12-1-75
duplicate

103.1.4 Aquatic Invertebrate

DATA REVIEW NUMBER: ES H1

TEST: Aquatic Invertebrate Acute Toxicity

SPECIES: Water Flea (Daphnia magna)

RESULTS: 96 hour LC_{50} = 39 ppt (25-62 ppt) 95% C.L. — This is in (Sum.)

No discernible effect level 32 ppt.
48 hour LC_{50} = 75 ppt (54-103 ppt) 95% C.L.

Statistical analysis of data by Finney Probit gave the following results for the 96 hour LC_{50} [Chi^2 (3df) = 7.81].

5.705	M						
13.033	YINT	0.039	LD50	0.023	LD10	0.066	LD90
1.497	LW M	0.033	LOCL	0.017	LOCL	0.053	LOCL
4.712	CHI^2	0.046	UPCL	0.033	UPCL	0.082	UPCL

CHEMICAL: FMC 33297 Technical (95.7% A.I.)

TITLE: Acute Toxicity of FMC - 33297 Technical to Water Flea (Daphnia Magna)

ACCESSION NO: 096699

STUDY DATE: December, 1975

RESEARCHER: Bentley, Robert E.
E. E. & G. Bionomics
Aquatic Toxicology Laboratory
Wareham, Massachusetts

REGISTRANT: FMC Corporation

VALIDATION CATEGORY: Core

CATEGORY REPAIRABILITY: NA. The aquatic invertebrate toxicity data for this study reported for 48 hours did not produce favorable results for the Chi^2 analysis ~~by~~ with Finney Probit. This study did supply values for 96-hour LC_{50} for Daphnia magna. This study used acetone solvent and had 7% mortality in the solvent control. The raw data was analyzed using Finney Probit after correcting for control mortality by Abbotts Formula. The value derived had an acceptable Chi^2 value (4.712 < 7.81)

and therefore the 96 hour LC_{50} will be used in the hazard assessment.

FMC 33297 95.7% AI

E&G Bionomics

Dec 1975

O'Brien

1/11/78

Daphnia Magna

48 hr LC_{50}

0.042
C.
1E.

0.056
E.
1E.

0.075
14.
1E.

0.1
13.
1E.

Chi^2 2df = 5.99

8.951 M
15.735 YINT
1.293 LW M
5.99 < 7.528 CHI^2

0.063 LD50
0.057 LDCL
0.070 UPCL

0.045 LD10
0.038 LDCL
0.054 UPCL

0.068 LD90
0.074 LDCL
0.104 UPCL

Daphnia Magna

96 hr LC_{50}

Formerly Probit
Corrected values
using Abbots Formula
for 7% mortality
in control

0.032
3.16
1E.

0.042
11.78
1E.

0.056
10.7
1E.

0.075
14.
1E.

0.1
1E.
1E.

Chi^2 3df = 7.81

5.705 M
13.033 YINT
1.497 LW M
4.712 CHI^2

0.039 LD50
0.033 LDCL
0.046 UPCL

0.023 LD10
0.017 LDCL
0.033 UPCL

0.066 LD90
0.053 LDCL
0.082 UPCL

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