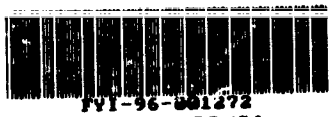
FMC Corporation

FYI-0596-1272



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Philadelphia Pennsylvania 19103
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ATTN: TSCA 8(e) Coordinator

Dear Sir or Madam:

This notification is submitted on behalf of FMC Corporation ("FMC"), 1735 Market Street, Philadelphia, PA 19103, on a "FYI" basis pursuant to Section 8(e) of the Toxic Substances Control Act, Public Law 94-469 ("TSCA") and the Statement of Interpretation and Enforcement Policy, 43 FR 11110-11116, March 16, 1978, as subsequently supplemented by EPA (the "Policy Statement").

FMC Corporation has conducted a Bioassay for Determining the Acute Toxicity of 5% Peracetic Acid, CAS Number 79-21-0, to Algae (*Selanastrum capricornutum* Printz). The study was conducted at ABC Laboratories, Columbia, MO, following U.S. EPA-FIFRA, 40-CFR, Guideline 123-2. The results listed below are based on an unaudited draft report.

An acute toxicity study of 5% Peracetic Acid to *Selanastrum* was conducted at nominal concentrations of 0 (control), 0.065, 0.13, 0.25, 0.50, and 1.0 mg/L for 120 hours under static conditions. Three replicate vessels containing approx. 0.37×10^4 cells/mL each were established for all treatment levels and the control. Analytical determinations were conducted at 0 and 120-hours and are listed below:

Contains No CBI

Nominal Conc. (mg/L)	Measured Conc. 0-Hour (mg/L)	Measured Conc. 120-Hour (mg/L)
Control	<MQL	<MQL (min. quantifiable limit)
0.065	0.061	<MQL
0.13	0.12	<MQL
0.25	0.25	<MQL
0.50	0.46	0.38
1.0	1.1	1.0

Algal cell counts were determined at 0 (control only), 24, 48, 72, 96 and 120 hours. The mean cell counts for all concentrations at 120 hours are listed below:

Meas. Conc. mg/L	120-hour Mean Cell Counts ($x10^4$)cells/mL
Control	120
0.061	130
0.12	120
0.25	3.6
0.46	0.11
1.1	0.0

Based on these unaudited results, the 120-hour EC50 is 0.18 mg/L (95% confidence limits of 0.14-0.21 mg/L) and the 120-hour (NOEC) is 0.12 mg/L for 5% Peracetic Acid to *Selanastrum.*

Peracetic acid is a mixture of peracetic acid and hydrogen peroxide. In its typical applications there should be essentially no residual peracetic acid in the effluent. Usually, peracetic acid is totally consumed during its TSCA uses. However, in all FIFRA registered applications, any effluent containing residual peroxygen will either be decomposed or treated at a permitted NPDES facility. The labels for FMC's EPA FIFRA registered Vigor-Ox™ products state: "Do not discharge effluent into lakes, ponds, estuaries, ocean or other waters."

Neither peracetic acid nor hydrogen peroxide are known to bioaccumulate to a pronounced degree or to persist in the environment. Although somewhat stable in air and distilled water, peracetic acid when exposed to various catalysts, e.g., clay, iron rich soil, microbes, etc., readily decomposes into water, oxygen, and acetic acid. Typically, decomposition will occur within a matter of minutes to hours. Hydrogen peroxide will also break down within relatively short periods of time. Depending on the temperature, the presence of microbes and the concentration of organics and metal ions, the half-life is expected to be only a few hours.

The results of this study were expected and are consistent with peracetic acid's use as an effective biocide. Based on EPA guidance recently provided to FMC concerning this type of study, we do not believe the Agency is interested in receiving this information under TSCA 8(e). We nevertheless felt the Agency would be interested in these results.

FMC makes no claims of confidentiality for this submission.

A copy of the audited final report will be submitted to the Agency once it becomes available.

Sincerely yours,

Linda M Clark

Linda M. Clark
Manager, Product Regulatory Affairs
215/299-6133

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