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U.S. Environmental Protection Agency
EPA East
1200 Pennsylvania Avenue N.W.
Washington, D.C. 20460

8EHQ-0112-18545A

88120000088



Re: Section 8(e) Submission for the Reaction Mass of Diethylene glycol dibenzoate and Dipropylene glycol dibenzoate.

Dear Sir or Madam:

Eastman Chemical Company (Eastman) is reporting data from a preliminary range-finding test that was conducted as part of an aquatic toxicity test on the reaction mass of diethylene glycol dibenzoate (DEGDB; CAS # 120-55-8) and dipropylene glycol dibenzoate (DPGDB; CAS # 27138-31-4). The specific test method being utilized was the Freshwater Alga and Cyanobacteria, Growth Inhibition Test (OECD Guideline 201), which is a 72-hour acute toxicity test using the freshwater green alga, *Pseudokirchneriella subcapitata*.

The test was conducted using individually prepared water accommodated fractions (WAFs) which is a solution preparation method utilized for substances with very low water solubility. The test solutions were prepared with nominal loading rates of 0.10, 1.0, 10, and 100 mg/L and the solutions were mixed by relatively slow stirring for approximately 18 hours. After mixing the solutions were allowed to settle for 1 hour. Before settling, the 10 and 100 mg/L solutions appeared to contain un-dissolved test substance. After settling no un-dissolved material was observed in the soluble fraction which was removed and used for testing. No analytical determinations of the concentration of the dissolved material in the WAFs were conducted. These WAF solutions and a control were inoculated with algae and a 72 hour exposure was conducted to determine the appropriate test concentrations to further evaluate in the definitive portion of the test. At the end of the exposure the cell density was determined for each WAF concentration and the percent reduction in cell density as compared to the control was calculated. The data from this preliminary range-finding study is presented in Table 1.

Table 1: Preliminary Data for Algal Toxicity Range-Finding Test

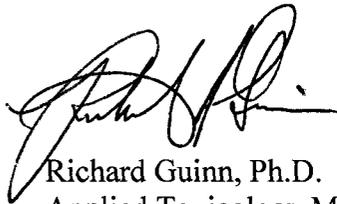
WAF Nominal Loading Rate	Mean Cells/mL (x10 ⁴)	% Reduction
Control	126.00	NA
0.10 mg/L	84.38	33
1.0	56.50	55
10	1.25	99
100	0.88	99

CONTAINS NO CBI



Discussion of Results: Eastman is not aware of any previous aquatic toxicity data for the reaction mass of these substances and is therefore providing this notification to discharge any TSCA 8(e) responsibilities that exist. Algal toxicity data is available for the two primary constituents of the reaction mass tested independently over a decade ago using different samples and laboratory. In those tests, which were conducted in a similar manner, DPGDB exhibited an EL50 for cell density of 1.1 mg/L, while DEGDB exhibited an EL50 of 5.2 mg/L. Based upon the preliminary data being reported here for the reaction mass of DEGDB and DPGDB it appears that the 72-hour EL50 for cell density would be slightly less than 1.0 mg/L, lower than either of the two constituents alone. It must be noted that these results are from a preliminary range-finding study that is not performed with the full number of replicates that are utilized in a definitive test conducted according to the guideline method, and therefore the results from a definitive study may be different from these preliminary results. However, Eastman believes that TSCA 8(e) requires the timely submission of these preliminary results.

Sincerely yours,



Richard Guinn, Ph.D.
Applied Toxicology Manager
Eastman Chemical Company

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CERTIFIED MAIL



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