0	0	0	0

* Replicate exposure chambers containing ten daphnids each.

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Reviewers Evaluation

A. Test Procedures

The test procedures meet the pesticide assessment guidelines.

B. Statistical Analysis

The concentration which is lethal to 50% of the test population during the specified time period was not reached, therefore, statistical analysis was not performed.

C. Discussion/Results

This test is scientifically sound and meets the guideline requirements. This product appears "practically non-toxic" to Daphnia magna with a LC_{50} greater than 1000 mg/L.

D. Conclusion

1. Category: "Core"

2. Rationale: See Discussion/Results

3. Repairability: N/A