



earth-wise guide to

Products

Toxicity Ratings

why grow green?

The Grow Green program recommends the least toxic approach to pest management and responsible fertilizer use in order to reduce the amount of landscape chemicals that runoff into our waterways and degrade water quality.

about the products

In order to provide the most useful product-rating list to customers, several area gardening retail stores were surveyed to determine which products were most frequently available in the stores.

Those products (with a few additions to provide an adequate number of products per problem) are listed here. Texas Cooperative Extension Service and the City of Austin provide this information as a comparative reference only, and do not necessarily agree with the ratings provided. Listing of a specific product trade name does not constitute an endorsement of its use. Many pesticides and pesticide products other than those listed in these tables are available and may be suitable for use.

about the ratings

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Education Program, Texas Cooperative Extension who can be reached for questions at (979) 862-1035.

The rating system was developed by Philip Dickey of the Washington Toxics Coalition.

Washington Toxics Coalition Criteria for Evaluating Lawn and Garden Chemicals

Home lawn and garden pest control products are rated for acute toxicity, chronic health effects, aquatic toxicity, off-target toxicity, persistence, and mobility. Factors determining the ratings in each category are:



Acute Toxicity: oral acute toxicity, inhalation toxicity, skin irritation and toxicity, potential for eye irritation and damage.

Acute hazards are evaluated on the basis of the formulated product. EPA's toxicity categories are used as the basis of the ranking.

Chronic Toxicity: presence of ingredients which may cause cancer, reproductive or developmental effects, or other long-term toxicity.



Aquatic Toxicity: hazard to fish and other aquatic species as indicated by required warnings on product label.



Off-Target Toxicity: hazard to birds, bees and other beneficial insects, and pets, as indicated by required warnings on product label.



Persistence: half-life of active ingredient(s) in soil.



Mobility: soil mobility as indicated by soil binding and soil half-life.

Within each of these categories, four ratings are possible. The qualitative interpretation of these ratings is as follows:

- **Lowest toxicity or environmental impacts.** Follow label precautions for safest possible use of product.
- ◐ **Low to moderate toxicity or environmental impacts.** Factors should be taken into account in deciding whether and how to use the product.
- ◑ **Higher toxicity or environmental impacts.** Product presents significant hazards that may be reduced by choosing a different product.
- **Highest hazard level.** Product should be avoided or considered only as a last resort, especially if it received several of these ratings.
- N/A **Not enough information available for rating.** (no score)
- ? **Not applicable** (e.g. half-life for minerals)

Important Note:

- Product ratings are based upon product labels, published data, or reference sources. Products may contain ingredients or contaminants unknown to us, whose presence, if known, would change the product's rating.
- Safety of a product depends to a great extent upon how it is used. Since individuals may exercise different safety precautions, a high rating is not a guarantee of a product's safety, just as a low rating does not necessarily imply that use will cause harm or damage.
- These ratings are presented as an informational service. A high rating does not constitute an endorsement of a particular product. Washington Toxics Coalition (WTC) makes no guarantees as to the safety or efficacy of any product rated by these criteria and assumes no responsibility or liability for any injury or damage which may occur as a result of using any such product.
- There is no universal set of criteria for ranking products. WTC has chosen an approach that looks at only the product itself and does not consider any safety protection offered by the package or the label directions. Safe and effective pest control may require a mix of tactics and products. WTC cannot offer hard and fast rules about which products to buy, but suggest giving priority to products with lower hazard ratings.

Ratings for Pest Control Products (including pesticide/fertilizer mixtures)

I. Acute Human Health Hazard

Based directly on EPA toxicity/hazard categories:

- Slightly toxic or practically non-toxic. Mild or slight eye or skin irritant. Signal word CAUTION may be required on label.
- Moderately toxic or moderate skin or eye irritant. Signal word CAUTION.
- Very toxic or severe but reversible skin or eye irritant. Signal word WARNING.
- Extremely toxic or corrosive (causes skin or eye burns). Signal word DANGER.

II. Other Human Health Hazards

If product contains unknown or undisclosed "inert ingredients", the rating for chronic effects shall be "?" unless there are established chronic effects from the known ingredients sufficient to classify the product or .

- All ingredients are known.** Product contains no ingredient listed as a known or suspected human or animal carcinogen, reproductive or developmental toxicant, or other ingredient associated with long-term hazard.
- All ingredients are known.** Product contains no known or suspected human or animal carcinogen as an ingredient.
- Contains possible carcinogen or reproductive or developmental toxicant, or use of similar products has caused long-term toxicity.
- Contains known, suspected, anticipated, or probable human carcinogen as an ingredient.

III. Environmental Characteristics

A. Toxicity to Aquatic Organisms

- Product presents no hazard to aquatic organisms.
- Product label warns to keep out of water.
- Product label warns of toxicity to fish or other aquatic life.
- Product label warns of high toxicity to fish or other aquatic life.

B. Toxicity to Other Wildlife (selectivity of active ingredients)

- Practically non-toxic to birds, bees, and other beneficials.
- Selective in toxicity (e.g. toxic only to caterpillars) but still toxic to important species.
- Product label warns of toxicity to particular species or product is known to be a broad-spectrum insecticide.
- Poses higher-level hazards to beneficial organisms or wildlife as indicated by label warnings such as "highly toxic" or "extremely toxic."

C. Environmental Persistence

- Half-life of active ingredients = 7 days or less in average soil.
- Half-life of active or toxic ingredients = 8 - 29 days.
- Half-life of active or toxic ingredients = 30 - 180 days.
- Half-life of active or toxic ingredients > 180 days.

Sources: Oregon State University Extension Pesticide Properties Database,² Agricultural Research Service/US Department of Agriculture Pesticide Properties Database,³ or the Hazardous Substances Databank,⁴ in that order.

D. Mobility (active ingredient only)

- Very low to extremely low mobility in soil
- Low mobility
- Moderate mobility
- High to very high mobility

If you have leftover or banned chemicals in your garage, please take them for safe disposal to a household hazardous waste facility.
Visit www.yardwise.org/

Source: OSU Extension Pesticide Properties Database.²

E. Breakdown Products

If the breakdown products of any ingredient are known to be of similar or greater toxicity, persistence, or mobility than the original compound, the ratings should be based upon both the ingredient and its metabolites.

- ¹ EXTTOXNET, The Extension Toxicology Network, Pesticide Information Profiles, <http://exttoxnet.orst.edu>
- ² Oregon State University Extension Pesticide Properties Database, <http://npic.orst.edu/ppdmmove.htm>
- ³ Agricultural Research Service, US Department of Agriculture Pesticide Properties Database, <http://ars.usda.gov/services/docs.htm?docid=6433>
- ⁴ Hazardous Substances Databank, Toxnet, National Library of Medicine, <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>



Earth-wise designations are assigned to products where all known ratings are or . As with all pesticides, unknown hazards may exist and should be treated with extreme caution.

Active vs. Inert Ingredients

A pesticide product has two main components: the active ingredient(s) and the inert (other) ingredient(s). The EPA requires the manufacturer to list on the label the percent of the active ingredient only – those substances that destroy, prevent or repel a pest.

An inert ingredient is any substance in a pesticide product having no pesticidal action. Inert ingredients are typically added to improve storage, handling, application, effectiveness, or safety. The EPA does not require pesticide manufacturers to divulge inert (“other”) ingredients as they are considered proprietary information.

While people may believe that inert ingredients are harmless – as the term suggests – in fact, they aren’t necessarily chemically or biologically inert and can contribute substantially to the hazards of the product. Some are in fact, more toxic than the active ingredient. Since 1997, 2300 inert ingredients have been used in pesticide products and more than a quarter (26%) of the inerts used, have been identified as hazardous by state, federal or international agencies.

With the exception of the acute toxicity category which analyzes the entire pesticide product, the following toxicity comparisons rate only the active ingredients. While the information is considered extremely useful, it is limited to the available public information.

product toxicity comparisons

Evaluation of active ingredients only; does not include toxicity information on inert or "other" ingredients.

Toxicity/Threat:

○ low ◐ moderate ◑ high ● highest NA not applicable
 ? unknown toxicity 🌍 earth-wise

Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Actinovate® SP	<i>Streptomyces lydicus</i> 0.037%	◐	?	◑	○	●	◐
🌍	Agralawn Crabgrass Control	Cinnamon bark 0.95%	○	?	○	○	○	?
	Amdro® Fire Strike™ Yard Treatment Fire Ant Bait	Hydramethylnon 0.036% Methoprene 0.25%	◐	◑	◑	◑	○	◐
🌍	Amdro® Image® Nutsedge Killer	Imazaquin 3.3%	◐	?	◐	○	●	◑
	Amdro® Pro Fire Ant Bait	Hydramethylnon 0.73%	◐	◑	◑	◑	○	◐
	Bayer Advanced™ 2 in 1 Systemic Flower Care	Disulfoton 0.1%	◑	◑	●	●	◐	◑
	Bayer Advanced™ 3 in 1 Insect, Disease & Mite Control	Tebuconazole 0.65% Imidaproclid 0.47% Tau-fulvalinate 0.61%	◐	◐	●	●	◐	◑
	Bayer Advanced™ All-in-One Weed Killer for Lawns Concentrate	MSMA 9.81%, 2,4-D 3.81% MCPP 1.6% Dicamba 0.79%	◐	●	◐	○	○	●/◑
	Bayer Advanced™ 24 Hour Grub Killer Plus Ready-to-Spread Granules	Trichlorfon 6.24%	◐	◑	◑	◑	●	◐
	Bayer Advanced™ All-in-One Lawn Weed & Crabgrass Killer Ready-to-Spray	2,4-D 4.85% Quinclorac 1.61%	◐	◑	◑	○	●	◐
	Bayer Advanced™ Complete Insect Killer for Soil & Turf Ready-to-Spread Granules	Imidacloprid 0.15% Beta-cyfluthrin 0.5%	◐	?	●	◑	◐	◑
	Bayer Advanced™ Disease Control for Roses, Flowers & Shrubs Concentrate	Tebuconazole 2.9%	◐	○	◑	○	◐	◐
	Bayer Advanced™ Fire Ant Killer Ready-to-Use Dust	Beta-cyfluthrin 0.5%	◐	?	●	◑	○	◐
	Bayer Advanced™ PowerForce® Mosquito Killer Plus Outdoor Fogger	Tetramethrin 0.15%, Permethrin 0.15%, Piperonyl butoxide 0.75%	◐	◑	●	◑	○	●/◑
	Bayer Advanced™ PowerForce® Multi-Insect Killer Concentrate	Cyfluthrin 0.75%	◐	?	●	◑	○	◐
🌍	Bayer Advanced™ Snail & Slug Killer Bait	Iron phosphate 1%	○	?	◐	○	○	N/A
	Bayer Advanced™ Tree & Shrub Insect Control Concentrate	Imidacloprid 1.47%	◐	?	●	◑	◐	◑
🌍	Bioganic™ Spot Weeder Ready-to-Use	Phenethyl proprionate 2.5% Eugenol 2.5%	○	?	?	○	○	○
	Black Flag® Backyard Fogger	Permethrin 0.2%, Tetramethrin 0.2%	◐	◑	●	◑	◐	●/◑
	Bonide® All Seasons® Horticultural Spray Oil	Petroleum oil 98%	◐	?	●	●	?	?
	Bonide® Fire Ant Granules	Permethrin 0.25%	◐	◑	●	◑	○	●/◑
	Bonide® Garden Dust	Copper 7% Rotenone 0.75% Other cube resins 1.5%	◐	○	◑	◑	◐	○
	Bonide® Grub Beater	Azadirachtin 0.09%	◐	?	◐	◑	○	○
🌍	Bonide® Hot Pepper Wax Ready-to-Use	Capsaicin and related capsaicinoids 0.184%	◐	?	◐	○	?	?

If you are considering a product that is not listed on this fact sheet, look for one with the 'same' active ingredient(s) -- it should have a similar toxicity rating unless the concentrations are different.

■ herbicide
 ■ fungicide
 ■ insecticide
 ■ combination

Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Bonide® Mosquito Beater Flying Insect Yard Fog	Resemethrin 0.2%	○	○	◐	◐	?	◐
	Bonide® Stinger Fire Ant Killer	Bifenthrin 0.20%	◐	?	●	◐	○	◐
	Concern® Citrus Home Pest Control™	D-limonene 5.8%	◐	?	◐	◐	○	○
	Concern® Copper Soap Fungicide®	Copper Octonate 0.08%	◐	○	◐	○	○	○
	Concern® Insect Killing Soap	Fatty acid soap	◐	?	◐	○	○	○
	Concern® Multi-Purpose Insect Killer	Pyrethrins 0.02%, PBO 0.2%	◐	●	◐	◐	○	○
	Concern® Weed Prevention Plus™ 8-2-4	Corn gluten 100%	○	○	◐	○	?	?
	Cutter® Advanced Insect Repellent	Picaridin 7%	◐	?	N/A	N/A	N/A	N/A
	Cutter® Bug Free Backyard® Concentrate	Lambda-cyhalothrin 0.5%	◐	◐	◐	◐	◐	◐/○
	Diatect® Multi-purpose	Pyrethrins 0.2% PBO 1.0% Silicone dioxide 82%	◐	●	◐	◐	○	○
	Diatect® Results Fire Ant Control	Pyrethrins 0.2% PBO 1.0% Silicone dioxide 82%	◐	●	◐	◐	○	○
	Ecosmart® Organic™ Insect Repellent	Rosemary Oil 0.5% Cinnamon Leaf Oil 0.5% Lemongrass 0.5 Geranoil 1%	◐	?	N/A	N/A	N/A	N/A
	Eliminator® Bug & Snail Bait	Metaldehyde 2%, Carbaryl 5%	◐	◐	◐	●	◐	◐
	Eliminator® Liquid Edger	Sodium cacodylate 0.53%, Cacodylic acid 0.09%	◐	●	◐	◐	○	●/○
	Fertilome® Borer Bagworm, Leafminer & Tent Caterpillar Spray	Spinosad 0.5%	◐	?	◐	◐	○	◐
	Fertilome® Broad Spectrum Landscape & Garden Fungicide	Chlorothalonil 12.5%	◐	●	◐	○	◐	◐/○
	Fertilome® Crabgrass, Nutgrass & Dallisgrass Killer	Monosodium acid methanearsonate 13.2%	◐	●	◐	○	○	◐
	Fertilome® Dormant Oil	Parrafinic oil 98%	◐	?	◐	○	○	◐
	Fertilome® F Stop Lawn Fungicide	Myclobutanil 0.39%	◐	◐	●	●	◐	◐
	Fertilome® Halt Systemic Rose, Flower, Lawn & Ornamentals Fungicide	3-thioallophanate 50%	○	◐	◐	◐	◐	○
	Fertilome® Liquid Systemic Fungicide	Propiconazole 1.55%	◐	◐	◐	◐	◐	◐
	Fertilome® Weed & Feed Special 20-0-4	Simazine 0.63%	○	◐	○	○	○	◐
	Finale® Weed and Grass Killer Concentrate	Glufosinate-ammonium 1.0%	◐	◐	◐	◐	?	○
	Garden Safe® Fungicide 3-in-1 Ready-to-Use	Neem Oil 0.9%	◐	?	◐	◐	○	○
	Garden Tech® Over'n Out!™ Fire Ant Killer Granules	Fipronil 0.0103%	◐	○	◐	◐	○	◐
	Garden Tech® Over'n Out!™ Fire Ant Killer Mound Treatment	Indoxacarb 0.008%	◐	?	◐	◐	?	?
	GardenTech® Sevin® Daconil® Ready-to-Use	Chlorothalonil 0.087%	◐	●	◐	○	◐	◐/○

product toxicity comparisons

Evaluation of active ingredients only; does not include toxicity information on inert or "other" ingredients.

Toxicity/Threat:

○ low ◐ moderate ◑ high ● highest NA not applicable
 ? unknown toxicity 🌍 earth-wise

Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Bonide® Mosquito Beater Flying Insect Yard Fog	Resemethrin 0.2%	○	○	◐	◐	?	◑
	Bonide® Stinger Fire Ant Killer	Bifenthrin 0.20%	◐	?	●	◑	○	◐
	Concern® Citrus Home Pest Control™	D-limonene 5.8%	◐	?	◑	◐	○	○
	Concern® Copper Soap Fungicide®	Copper Octonate 0.08%	◐	○	◐	○	○	○
	Concern® Insect Killing Soap	Fatty acid soap	◐	?	◐	○	○	○
	Concern® Multi-Purpose Insect Killer	Pyrethrins 0.02%, PBO 0.2%	◐	●	◐	◐	○	○
	Concern® Weed Prevention Plus™ 8-2-4	Corn gluten 100%	○	○	◐	○	?	?
	Cutter® Advanced Insect Repellent	Picaridin 7%	◐	?	N/A	N/A	N/A	N/A
	Cutter® Bug Free Backyard® Concentrate	Lambda-cyhalothrin 0.5%	◑	◐	◑	◑	◐	◑/◐
	Diatect® Multi-purpose	Pyrethrins 0.2% PBO 1.0% Silicone dioxide 82%	◐	●	◑	◑	○	○
	Diatect® Results Fire Ant Control	Pyrethrins 0.2% PBO 1.0% Silicone dioxide 82%	◐	●	◑	◑	○	○
	Ecosmart® Organic™ Insect Repellent	Rosemary Oil 0.5% Cinnamon Leaf Oil 0.5% Lemongrass 0.5% Geranoil 1%	◐	?	N/A	N/A	N/A	N/A
	Eliminator® Bug & Snail Bait	Metaldehyde 2%, Carbaryl 5%	◐	◑	◐	●	◐	◐
	Eliminator® Liquid Edger	Sodium cacodylate 0.53%, Cacodylic acid 0.09%	◑	●	◑	◑	○	●/◑
	Fertilome® Borer Bagworm, Leafminer & Tent Caterpillar Spray	Spinosad 0.5%	◐	?	◑	◑	○	◐
	Fertilome® Broad Spectrum Landscape & Garden Fungicide	Chlorothalonil 12.5%	◑	●	◑	○	◐	◑/◐
	Fertilome® Crabgrass, Nutgrass & Dallisgrass Killer	Monosodium acid methanearsonate 13.2%	◐	●	◐	○	○	◑
	Fertilome® Dormant Oil	Parrafinic oil 98%	◐	?	◐	○	○	◐
	Fertilome® F Stop Lawn Fungicide	Myclobutanil 0.39%	◐	◑	●	●	◐	◑
	Fertilome® Halt Systemic Rose, Flower, Lawn & Ornamentals Fungicide	3-thioallophanate 50%	○	◐	◑	◑	◑	○
	Fertilome® Liquid Systemic Fungicide	Propiconazole 1.55%	◐	◐	◑	◑	◐	◐
	Fertilome® Weed & Feed Special 20-0-4	Simazine 0.63%	○	◐	○	○	○	◐
	Finale® Weed and Grass Killer Concentrate	Glufosinate-ammonium 1.0%	◐	◐	◐	◐	?	○
	Garden Safe® Fungicide 3-in-1 Ready-to-Use	Neem Oil 0.9%	◐	?	◐	◑	○	○
	Garden Tech® Over'n Out!™ Fire Ant Killer Granules	Fipronil 0.0103%	◐	○	◑	◑	○	◑
	Garden Tech® Over'n Out!™ Fire Ant Killer Mound Treatment	Indoxacarb 0.008%	◐	?	◐	◐	?	?
	GardenTech® Sevin® Daconil® Ready-to-Use	Chlorothalonil 0.087%	◑	●	◑	○	◐	◑/◐

If you are considering a product that is not listed on this fact sheet, look for one with the 'same' active ingredient(s) -- it should have a similar toxicity rating unless the concentrations are different.

■ herbicide
 ■ fungicide
 ■ insecticide
 ■ combination

Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Ortho® Bug-B-Gon® Max® Season Long Insect Killer for Lawns	Bifenthrin .115%	☾	?	●	☾	○	☾
	Ortho® Bug-Geta® Snail & Slug Killer	Metaldehyde 3.25%	☾	?	☾	●	☾	☾
	Ortho® Ecosense™ Brand Disease Control	Copper Octonate 0.08%	☾	○	☾	○	○	○
	Ortho® Ecosense™ Brand Insecticidal Soap	Potassium salt of fatty acid soap 1.0%	☾	?	☾	○	○	○
	Ortho® Ecosense™ Brand Organic Weed & Grass Killer	2-phenethyl propionate 2.5% Eugenol 2.5% Sodium laurel sulfate .05%	○	?	?	○	○	○
	Ortho® Max Season Long® Weed & Grass Killer Plus Preventer Ready-to-Use	Glyphosate 0.25% Oxyfluorfen 0.25%	○	?	☾	○	○	☾
	Ortho® Max® Fire Ant Killer Broadcast Granules	Bifenthrin 0.1%	☾	?	●	☾	○	☾
	Ortho® Max® Tree & Shrub Insect Control	Imidacloprid 1.47%	☾	?	●	☾	☾	☾
	Ortho® Orthene® Fire Ant Killer	Acephate 50%	☾	☾	☾	●	☾	☾
	Ortho® Orthenex® Garden Insect & Disease Control Concentrate	Acephate 4%, Triflorine 3.25%, Fenbutatin-oxide 0.75%	☾	☾	☾	●	☾	☾
	Ortho® Volck® Oil Spray	Petroleum oil 97%	☾	?	●	●	?	?
	Ortho® Weed-B-Gon Max® Plus Crabgrass Control Ready-to-Use	2,4-D 0.12%, Dicamba quinclorac 0.10% MCPP 0.22%	☾	☾	☾	○	●	☾
	Ortho® Weed-B-Gon® Crabgrass Killer for Lawns	Calcium acid methanearsinatate 0.50%	☾	●	☾	○	○	●/☾
	Ortho® Weed-B-Gon® Spot Weed Killer for St Augustine Lawns	Atrazine 0.60%	☾	☾	☾	○	●	☾
	Preen® Garden Weed Preventer	Trifluralin 1.47%	☾	?	●	☾	○	☾
	Repel® Lemon Eucalyptus Insect repellent	P-menthane	☾	?	N/A	N/A	N/A	N/A
	Roundup® Poison Ivy & Tough Brush Killer Plus Ready-to-Use	Glyphosate 1% Triclopyr 0.1%	☾	?	☾	○	○	☾
	Roundup® Weed & Grass Killer Super Concentrate	Glyphosate 50.2%	☾	?	☾	○	○	☾
	Safer® 3 in 1 Spray	Potassium salt of fatty acid .75% Sulfur .40%	☾	?	☾	○	○	○
	Safer® Garden Fungicide	Sulfur 12%	○	?	○	○	○	N/A
	Safer® Fire Ant Killer	d-limonene 78%	☾	?	☾	☾	○	○
	SC Johnson Off!® Power Pad Lamp	D-CIS/transallethrin 21.97%	☾	?	●	☾	☾	☾
	SC Johnson Off!® Mosquito Coil For Outdoor Use	D-CIS transallethrin 0.33%, Sodium benzoate 0.15%	☾	?	●	☾	☾	☾
	Scotts® Bonus® S Max Southern Weed and Feed & Fire Ant Killer	Bifenthrin 0.110%, Atrazine 1.089%	☾	☾	●	☾	●	☾
	Scotts® Bonus® S Southern Weed and Feed	Atrazine 1.055%	☾	☾	☾	○	●	☾

product toxicity comparisons

Evaluation of active ingredients only; does not include toxicity information on inert or "other" ingredients.

Toxicity/Threat:

○ low ◐ moderate ◑ high ● highest NA not applicable
 ? unknown toxicity 🌱 earth-wise

Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Scotts® GrubEx® Season-Long Grub Killer	Imidacloprid	◐	?	●	◑	◑	◑
	Scotts® Lawn Fungus Control	Thiophanate-methyl 2.3%	◐	●	◐	○	○	◐
	Scotts® Turf Builder® Halts® Crabgrass Preventer	Pendimethalin 1.71%	◐	○	◑	◑	○	◑
	Scotts® Turf Builder® WinterGuard™ PLUS 2® Weed Control	2,4-D 1.04% MCPP 0.52%	◐	◑	◑	○	●	◐
	SedgeHammer™	Halosulfuron - methyl 75%	◐	◐	◐	○	◑	?
🌱	Serenade® Disease Control	Bacillus subtilis 1.34%	○	○	○	○	○	○
🌱	Serenade® Lawn Disease Control	Bacillus subtilis 1.34%	○	○	○	○	○	○
	Spectracide® Fire Ant Killer Granules Mound Destroyer™	Lambda-cyhalothrin 0.04%	◑	◐	◑	◑	◑	◑/○
🌱	Spectracide® Fire Ant Killer Plus Preventer Bait Once & Done!™	Indoxacarb 0.016%	◐	?	◐	◑	?	?
	Spectracide® Grub Stop™ Once & Done!™	Halofenozide 1.5%	◐	?	●	◑	○	◐
	Spectracide® Immunox® Plus Insect & Disease Control	Myclobutanil 0.78% Permethrin 1.25%	◐	◑	●	●	◑	◑/○
	Spectracide® Malathion Concentrate	Malathion 50%	◐	?	◑	●	○	◐
	Spectracide® Poison Oak & Poison Ivy Brush Killer EZ Spray™	2,4-D 0.493% 2-methy-4-chlorophenoxy	◐	◑	◑	○	●	◐
	Spectracide® Triazicide® Once and Done!™ Insect Killer Ready-to-Use	Cyhalothrin 0.25%	◑	◐	◑	◑	◑	◑
🌱	Spectracide® Weed & Grass Killer Concentrate	Diquat dibromide 2.3% fluazifop-p-buytl 1.15% Dicamba 0.77%	◐	?	◐	○	◑	○
	Spectracide® Weed Stop® 2x for Lawns Concentrate	2,4-D 7.57%, Dicamba 0.71%, MCPP 2.73%, Sulfentrazone 0.18%	◐	◑	◑	○	●	◐
🌱	Summit® Mosquito Dunks	B.t. israeliensis 10.31%	◐	?	○	○	N/A	○
🌱	TomCat® Fire Ant Killer Granules	Indoxacarb 0.008%	◐	◐	◑	◑	?	◐
🌱	True Stop™ Fire Ant Killer	Rotenone 0.25% Other resins 0.30%	◐	◐	◑	◑	○	○
	Vigoro® Ultra Weed & Feed 28-3-3	2,4-D 0.64%, MCPP 0.16%, Dicamba 0.03%	◐	◑	◑	○	●	◐
	Vigoro® UltraTurf™ St. Augustine Weed & Feed with Atrazine 29-3-5	Atrazine 1.102%, Related compounds 0.058%	◐	◑	◑	○	●	◑

The City of Austin and the Texas Cooperative Extension provide this information as a comparative reference only. Listing of specific product trade names does not constitute an endorsement of its use. Many other pesticides and pesticide products are available and may be suitable for use other than those listed in these tables.

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Education Program, Texas Cooperative Extension who can be reached for questions at (979) 862-1035. The rating system was developed by Philip Dickey of the Washington Toxics Coalition.

