

Herbicide	Acute Toxicity								Chronic Toxicity			
	Primary Irritation		Oral		Dermal		Inhalation		Carcinogenicity	Teratogenicity	Reproductive	Mutagenicity
	Eye	Skin	LD50 (mg/kg)	Comments	LD50 (mg/kg)	Comments	LC50 (mg/l)	Comments				
2,4-D right-of-way non-electric	Toxicity Category I - III: Highly Toxic to Slightly Toxic	Toxicity Category III Slightly Toxic	Rat 50 - >5000	Toxicity Category I - IV Highly Toxic to Practically Non-toxic	Rabbit >2000 - >20,000	Toxicity Category III - IV Slightly Toxic to Practically Non-toxic	Rat (4-hour) >1.0 - >100	Toxicity Category II - IV Moderately Toxic to Practically Non-toxic	Group 2B by IARC Possibly carcinogenic to humans	Animal studies indicate limited ability to cause birth defects	Evidence suggests adverse effects at moderate doses	Evidence suggests adverse effects to human chromosomes
Azafenidin right-of-way electric yard non-electric	Toxicity Category IV Practically Non-toxic	Toxicity Category IV Practically Non-toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >5.3	Toxicity Category III Slightly Toxic	Not listed by EPA as a carcinogen	Increased resorptions and bone abnormalities	Fetal toxicity observed in absence of overt maternal toxicity.	No adverse effects.
Bromacil right-of-way electric yard	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat 5126	Toxicity Category IV Practically Non-toxic	Rabbit >5000	Toxicity Category III Slightly Toxic	Rat (1-hour) >14.4	Toxicity Category III Slightly Toxic	Group C by EPA-OPP – Possible human carcinogen	Repeated high doses caused fetal abnormalities in rats.	No adverse effects	No adverse effects
Chlorsulfuron right-of-way	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat (female) 2341	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) 5.9	Toxicity Category III Slightly Toxic	No adverse effects	No adverse effects	Slightly decreased fertility at high doses	No adverse effects
Clopyralid right-of-way non-electric	Toxicity Category II Moderately Toxic	Toxicity Category IV Practically Non-toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >5000	Toxicity Category IV Practically Non-toxic	Rat >3.0	Toxicity Category III Slightly Toxic	No adverse effects	Caused birth defects in animals at greatly exaggerated doses	No adverse effects	No adverse effects
Dicamba right-of-way non-electric	Toxicity Category I Highly Toxic	Toxicity Category IV Practically Non-toxic	Rat >757	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >5.3	Toxicity Category III Slightly Toxic	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Dichlobenil non-electric	Toxicity Category IV Practically Non-toxic	Toxicity Category IV Practically Non-toxic	Rat 4250	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >3.3	Toxicity Category III Slightly Toxic	Group C by EPA-OPP – Possible human carcinogen	No adverse effects	No adverse effects	No adverse effects
Diuron right-of-way electric yard	Toxicity Category III Slightly Toxic	Toxicity Category III Slightly Toxic	Rat (female) 1300 Rat (male) 2300	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >3.5	Toxicity Category III Slightly Toxic	Proposed EPA-OPP as a Known/Likely Carcinogen	Teratogenic in mice and rats at doses of 250 mg/kg/day	Significant decrease in weight of offspring at highest doses	No adverse effects
Fosamine Ammonium right-of-way	Toxicity Category IV Practically Non-toxic	Toxicity Category III Slightly Toxic	Rat >24,000	Toxicity Category IV Practically Non-toxic	Rabbit >5000	Toxicity Category III Slightly Toxic	Rat (4-hour) >42	Toxicity Category IV Practically Non-toxic	Not listed by EPA as a carcinogen	No adverse effects.	No adverse effects.	Clastogenic; Chromosome breakage at highest doses.
Glyphosate right-of-way electric yard	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat >4320	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category II Moderately Toxic	Rat (4-hour) >1.3	Toxicity Category III Slightly Toxic	Group E by EPA-OPP – evidence of human non-carcinogenicity.	Diarrhea; decreased body weight, nasal discharge and death in high doses.	Kidney and digestive effects and decreased body weight gain in high doses.	No adverse effects
Halosulfuron-Methyl non-electric	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat 1287	Toxicity Category III Slightly Toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rat (4-hour) >5.7	Toxicity Category IV Practically Non-toxic	No adverse effects	Decrease in mean body weight; soft tissue; skeletal variations	No adverse effects	No adverse effects
Hexazinone right-of-way	Toxicity Category I Highly Toxic	Toxicity Category IV Practically Non-toxic	Rat 1200	Toxicity Category III Slightly Toxic	Rabbit >5278	Toxicity Category IV Practically Non-toxic	Rat (4-hour) 3.94	Toxicity Category IV Practically Non-toxic	Group D by EPA-OPP – not classifiable as a human carcinogen	Some effects at high dose levels	Some effects at mid- and high dose levels	Positive in one study and negative in others.
Imazapyr right-of-way	Toxicity Category I Highly Toxic	Toxicity Category IV Practically Non-toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >1.3	Toxicity Category III Slightly Toxic	Group E by EPA-OPP – evidence of human non-carcinogenicity	No adverse effects	No adverse effects	No adverse effects
Isoxaben right-of-way electric yard non-electric	Toxicity Category II Moderately Toxic	Toxicity Category III Slightly Toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >2.6	Toxicity Category III Slightly Toxic	Group C by EPA-OPP – Possible human carcinogen	Has caused birth defects in animals at high doses	Shown to interfere with reproduction in animals	No information available
Mefluidide non-electric	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Mice 1920	Toxicity Category III Slightly Toxic	Rabbit >4000	Toxicity Category III Slightly Toxic	Rat (4-hour) >8.5	Toxicity Category III Slightly Toxic	Possible oncogenic effects in tests on mice	No adverse effects	No adverse effects	No adverse effects
Metsulfuron-Methyl right-of-way	Toxicity Category II Moderately Toxic	Toxicity Category III Slightly Toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >5.3	Toxicity Category III Slightly Toxic	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Oryzalin non-electric	Toxicity Category III Slightly Toxic	Study requested by EPA	Rat >10,000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat >3.17	Toxicity Category III Slightly Toxic	Group C by EPA-OPP – Possible human carcinogen	Reduced maternal and fetal body weight	Increase in liver, body, kidney weights	No adverse effects

Pacloubtrazol right-of-way	Toxicity Category II Moderately Toxic	Toxicity Category III Slightly Toxic	Rat 2150	Toxicity Category III Slightly Toxic	Rabbit >4000	Toxicity Category III Slightly Toxic	Rat (4-hour) >250	Toxicity Category IV Practically Non-toxic	No adverse effects	Caused birth defects in lab animals at doses toxic to the mother	No adverse effects	No adverse effects
Picloram right-of-way	Toxicity Category II Moderately Toxic	Toxicity Category IV Practically Non-toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >8.11	Toxicity Category III Slightly Toxic	Group E by EPA-OPP – Evidence of non- carcinogenicity	Body weight gains/losses, excess salivation	Effects not reported	No adverse effects
Sulfometuron- Methyl electric yard	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >5.1	Toxicity Category III Slightly Toxic	No adverse effects	No adverse effects	Decreased number of off-spring at levels toxic to the mother	No adverse effects
Tebuthiuron right-of-way electric yard	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-	Rat (male) >2000 Rat (female) >1000	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >2.0	Toxicity Category III Slightly Toxic	Group D by EPA-OPP – not classifiable as a human carcinogen	No adverse effects	No adverse effects	No adverse effects
Triclopyr right-of-way non-electric TEA	Toxicity Category I Highly Toxic	Toxicity Category IV Practically Non-toxic	Rat 1847	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >2.6	Toxicity Category IV Practically Non-toxic	Group D by EPA-OPP – not classifiable as a human carcinogen	Positive for adverse developmental effects	Positive for adverse reproductive effects	No adverse effects
BEE	Toxicity Category III Slightly Toxic	Toxicity Category IV Practically Non-toxic	Rat 803	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >4.8	Toxicity Category IV Practically Non-toxic	Same as above	Same as above	Same as above	No adverse effects
Trinexapac- Ethyl non-electric	Toxicity Category II Moderately Toxic	Toxicity Category III Slightly Toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >2.7	Toxicity Category III Slightly Toxic	Slight increase in stomach tumors in male mice at high doses	Effects not reported	None observed	None observed
Mixtures												
2,4-D + Dicamba	Toxicity Category I Highly Toxic	Toxicity Category III Slightly Toxic	Rat 1150	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >20	Toxicity Category IV Practically Non-toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
2,4-D + Glyphosate	Toxicity Category I Highly Toxic	Toxicity Category III Slightly Toxic	Rat 3860	Toxicity Category III Slightly Toxic	Rabbit >6366	Toxicity Category IV Practically Non-toxic	Rat (4-hour) >1.8	Toxicity Category II Moderately Toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
2,4-D + Picloram	Toxicity Category II Moderately Toxic	Toxicity Category II Moderately Toxic	Rat >2600	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >1.8	Toxicity Category II Moderately Toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
2,4-D + Triclopyr	Toxicity Category III Slightly Toxic	Toxicity Category III Slightly Toxic	Rat >2000	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >4.9	Toxicity Category III Slightly Toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
Bromacil + Diuron	Toxicity Category I Highly Toxic	Toxicity Category IV Practically Non-toxic	Rat >1500	Toxicity Category III Slightly Toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >2.6	Toxicity Category III Slightly Toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
Clopyralid + Triclopyr	Toxicity Category II Moderately Toxic	Toxicity Category III Slightly Toxic	Rat >5000	Toxicity Category IV Practically Non-toxic	Rabbit >2000	Toxicity Category III Slightly Toxic	Rat (4-hour) >5.3	Toxicity Category III Slightly Toxic	See individual chemical above	See individual chemical above	See individual chemical above	See individual chemical above
Chlorsulfuron + Metsulfuron Methyl												

Notes:

Unless otherwise noted, toxicity data are for technical forms of the herbicide (that is, the grade used for toxicology studies), not formulated (brand-name) products; data for specific formulated products might be different than that shown. **LC50** = lethal concentration 50; the concentration of a material in air that on the basis of laboratory tests (respiratory route) is expected to kill 50% of a group of test animals when administered as a single exposure (1 hour or 4 hours as indicated in the table). **LD50** = lethal dose 50; the dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route (other than inhalation) when given all in one dose. (Source: MSDS Pocket Dictionary, Genium Publishing Corporation 1988) **Toxicity Categories:** Category I indicates the highest degree of acute toxicity, Category IV the lowest.