EFED Document Number



Shaughnessy #103394

DATA EVALUATION RECORD

- 1. CHEMICAL: Streptomycin Sulfate
- 2. <u>TEST MATERIAL</u>: Agri-Strep: Streptomycin Sulfate: 21.2% Inert ingredients: 78.8%
- 3. TEST TYPE: Acute Toxicity for Freshwater Fish Trout
- STUDY IDENTIFICATION: Fish Toxicity Laboratory Report, Animal Biology Laboratory, EPA-PR, ARC, Beltsville, Md. I.D. Number: MB283 February 23, 1981. MRID: 103394
- 5. REVIEWED: Carol J. Belew, Biologist Carol J. German (1992)
- 6. APPROVED: Les Touart, Section Head EFED/EEB
- 7. <u>CONCLUSIONS</u>: This study is scientifically sound and fulfills the requirements for a core study. The study indicates that Streptomycin is practically non-toxic Rainbow Trout. The LC₅₀ was determined to be above 180 ppm.
- 8. RECOMMENDATIONS: NA
- 9. BACKGROUND: NA

10. METHODS AND MATERIALS:

- A. Test Organisms: Trout (Salmo gairdnerii currently Oncoirhyeltus mykiss)
 Age/stage of maturity: Not provided
 Size: Average length = 38.7 mm and Average weight = .48 grams.
 Source: Wytheville National Fish Hatchery
- B. Dosage Form: "
 Solvents/vehicles: None
 Route of administration: In solution
- C. Referenced Protocol Test level: 180, 100 and 56 ppm. Holding/acclimation: The test organisms were held for a ten day observation period and were acclimated for three days just prior to testing. Number per level: 20 Feeding: Not reported



Physical condition: The fish appeared to be in good physical condition at test initiation.

Test Condition Temperature: 55°F

Dissolved oxygen: 6.0 ppm

pH/hardness: pH = 7.0, hardness: 51.3 ppm Source of dilution water: Demineralized water

1,000,000 ohms resistivity reconstituted to U.S. Fish

and Wildlife Service Standard.

Test vessels: 5 gallon glass jar. Static/Renewal/Flo-through: static

Loading:

Aeration: No

Photoperiod: Not reported Controls: Not reported.

Measured test levels: 180, 100, and 56 ppm.

Observation period: 96 hours

Statistical methods: No statistical analysis was necessary because the LC50 was determined to be higher than the highest tested dose.

11. REPORTED RESULTS:

Effects criteria: Mortality, and abnormal physical and behavior characteristics.

LC₅₀: 180 ppm

NOEL: Not reported

Dose response data: Not reported.

Observation period: 96 hours

Test conditions Temperature: 55°F

Dissolved oxygen: 6.0 ppm

pH/hardness: pH = 7.0, hardness = 51.3 ppm

12. STUDY AUTHOR'S CONCLUSIONS/QUALITY ASSURANCE MEASURES:

Agri-Strep can not be expected to kill rainbow trout at a concentration of 180 ppm formulation within 96 hours of exposure. The study was preformed by USDA- Beltsville, therefore, the Quality Assurance Statement is not required.

13. REVIEWER'S DISCUSSION AND INTERPRETATION OF THE STUDY:

- A. Test Procedures: The study was scientifically sound and fulfills the EPA guideline requirements.
- B. Statistical Analysis: Statistical analysis was necessary because the LC50 was determined to be higher than the highest dose tested.
- C. Discussion/Results: The study was scientifically sound and fulfills the EPA requirements for a core study. The LC50 was determined to be higher than the highest dose level tested of 180 ppm.

- D.
- Adequacy of Test:
 1. Validation Category: Core
 2. Rationale:

 - 3. Repairability:
- 13. COMPLETION OF ONE-LINER FOR TEST: