

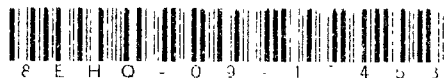
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March 17, 2009

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Document Processing Center (Mail Code 7407M)  
Room 6428  
Attention: 8(e) Coordinator  
Office of Pollution Prevention and Toxics  
U.S. Environmental Protection Agency, ICC Building  
1201 Constitution Ave., NW  
Washington, DC 20004



Dear 8(e) Coordinator:

Carboxylic Acid

This letter is to inform you of the results of three acute aquatic toxicity studies with the test substance referenced above.

Algae:

A study was conducted to determine the effect of the test substance on the growth of the green alga *Pseudokirchneriella subcapitata*. The algae were exposed to nominal concentrations of 0.1, 1, 10, and 100 mg/L of the test substance in the nutrient medium (ppm). The algae were exposed for 72 hours without test medium renewal. The effect was expressed as percent inhibition in growth based on healthy cell count (also referred to as biomass) relative to the blank (culture medium) control for the 72-hour interval of the test. The 72-hour EC<sub>50</sub> based on nominal concentrations was 7.46 mg/L.

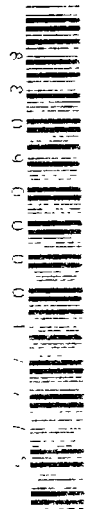
*Daphnia magna*:

The acute toxicity of the test substance to the water flea, *Daphnia magna* (less than 24 hours old) was determined in an unaerated, 48-hour, static test. The study was conducted with 4 concentrations of the test substance (0.1, 1.0, 10, and 100 mg/L) and a dilution water control at a mean temperature of 20.0°C (range of 19.8-20.1°C). One test chamber was used per test concentration with 10 test organisms in each chamber. Based on visual observations, the dilution water control was clear and colorless at test start. The 0.1 mg/L test concentration was clear and colorless with undissolved test material on the water surface at test start. The 1.0 and 10 mg/L test concentrations were clear and colorless with undissolved test material on the water surface and throughout the test solution at test start. The 100 mg/L test concentration was slightly cloudy with undissolved test material on the water surface and throughout the test solution at test start. All water quality parameters were within acceptable limits during the exposure.

Exposure of water flea to the dilution water control and nominal test substance concentrations of 0.1, 1.0, 10, and 100 mg/L resulted in 0, 0, 0, 100, and 100% immobility, respectively, at the end of 48 hours. No immobility or sublethal effects were seen in the dilution water control test organisms. The highest nominal concentration causing no immobility at test end was 1.0 mg/L. The lowest nominal concentration causing 100% immobility at test end was 10 mg/L. The 48-hour EC<sub>50</sub> value based on nominal concentrations was 3.2 mg/L.

Rainbow trout:

The acute toxicity of the test substance to the rainbow trout, *Oncorhynchus mykiss* was determined in an unaerated, 96-hour, static test. The study was conducted with 4 concentrations of the test substance and a dilution water control at a mean temperature of 12.5°C (range of 12.5-12.6°C). One test chamber was used per test concentration with 5 test organisms in each chamber. Based on visual observations, the dilution water control was clear and colorless at test start. The 0.1 mg/L test concentration was clear and colorless with undissolved test material present on the water surface at test start. The 1.0 and 10 mg/L test



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concentrations were clear and colorless with undissolved test material present on the water surface and on the bottom of the test chamber at test start. The 100 mg/L test concentration was slightly cloudy with undissolved test material present on the water surface and on the bottom of the test chamber at test start. All water quality parameters were within acceptable limits during the exposure.

Exposure of rainbow trout to the dilution water control and nominal test substance concentrations of 0.1, 1.0, 10, and 100 mg/L resulted in 0, 0, 0, 0, and 60% mortality, respectively, at the end of 96 hours. No mortality or sublethal effects were seen in the dilution water control test organisms. The highest nominal concentration causing no mortality at test end was 10 mg/L. The lowest nominal concentration causing 100% mortality at test end was greater than 100 mg/L. The 96-hour LC<sub>50</sub> value, based on nominal concentrations was 81 mg/L.

Sincerely,