

US EPA ARCHIVE DOCUMENT

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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 <sub>2</sub>	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-ethylthioethyl] 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 <sub>1</sub>	15	14.0 <sup>a</sup> 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 <sup>b</sup> 136-162
Walleye	1.3	18	230 <sup>b</sup> 203-260

<sup>a</sup>48-h EC50.

<sup>b</sup>Tested in hard water, 272 ppm CaCO<sub>3</sub>.

## 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%<sup>1</sup>, 92%<sup>2</sup>

### SUMMARY OF ACUTE TOXICITY

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

MR10  
40094602

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (µg/L)
Bluegill <sup>2</sup>	1.0	18	168 120-220

<sup>a</sup>48-h EC50.

<sup>b</sup>Tested in hard water, 162 ppm CaCO<sub>3</sub>.

## 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 <sub>1</sub>	21	> 100 <sup>a,b</sup>
<i>Asellus</i>	M	15	> 100 <sup>b</sup>
<i>G. fasciatus</i>	M	15	> 100 <sup>b</sup>
<i>Palaemonetes</i>	M	21	> 56 <sup>b</sup>
Rainbow trout	0.8	12	28
Bluegill	0.9	12	> 50

<sup>a</sup>48-h EC50.

<sup>b</sup>Tested in hard water, 272 ppm CaCO<sub>3</sub>.

## 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%<sup>1</sup>; wettable powder, 50%<sup>2</sup>; metabolite (2,6-Dichlorobenzoic acid), technical material, 100%<sup>3</sup>

### SUMMARY OF ACUTE TOXICITY

Test organism	Stage or wt (g)	Temp (C)	96-h LC50 95% CI (mg/L)
Rainbow trout <sup>1</sup>	1.0	13	6.3 4.7-8.4
Goldfish <sup>1</sup>	0.9	18	7.8 4.8-12.6
Fathead minnow <sup>1</sup>	0.8	18	6.0 4.0-9.1
Green sunfish <sup>1</sup>	1.1	18	5.7 3.6-8.9
Bluegill <sup>1</sup>	1.5	18	8.3 6.0-11.6
<i>Simocephalus</i> <sup>2</sup>	I <sub>1</sub>	15	5.8 <sup>a</sup> 4.8-8.4
<i>Daphnia pulex</i> <sup>2</sup>	I <sub>1</sub>	15	3.7 3.3-4.2
<i>Asellus</i> <sup>2</sup>	M	15	35
<i>G. lacustris</i> <sup>2</sup>	M	21	11 8-15
<i>Pteronarcys</i> <sup>2</sup>	YC <sub>2</sub>	15	7.0 5.5-9.0
Rainbow trout <sup>3</sup>	2.6	12	140
Bluegill <sup>3</sup>	1.0	24	120

<sup>a</sup>48-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%