



# RESTRICTED USE PESTICIDES

Both the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Utah Pesticide Control Act restrict some uses of certain pesticides to certified applicators or those working under their direct supervision. In Utah only private applicators can supervise the use of restricted use pesticides by noncertified applicators. Below is a list of restricted use pesticides that are likely to be used in Utah. Information on how to become a certified applicator or additional information about these restricted use pesticides may be obtained from your Utah Department of Agriculture and Food Agricultural Field Representative or Utah State University County Agent.

<u>ACTIVE INGREDIENT (TRADE NAME)</u>	<u>TYPE OF PESTICIDE</u>	<u>RESTRICTED USES &amp; FORMULATIONS</u>	<u>RESTRICTION CRITERIA</u>
acrolein (Aqualin, Magnacide-H)	Herbicide Rodenticide	All formulations and uses	Human inhalation hazard. Residue effects on avian and aquatic organisms.
alachlor (Lasso)	Herbicide	All formulations and uses.	Potential oncogenicity*.
aldicarb (Temik)	Insecticide Acaricide Nematicide	All formulations and uses.	Accident history.
aluminum phosphide (Detia, Fumitixoin, Phostoxin)	Fumigant	All formulations and uses.	Inhalation hazard to humans.
aminopyridine (Avitrol)	Avicide	All formulations and uses.	Hazard to fish and non-target birds.
amitrole (amitrol T)	Herbicide	All formulations except for home use.	Potential oncogenicity*.
atrazine (Aatrex, Extrazine)	Herbicide	All formulations 2% and greater.	Potential ground water hazard. Worker exposure concerns.
avermectin (Agri-Mek)	Insecticide	Emulsifiable concentrate.	Fish, mammal and aquatic organism toxicity.
azinphos methyl (Guthion)	Insecticide	All liquids with a concentration >13.5%.	Human inhalation hazard. Acute toxicity hazard to avian, aquatic and mammalian species.
bendiocarb (Turcam)	Insecticide	Granular and wettable powder	Aquatic and avian toxicity.
bifenthrin (Capture)	Insecticide	Emulsifiable concentrate.	Aquatic organism and fish toxicity.
carbofuran (Furadan)	Insecticide Nematicide Acaricide	All formulations and used except pellet/tablet.	Acute inhalation toxicity. Avian toxicity.
chlorophacinone (Rozol)	Rodenticide	Tracking powder, dust and ready-to-use formulations >0.2%.	Human hazard. Potential for food contamination. Possible inhalation hazard.
chloropicrin (Brom-O-Gas, Terr-O-Gas)	Fumigant	All formulations and used >2%. All formulations for rodent control.	Acute inhalation toxicity. Hazard to non-target organisms.

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chromic acid (CCA)	Wood Preservative	All formulations except brush on.	Oncogenicity*, mutagenicity*, teratogenicity* and fetotoxicity*.
clofentezine (Apollo SC)	Miticide	Soluble concentrate.	Environmental hazard.
coumaphos (CO-RAL)	Insecticide	Flowable concentrate.	Acute oral toxicity.
creosote (Creosote, Coaltar)	Wood Preservative	All formulations and uses.	Oncogenicity*, mutagenicity*
cyanazine (Bladex)	Herbicide	All formulations and uses.	Teratogenicity*, fetotoxicity*.
cypermethrin (Ammo, Cymbush)	Insecticide	All formulations and uses.	Oncogenicity*. Hazard to non-target organisms.
diazinon	Insecticide	Granules, emulsifiable concentrate and wettable powders.	Avian hazard.
dichloropropene (Telone)	Fumigant	All formulations and uses.	Probable human carcinogen. Oncogenicity*. Acute oral and inhalation toxicity.
dichlofop methyl (Hoelon)	Herbicide	All formulations and uses.	Oncogenicity*.
dioxathion (Deltic, Delnav)	Insecticide Acaricide	All emulsifiable and solution concentrates. All domestic uses for wettable powders <30%.	Acute dermal toxicity.
diphacinone (Ditrac Tracking Powder)	Rodenticide	Tracking powders.	Inhalation toxicity.
disulfoton (Di-syston)	Insecticide Acaricide	All granular formulations 10% and greater. All emulsifiable concentrates 65% and greater; all emulsifiable concentrates and concentrate solutions 21% and greater with fensulfothion 43% and greater in combinations with fensulfothion 32% and greater. In commercial seed treating, non-aqueous solution, 95% and greater. All end use formulations >2%.	Acute dermal and inhalation toxicity.
ethoprop (Mocap)	Insecticide Nematicide	All granular formulations except 10%. All fertilizer formulations. Emulsifiable concentrations 40% and greater.	Environmental hazards. Acute dermal toxicity.
ethyl parathion (Parathion)	Insecticide	All formulations and uses.	Human inhalation hazard. Acute dermal toxicity. Residue effects on mammalian, aquatic and avian species. Accident history.
fenamiphos (Nemacur)	Nematicide	Emulsifiable concentrates 35% and greater.	Acute dermal and inhalation toxicity. Avian toxicity.
fenthion (Rid-A-Bird 1100 Perch Solution)	Avicide	All uses.	Avian, fish and aquatic invertebrate toxicity.
fenvalerate (Pydrin, Asana)	Insecticide	Emulsifiable concentrates >30%.	Possible adverse effects on aquatic organisms.

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fonofos	Insecticide	All granular formulations 20% and greater. Emulsifiable concentrates 44% and greater.	Environmental hazards. Acute dermal toxicity.
inorganic arsenicals (CCA, ACA, FCAP)	Wood Preservative	All formulations.	Human and environmental hazards.
isazofos (Triumph)	Insecticide	All formulations and uses.	Bird, fish and aquatic organism toxicity.
isofenphos (Pryfon)	Insecticide	65% liquid formulation for termite use.	Acute toxicity.
lindane (Lindane)	Insecticide	All formulations for various uses.	Possible oncogenicity*.
magnesium phosphide (Degesch, Detia)	Fumigant	All formulations and uses.	Inhalation hazard.
metam sodium (Vapam)	Herbicide	Sewer root control.	Human, domestic animal and environmental hazards.
methamidophos (Monitor)	Insecticide Acaricide	Liquid formulations 40% and greater. Dust formulations 2.5% and greater.	Acute dermal toxicity. Residue effects on avian species.
methidathion (Supracide)	Insecticide Acaricide	All formulations and all uses except nursery stock, safflower and sunflower.	Residue effects on avian species.
methiocarb (Mesuroo, Metaldehyde/Methiocarb Granules)	Avicide Molluscicide	All formulations and outdoor commercial and agricultural uses.	Possible hazard to avian, fish and aquatic organisms.
methomyl (Lannate, Nudrin)	Insecticide	As sole active ingredient in 1% to 2.5% baits (except 1% fly bait). All concentrated solution formulations 90% wettable powder not in water soluble bags.	Residue effects on mammalian species. Accident history.
methyl bromide (Brom-O-Gas, Meth-O-Gas, Terr-O-Gas)	Fumigant	All formulations and uses.	Accident history. Acute toxicity.
methyl isothiocyanate (Vorlex Soil Fumigant)	Fumigant	Solution-ready to use.	Human hazard.
methyl parathion (Penncap-M)	Insecticide	All formulations and uses.	Residue effects on mammalian and avian species. Hazard to bees. Acute dermal toxicity.
mevinphos (Phosdrin)	Insecticide Acaricide	All emulsifiable concentrates, liquid concentrates and 2% dusts.	Acute dermal toxicity. Residue effects on mammalian and avian species.
nicotine (Fulex, Nico-Fume)	Insecticide	Liquid and dry formulations 14% and greater for greenhouse use.	Acute inhalation toxicity. Effects on aquatic organisms.
oxamyl (Vydate)	Insecticide Nematicide	All liquid formulations and uses.	Acute oral and inhalation toxicity. Avian toxicity.
oxydemeton methyl (Meta Systox R)	Insecticide Acaricide	All formulations and uses.	Reproductive effects.

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Paraquat (Gramoxone)	Herbicide	All formulations and concentrates EXCEPT as listed: pressurized. Spray formulations containing 0.44% paraquat bis (methyl sulfate) & 15% petroleum distillates as actives liquid fertilizers containing 0.025% paraquat dichloride and 0.03% atrazine; 0.03% paraquat dichloride & 0.37% atrazine; 0.04% paraquat dichloride & 0.49% atrazine.	Human toxicological data. Use and accident history.
pentachlorophenol (Penta, PCP)	Wood Preservative	All formulations and uses.	Oncogenicity*, teratogenicity* and fetotoxicity*.
permethrin (Ambush, Pounce)	Insecticide	All formulations labeled for agricultural crop use.	Aquatic organism toxicity. Oncogenicity*.
phorate (Thimet)	Insecticide	All granular formulations. Liquid formulations 65% and greater.	Acute dermal and oral toxicity. Residue effects on avian and mammalian species. Aquatic organism effects.
picloram (Tordon)	Herbicide	All formulations except Tordon 101R and RTU.	Hazard to non-target plants.
pronamide (Kerb)	Herbicide	All uses of 50% wettable powders.	Oncogenicity*.
propramphos (Safrotin)	Insecticide	50% emulsifiable concentrates for indoor domestic use.	Indoor uses restricted.
rotenone (Prentox)	Pisicide	2.5-5% emulsifiable concentrate and 5% and 20% wettable powder.	Aquatic organism toxicity.
sodium cyanide (M-44)	Predacide	All capsules and ball formulations and uses.	Human inhalation hazard. Hazard to non-target species.
sodium fluoroacetate (Compound 1080)	Predacide	All solutions and dry bait formulations and uses.	Acute oral toxicity. Hazard to non-target organisms. Use and accident history.
starlicide (Starlicide, DRC 1399)	Avicide	98% concentrate bird repellants.	Hazard to non-target organisms.
strychnine (Strychnine)	Rodenticide	All formulations except hand application below ground.	Acute oral toxicity. Hazard to non-target organisms. Use and accident history.
sulfotepp (Fulex Dithio, Plantfume 103)	Insecticide	Smoke generators.	Human inhalation hazard.
sulfuric acid (ASARCO)	Desiccant	Potato vine dessicant.	Acute toxicity to humans. Extremely corrosive.
Sulfuryl fluoride (Vikane)	Fumigant	All formulations and uses.	Acute inhalation hazard. Human acute toxicity.
tefluthrin	Insecticide	Granular product used on corn grown for seed.	Environmental hazard.
terbufos (Counter)	Insecticide Nematicide	All granular formulations 15% and greater.	Acute oral and dermal toxicity. Residue effects to avian species.

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tributyltin methacrylate (Classic Yacht #625)	Biocide	Solution-ready to use.	Aquatic organism toxicity.
triphenyltin hydroxide (DUTER)	Fungicide	All formulations and uses.	Possible mutagenicity*.
zinc phosphide (Gopharid, ZP)	Rodenticide	All 10% and greater dry formulations. All bait formulations. All uses.	Acute inhalation and oral toxicity. Hazard to non-target organisms.

\*Definitions: Fetotoxicity - Ability to be toxic to the developing fetus.  
 Mutagenicity - Ability to generate or cause mutations.  
 Oncogenicity - Ability to generate or cause tumors.  
 Teratogenicity - Ability to generate or cause birth defects.

### **PRECAUTIONARY STATEMENT**

All pesticides have both benefits and risks. Benefits can be maximized and risks minimized by reading and following the labeling. Pay close attention to the directions for use and the precautionary statements. The information on pesticide labels contains both instructions and limitations. Pesticide labels are legal documents and it is a violation of both federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for proper use. Always read and follow the label.

Howard Deer  
 Extension Pesticide Specialist