UtahStateUniversity
COOPERATIVE EXTENSION

TOXICITY OF REPRESENTATIVE PESTICIDES

The LD_{50} (Lethal Dose 50%) is the amount of a substance that kills 50% of a population of test animals and is measured in milligrams of the substance per kilogram of the test animals body weight.

	Rat Oral LD_{50} in mg/kg	Rabbit Dermal LD_{50} in mg/kg
sodium fluoroacetate (1080)	0.1	---
aldicarb (Temik)	0.7	1400 [**2.5***]
parathion	2	15
warfarin (D-Con)	3 [**800****]	1400
carbofuran (Furadan)	5.3	885 [**120***]
azinphos-methyl (Guthion)	7	220*
strychnine	16	---
cholecalciferol (Vitamin D_3)	42	---
nicotine	50	50
paraquat (Gramoxone)	57	325 [**80***]
rotenone	60	---
diazinon (D·Z·N)	66	180
DDT	87	1931
chlorpyrifos (Dursban, Lorsban)	145	2000
caffeine	192	---
pyrethrum	200	---
aspirin	200 [**1010****]	---
carbaryl (Sevin)	250	2000 [**4000***]
2,4-D acid	370	1400
malathion	370	4100
piperine (black pepper)	514	---
atrazine (Aatrex)	672	7500
dicamba (Banvel)	1039 [**2000****]	---
garlic oil	1360	---
picloram (Tordon)	2898	---
sodium chloride (table salt)	3000	---
glyphosate (Roundup)	5480	---
captan	9000 **[740****]**	---
water	25000[intravenous]	---

***rat; **rabbit**

National Institute for Occupational Safety and Health 1985-86 Registry of the Toxic Effects of Chemical Substances.

The LD_{50} number in mg/kg multiplied by .003 equals the LD_{50} in ounces for a 187 lb. warm blooded animal (wba). For example, the 2,4-D acid LD_{50} is 370 mg/kg, times .003 equals 1.11 ounces for the LD_{50} of a 187 lb. wba. The aldicarb LD_{50} is 0.7 mg/kg, times .003 equals .0021 ounces for the LD_{50} of a 187 lb. wba. Water would be 75 ounces intravenous.

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