

1/11/78

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

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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

EGG Economics

Dec 1975

Daphnia magna

46 hr LC50

O'Brien

1/11/78

Daphnia magna

48 hr LC50

Furness Probit
Corrected values
using Abbott Formula
for 2% mortality
in control

0.042

C.

15.

0.056

E.

15.

0.075

14.

15.

0.1

13.

15.

χ^2 2df = 5.99

8.951 M

15.735 YINT

1.293 LW M

5.99 < 7.528 χ^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

0.032

3.16

15.

0.042

11.78

15.

0.056

10.7

15.

0.075

14.

15.

0.1

15.

15.

χ^2 3df = 7.81

5.705 M

13.033 YINT

1.457 LW M

4.712 χ^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