

US EPA ARCHIVE DOCUMENT

TDMS

DATA EVALUATION RECORD

Page 1 of 2

CASE GS \_\_\_\_\_

NAPHTHALENE ACETIC ACID

PM \_\_\_\_\_ / /

CHEM 056002

NAPHTHALENE ACETIC ACID

BRANCH EEB

DISC \_\_\_\_\_

FORMULATION 72-A112

FICHE/MASTER ID 62

CITATION: Union Carbide Environmental Services (1979) The Acute Toxicity of 72-A112 to the Water Flea Daphnia Magna, Straus, April 20, 1979, USCE Project No. 11506-24-11.

SUBST. CLASS= \_\_\_\_\_

OTHER SUBJECT DESCRIPTORS

PRIM: .

DIRECT REVIEW TIME = 1 hr (MH) START DATE 2/13/81 END DATE 2/13/81

REVIEWED BY: Thomas B. Johnston

TITLE: Fisheries Biologist

ORG: EEB/HED

LOC./TEL: 557-0320

SIGNATURE: *Thomas B. Johnston* DATE: 2/26/81

APPROVED BY:

TITLE:

ORG:

LOC./TEL:

SIGNATURE:

DATE:



2003819

FICHE/MASTER ID 62

CONCLUSIONS: This study is scientifically sound, but does not fulfill USEPA Guideline requirements because it was not run on the technical grade of the toxicant. With an  $EC_{50}$  of 23.8 ppm, NAA Acid Formulation 72-A112 is slightly toxic to aquatic invertebrates.

METHODS AND MATERIALS :

- A. TEST TYPE - 48-hour Static Acute  $EC_{50}$
- B. TEST SPECIES - Water Flea Daphnia Magna
- C. TEST PROCEDURES - Five groups of ten daphnia each were exposed to nominal concentrations of 5.6, 10.0, 18.0, 32.0, or 56.0 ppm of 72-A112 for 48 hours. All toxic symptoms and mortality were recorded.

STATISTICAL ANALYSIS: Mortality data were analyzed according to the methods of Litchfield and Wilcoxon.

REPORTED RESULTS: The 48-hour  $EC_{50}$  of 72-A112 to Daphnia Magna is calculated to be 23.8 ppm, with 95% confidence limits not calculable.

DISCUSSION:

- A. TEST PROCEDURE:  
This study followed USEPA Guidelines, except that the study was run on a formulated product instead of on the technical grade.
- B. STATISTICAL ANALYSIS:  
Mortality data were analyzed according to the Spearman-Kärber Estimator (Fenney 1971).
- C. DISCUSSION/RESULTS:  
The 48-hr  $EC_{50}$  of 72-A112 to Daphnia Magna is 23.8 ppm, with 95% confidence limits not calculable.
- D. CONCLUSIONS:
  1. CATEGORY: Supplemental
  2. RATIONALE: To fulfill EPA Guideline requirements, test must be run on the technical grade of the toxicant. Tests run on formulated products cannot be used to accurately estimate the toxicity of the active ingredient.
  3. REPAIRABILITY: This study cannot be repaired to Core.