12-1-75

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103.1.4 Aquatic Invertebrate

DATA REVIEW NUMBER: ES K1

TEST: Aquatic Invertebrate Acute Toxicity

SPECIES: Water Flea (Daphnia magna)

RESULTS: 48 hour LC_{50} = 151 ppt (120-188 ppt) 95% C.L.

96 hour LC_{50} = 112 ppt (76-164 ppt) 95% C.L.

No discrenible effect level = 84 ppt.

Statistical analysis by Finney Probit for 96 hour LC_{50} is given below.

5.882	M	0.138	LC50	0.229	LC90	0.064	LC10
10.051	YINT	0.121	LOCL	0.182	LOCL	0.066	LOCL
1.479	LW M	0.158	UPCL	0.287	UPCL	0.106	UPCL
6.919	CHI^2						

CHEMICAL: FMC 33297 3.2 EC 38.4% a.i.

TITLE: Acute Toxicity of FMC 33297 3.2 EC to Water Flea (Daphnia magna)

ACCESSION NO: 096699

STUDY DATE: December 1975

RESEARCHER: Bentley, Robert E.
E.G.&G Bionomics
Aquatic Toxicology Lab.
Wareham, Mass.

REGISTRANT: FMC Corp.

VALIDATION CATEGORY: Core

CATEGORY REPAIRABILITY: N.A. The statistical analysis for the 96 hour LC_{50} can be used in its present form because mortality did not occur in the control. The 96 hour LC_{50}

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is considered representative of
daphnia sensitivity to permethrin.

VALIDATOR: Tom O'Brien - 1/11/78

upper dose level eliminated
Ferney Probit
Daphnia Magna
48 hr LC_{50}
E&G Bionomics
Dec 1975
FMC 33297 3.2EC.
38.4% A.I.

O'Brien
1/11/78

0.084
C.
15.

0.109
1.
15.

0.146
3.
15.

0.196
10.
15.

0.261
15.
15.

Chi^2 3df = 7.81

9.739	M
12.467	YINT
1.267	LW M
1.801	CHI^2
0.171	LD50
0.155	LDCL
0.189	UPCL
0.126	LD10
0.109	LDCL
0.147	UPCL
0.262	LD90
0.198	LDCL
0.271	UPCL

Ferney Probit
Daphnia Magna
48 hr LC_{50}
E&G Bionomics
Dec 1975
FMC 33297 3.2 EC
38.4% A.I.

O'Brien
1/11/78

0.084
C.
15.

0.109
1.
15.

0.146
3.
15.

0.196
10.
15.

0.261
15.
15.

0.365
14.
15.

Chi^2 4df = 9.49

7.475	M
10.617	YINT
1.361	LW M
7.515	CHI^2
0.177	LD50
0.158	LDCL
0.199	UPCL
0.119	LD10
0.100	LDCL
0.142	UPCL
0.263	LD90
0.220	LDCL
0.315	UPCL

Ferney Probit
Daphnia magna
96 hour LC_{50}
E&G Bionomics
Dec 1975
FMC 33297 3.2EC
38.4% A.I.

O'Brien
1/11/78

0.084
1.
15.

0.109
7.
15.

0.146
5.
15.

0.196
12.
15.

0.261
15.
15.

Chi^2 3df 7.81

5.862	M
10.051	YINT
1.479	LW M
6.919	CHI^2
0.138	LD50
0.121	LDCL
0.158	UPCL
0.084	LD10
0.066	LDCL
0.106	UPCL
0.229	LD90
0.182	LDCL
0.267	UPCL