

5-1-86

X

TDMS DATA EVALUATION RECORD

PAGE 1 OF

CASE GS _____ : _____

PM ____/____/____

CHEM Diazinon _____BRANCH EEB DISC _____FORMULATION Technical (89% to 92%) _____FICHE/MASTER ID 00003503 _____

CITATION: Johnson, W.; Finley, M. (1980) Handbook of Acute
Toxicity of Chemicals to Fish and Aquatic
Invertebrates. USDI Publication 137, Washington, DC.

SUBST. CLASS=

OTHER SUBJECT DESCRIPTORS
PRIM:

DIRECT REVIEW TIME= 1 hour (MH) START DATE May 1986 END DATE May
1986

REVIEWED BY: Margaret Rostker
TITLE: Wildlife Biologist
ORG: EEB
LOC./TEL: 557-7600

SIGNATURE: *for H.T. Craven*

APPROVED BY: Harry Craven
TITLE: Supervisory Biologist
ORG: EEB
LOC./TEL: 557-7600

SIGNATURE: *H.T. Craven*

Studies are supplemental and taken in total fulfill data
requirements.

stand stress. Food seems to be more important than water as a source of body residues. Although DDT was not observed to affect gonad maturation, the mortality of fry produced by treated parents was high, especially during the terminal stages of yolk absorption.

DEF

Chemical Name: S,S,S-Tributyl phosphorotrithioate

Alternate Names: CAS 78-48-8, De-Green, E-Z-OffD, Fos-Fall "A," Ortho Phosphate Defoliant

Principal Use: Defoliant herbicide

Sample Description: Technical material, 95%

SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
<i>G. fasciatus</i>	M	21	100 68-150
<i>Pteronarcys</i>	YC ₂	15	2,100 1,500-2,900
Rainbow trout	0.6	13	660 560-750
Bluegill	0.6	18	620 390-975

DEMETON

Chemical Name: Mixture of 0,0-diethyl 0-[2-(ethylthio)ethyl] phosphorothioate and 0,0-diethyl S-[2-ethylthio]ethyl] phosphorothioate

Alternate Names: Systox

Principal Use: Systemic insecticide-acaricide

Sample Description: Technical material, 94%

SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
<i>Daphnia pulex</i>	I ₁	15	14.0 ^a 10.4-18.7

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
<i>G. fasciatus</i>	M	15	78 42-140
Rainbow trout	1.4	12	600 483-745
Channel catfish	1.2	18	3,700 3,410-4,020
Largemouth bass	0.7	18	148 ^b 136-162
Walleye	1.3	18	230 ^b 203-260

^a48-h EC50.

^bTested in hard water, 272 ppm CaCO₃.

DIAZINON

Chemical Name: 0,0-Diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate

Alternate Names: AG-500, Alfa-tox, Basudin, CAS 333-41-5, Dazzel, Diazajet, Diazide, Diazol, ENT-19507, Gardentox, Neocidol, Nucidol

Principal Use: Insecticide

Sample Description: Technical material, 89%¹, 92%²

SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
<i>Simocephalus</i> ¹	I ₁	15	1.4 ^a ✓ 1.2-1.6
<i>Daphnia pulex</i> ¹	I ₁	15	0.8 ^a ✓ 0.6-1.1
<i>G. fasciatus</i> ¹ 5 cub	M	21	0.20 ✓ 0.15-0.28
<i>Pteronarcys</i> ¹ stonefly larvae	YC ₂	15	25 ✓ 20-30
Rainbow trout ¹	1.2	13	90 ✓
Cutthroat trout ²	2.0	12	1,700 ^b ✓ 1,390-2,090
Lake trout ¹	3.2	12	602 ^b ✓ 400-906

MRIB
40094602

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
Bluegill ^a	1.0	18	168 120-220

^a48-h EC50.

^bTested in hard water, 162 ppm CaCO₃.

DICAMBIA

Chemical Name: 2-Methoxy-3,6-dichlorobenzoic acid

Alternate Names: Banex, Banvel, CAS 1918-00-9, Dianet, Mediben

Principal Use: Herbicide

Sample Description: Technical material, 88%

SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (mg/L)
<i>Daphnia magna</i>	I ₁	21	> 100 ^{a,b}
<i>Asellus</i>	M	15	> 100 ^b
<i>G. fasciatus</i>	M	15	> 100 ^b
<i>Palaemonetes</i>	M	21	> 56 ^b
Rainbow trout	0.8	12	28
Bluegill	0.9	12	> 50

^a48-h EC50.

^bTested in hard water, 272 ppm CaCO₃.

DICHLORBENIL

Chemical Name: 2,6-Dichlorobenzonitrile

Alternate Names: CAS 1194-65-6, Casoron, 2,6-DBN, DU-SPREX, ENT-26665, NIA 5996.

Principal Use: Herbicide

Sample Description: Technical material, 98.9%¹; wettable powder, 50%²; metabolite (2,6-Dichlorobenzoic acid), technical material, 100%³

SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (mg/L)
Rainbow trout ¹	1.0	13	6.3 4.7-8.4
Goldfish ¹	0.9	18	7.8 4.8-12.6
Fathead minnow ¹	0.8	18	6.0 4.0-9.1
Green sunfish ¹	1.1	18	5.7 3.6-8.9
Bluegill ¹	1.5	18	8.3 6.0-11.6
<i>Simocephalus</i> ²	I ₁	15	5.8 ^a 4.8-8.4
<i>Daphnia pulex</i> ²	I ₁	15	3.7 3.3-4.2
<i>Asellus</i> ²	M	15	35
<i>G. lacustris</i> ²	M	21	11 8-15
<i>Pteronarcys</i> ²	YC ₂	15	7.0 5.5-9.0
Rainbow trout ⁴	2.6	12	140
Bluegill ⁴	1.0	24	120

^a48-h EC50.

NOTE: Variations in water hardness from 44 to 272 ppm did not alter the toxicity to fish. In the metabolite, 2,6-dichlorobenzoic acid, 96-h LC50 values exceeded 100 mg/L for rainbow trout and bluegills.

DICHLOFENTHION

Chemical Name: 0,0-Diethyl 0-(2,4 dichlorophenyl) phosphorothioate

Alternate Names: CAS 97-17-8, dichlorofenthion, ENT-17470, Hexa-Nema, Mobilawn, Nemacide, Tri-VC 13, VC 13, V-C 1-13

Principal Use: Nematocide, insecticide

Sample Description: Technical material, 100%