9-24-91

Data Evaluation Record

1. Chemical: F6285 4F Herbicide
Shaughnessy No.:129081

2. Test Material: F6285, 94.3% a.i., lot #21-89-1403, EF301-72, CAS#122836-35-5, a cream-colored powder.

3. Study type: Freshwater Fish 96-hour Acute Toxicity

Test Species: Rainbow trout (Oncorhynchus mykiss)

4. Study ID: Graves, William C., and Peters, Gregory T. F6285: A 96-hour flow-through acute toxicity test with the rainbow trout, Oncorhynchus mykiss. Performed by Wildlife International, 305 Commerce Drive, Easton, MD 21601 for the FMC Corporation. WI study ID #104A-103. FMC Study #A89-3060. **MRID #419116-20.**

5. Reviewed by: Kathryn Valente
Biologist
EEB/EFED
Signature: Kathryn F Valente
Date: 7/24/91

6. Approved by: Allen Vaughan
Acting Head, Section II
EEB/EFED
Signature: Allen W. Vaughan
Date: 9.24.91

7. Conclusions: The study is scientifically sound. With an LC_{50} of >120 mg/L, the test material is considered to be practically non-toxic to rainbow trout. The NOEL was determined to be 120 mg/L. The study is classified as core.

8. Recommendations: N/A

9. Background information: This study was submitted in support of an Experimental Use Permit for F6285.

10. Discussion of Individual Tests: N/A

11. Materials and Methods:
a. Test animals: Trout were obtained from Trout Lodge, Inc., P.O. Box 11, McMillin, WA 98352. The fish were obtained as fertilized eggs and were hatched at Wildlife International. The trout were held for 77 days prior to the test. The test fish were held without food for 48 hours before testing and throughout the test period. The fish were acclimated to the test conditions for 50 hours prior to the test. The control fish had a mean length of 42 mm and a mean weight of 1.3 g, and were believed to be representative of the entire test lot. The biomass loading rate was 0.86 g/L.

b. Test system: Tests were conducted in 25L polyethylene

aquaria. Each aquarium was placed in a water trough with a controlled temperature of 12 +/- 1° C. The temperature was measured at the beginning and end of the test period, and was measured continuously in one of the control chambers. The water in the beakers ranged in temperature from 11.4-12.6° C. The pH ranged from 7.7-8.1. The nominal exposure levels of F6285 were: control, dimethyl formamide control, 15.6, 25.9, 43.2, 72.0 and 120 mg/L.

c. Study design: Five treatments, a control and a solvent control were used, each with two replicates of ten trout. Observations for mortality and sublethal effects were made daily throughout the exposure period. Analytical water samples were taken at 0 and 96 hours. Temperature was measured continuously in one of the test beakers. Additional temperature, and pH DO measurements were taken every 24-hr during the test period.

d. Statistics: Due to the lack of mortality, the computer program normally used to analyze the data from acute aquatic tests could not be used. The LD_{50} was estimated based on visual inspection of the data.

12. Reported Results: The mean measured concentrations of F6285 were determined only for the controls and the highest dose tested (120 mg/L) due to the lack of mortality. The level of F6285 in the controls was not detected and the mean measured concentration in the 120 mg/L chambers was 130 mg/L. The only sublethal effects observed during the test occurred at the 120 mg/L level. Three fish were observed gulping air at 48 hours and 1 lethargic and 3 surfacing fish were observed at 72 hours.

13. Study Author's Conclusions/Quality Assurance Report: The LC_{50} value was >120 mg/L. No slope was reported. The NOEL was 120 mg/L. Based on these values, F6285 is classified as practically nontoxic to rainbow trout.

Quality Assurance and Good Laboratory Practice statements were included in the report. One exception to GLP was noted: analyses for stability, purity and composition of the test material have been completed, but the results have not yet been reported.

14. Reviewer's Discussion and Interpretation of the Results:
a. Test Procedure: The test design and procedure were in accordance with protocols recommended by the Guidelines.

b. Statistical Analysis: The LC_{50} could not be verified by computer due to the lack of mortality, but estimation of the

LC_{50} by visual inspection was in agreement with the reported results.

c. Discussion/Results: The study is scientifically sound and in accordance with the Guidelines.

d. Adequacy of the study:
(1) Classification: Core.
(2) Rationale: N/A.
(3) Repairability: N/A