HASKELL LABORATORY FOR TOXICOLOGY AND INDUSTRIAL MEDICINE

H-21946: 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: 21946
TEST CODE: [redacted]
MATERIAL TESTED: [redacted]
SYNONYMS/CODES: [redacted]
SPONSOR: Specialty Chemicals
NOTEBOOK ID: [redacted]
SUBMITTER'S NOTEBOOK NUMBER: [redacted]
COMPOSITION: [redacted]
CONTAMINANTS: [redacted]
CAS REGISTRY: [redacted]
PURITY: [redacted]

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	8.6	8.7	8.7	9.1	9.0	8.6	8.6
0.5	8.6	8.6	8.7	8.7	8.9	9.0	8.6	8.6
1.0	8.6	8.6	8.7	8.7	9.0	9.0	8.6	8.6
50	8.6	8.6	8.5	8.5	8.7	8.7	8.5	8.5
500	8.6	8.6	7.7	7.7	7.8	8.0	8.3	8.3
5000	8.6	8.6	6.0	6.0	9.0 ª	9.0 ª	6.6 ª	6.6 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, 1.0, 50, and 500 mg/L test solutions were clear and had no color throughout the test. The 5000 mg/L test solutions were slightly cloudy throughout the test. Immobilities were 0, 0, 0, 0, 80, and 100% in the 0, 0.5, 1.0, 50, 500 and 5000 mg/L test concentrations, respectively. The 48-hour EC_{50}, based on nominal concentrations and immobility, was between 50 and 500 mg/L. All water quality parameters were within acceptable limits.

CONCLUSIONS

H-21946 exhibited slight toxicity in a 48-hour, unaerated, static acute test using *Daphnia magna*.

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