HASKELL LABORATORY FOR TOXICOLOGY
AND INDUSTRIAL MEDICINE

H-24119: STATIC, ACUTE 48-HOUR SCREENING TEST TO *Daphnia magna*

PURPOSE: This is a rangefinding study designed to provide an estimate of aquatic toxicity using fixed test concentrations and data measurements at predetermined intervals.

GENERAL INFORMATION

WORK REQUEST NUMBER: [redacted]
HASKELL NUMBER: 24119
SERVICE CODE: [redacted]
MATERIAL TESTED: [redacted]
SYNONYMS/CODES: [redacted]
SPONSOR: DuPont Specialty Chemicals
NOTEBOOK ID: [redacted]
SUBMITTER'S NOTEBOOK NUMBER: Not supplied by sponsor
COMPOSITION: [redacted]
CONTAMINANTS: Residual solvent (THF or MIBK). Residual ammonium hydroxide from neutralization of acrylic acid
CAS REGISTRY: [redacted]
PURITY: [redacted]
MSDS No: Not supplied by sponsor

TEST CONDITIONS

Nominal concentrations tested: 0, 0.5, 1.0, 50, 500, and 5000 mg/L.

Nominal Concentration (mg/L)	Test Initiation (0 hours)				Test Completion (48 hours)			
	Dissolved Oxygen (mg/L)		pH		Dissolved Oxygen (mg/L)		pH	
	A†	B†	A†	B†	A†	B†	A†	B†
0	8.6	8.5	7.1	7.1	8.9	8.8	7.7	7.7
0.5	8.8	8.8	7.1	7.1	8.8	8.8	7.7	7.7
1.0	8.8	8.8	7.1	7.1	8.8	8.8	7.7	7.7
50	8.7	8.8	7.1	7.1	8.8	8.8	7.7	7.7
500	8.7	8.7	7.1	7.1	8.8	8.8	7.6	7.6
5000	8.7	8.6	7.1	7.1	9.2 [a]	9.2 [a]	7.1 [a]	7.1 [a]

† A and B represent replicate test chambers within a dose level concentration.
[a] Measurement taken on day 1 (24 hours) due to total immobility.

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RESULTS

Based on visual observations, the water control solution and the 0.5 and 1.0 mg/L test solutions were clear and had no color throughout the test. The 50 mg/L test solutions were clear with a suspended substance, the 500 mg/L test solutions were slightly cloudy with a suspended substance, and the 5000 mg/L test solutions were cloudy and white in color with a suspended substance at test start. The suspended substance in the 50, 500 and 5000 mg/L test solutions settled onto the bottom of the test chambers as a white cloudy film throughout the remainder of the test. Immobilities were 0, 0, 0, 0, 10, and 100% in the 0, 0.5, 1.0, 50, 500 and 5000 mg/L test solutions, respectively. Forty-eight hours after exposure, lethargy was observed in 20% of the remaining mobile daphnids in the 50 mg/L test solutions, and 33% (3/9) of the remaining mobile daphnids in the 500 mg/L test solutions. The 48-hour EC_{50}, based on nominal concentrations and immobility, was between 500 and 5000 mg/L. All water quality parameters were within acceptable limits.

CONCLUSIONS

H-24119 exhibited low toxicity in a 48-hour, unaerated, static acute test using *Daphnia magna*.

WORK/AUTHORED BY: Laurie D. Bouchelle — 18-June-1999
Laurie D. Bouchelle
Toxicology Associate
Day-Month-Year

APPROVED BY: Paul W. Grube — 18-Jun-1999
Paul W. Grube, B.A.
Study Director
Day-Month-Year

DISTRIBUTION: [redacted]