



COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

From: Virginia Cooperative Extension: [Pesticides and Aquatic Animals: A Guide to Reducing Impacts on Aquatic Systems](#)

Article date: 5/1/2009

Link: <https://pubs.ext.vt.edu/420/420-013/420-013.html>

Toxicity to fish of commonly used herbicides.

Toxicity Classification	LC ₅₀ (mg/L*)	Toxicity Classification	LC ₅₀ (mg/L*)
super extreme High Moderate	<0.01 0.01 - 0.10 0.11 - 1.0 1.1 - 10	slight minimal - nontoxic <i>*1 mg/L = 1 part per million (ppm)</i>	11-100 >100

Chemical Name	Commonly Used Trade Name	Toxicity Classification	96-hour ^a LC ₅₀ (mg/L)	
			Rainbow trout ^b	bluegill ^b
acetochlor	Harness, Surpass	high	0.5	1
acifluorfen	Blazer	slight	17	31
alachlor	Lasso, Micro-Tech, Partner	moderate	2	3
ametryn	Evik	moderate	9	4
atrazine	AAtrex	moderate-slight	5	16
benefin	Balan	extreme	0.08	0.06
bensulide	Betasan	high	0.7	0.8
bentazon	Basagran	minimal	109	116
bromacil	Hyvar	slight	56-75 (48hr)	71 (48hr)
bromoxynil	Buctril	extreme	0.1	0.06
butylate	Sutan	moderate	4	7

chlorimuron	Classic	slight-minimal	50	> 100
Clomazone	Command	slight	19	34
copper (chelated) complex	K-Tea, Komeen	high-moderate	0.2 4 ^d	1 - 8 ^d
copper sulfate	bluestone	moderate-high	0. 1 ^d	0.8 - 7 ^d
2,4-D	Aqualeer, Weedar, Weedestroy	slight-high	1 - 100 ^c	> 100
2,4-DB	Butoxone, Butyrac, Embutox	moderate	2	8
DCPA	Dacthal	minimal-nontoxic	-	> 100
dicamba	Banvel, Clarity, Vanquish	slight	135	135
dichloberlil	Casoran, Norosac	slight-moderate	> 18 (48h, guppy)	> 6
diclofop	Hoelon	high	0.25	0.54
diquat	Aqua-clear, Aqua-Quat, Weedtrine	slight-moderate	10	115
diuron	Karmex	moderate	6	6
endothall	Aquathol, Hydrothol	high	0.14	0.94
EPTC	Eptam, Eradicane, Shortstop	slight	19	27
fluazifop-p-butyl	Fusilade	moderate	5.4	
fluometuron	Cotoran, Meturon	slight	47	96
fluridone	Sonar	slight	12	16
fosamine	Krenite	minimal	415	278
glyphosate	Roundup, Rodeo	slight	38	120 ^d
hexazinone	Velpar	minimal	320	370

"inert" dyes	Aquashade	-	-	-
irnazapyr	Arsenal, Chopper, Contain	minimal	> 100	> 100
lactofen	Cobra	moderate	3.7	2.1
linuron	Lorox, Linex	slight	16	16
metolachlor	Dual, Pennant	moderate-slight	2	15
metribuzin	Lexone, Sencor	slight	42	80
napnpamide	Devrinol	moderate-slight	9	20
naptalam	Alanap	slight-minimal	76	354
nofflurazon	Solicam, Zorial	moderate	6	200 (<i>catfish</i>)
oryzalin	Surflan	moderate	3	3
oxadiazon	Ronstar	high	9 (<i>carp</i>)	<i>o.g</i>
oxyfluorfen	Goal	high	0.4	0.2
paraquat	Gramoxone	slight	15	13
pendimethalin	Prowl, Stomp	high	0.1	0.2
picloram	Tordon	moderate-slight	3.1	13.5
prometryn	Caparol, Cotton-Pro	moderate	3	10
propanil	Stam	moderate	3	4
simazine	Princep	moderate-slight	3	16
sulfometuron	Oust	slight	13	13
tebuthiuron	Spike	minimal	144	112
terbacil	Sinbar	slight-minimal	46	103
triclopyr	Garlon, Pathfinder	minimal	117	148

trifluralin	Treflan, Elancolan, Trim	Super-extreme	0.01 <i>(young trout)</i>	0.02 <i>(young bluegill)</i>
vernolate	Vernam	moderate	10	8

^aToxicity values are determined by 96h exposure time unless otherwise specified

^bToxicity values are for rainbow trout and bluegill sunfish unless otherwise specified

^cToxicity depends on formulation

^dToxicity depends on pH - more toxic in water with low alkalinity