

Sim-Trol[®] 4L

Simazine Flowable Herbicide

Application Type

T/O

Turf & Ornamental

Application Type

AG

Agricultural

Active Ingredient:

Simazine (2-Chloro-4,6-bis (ethylamino)- s-triazine)	42.8%
Other Ingredients:	57.2%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Emergency telephone numbers:	(800) 424-9300 CHEMTREC (transportation and spills) (800) 900-4044 Poison Control Center (human health) (800) 345-4735 ASPCA (animal health)
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See inside panel for additional precautionary statements. Shake well before using.

EPA Reg. No. 35915-11-60063

EPA Est. No. 070989-MO-001
(Lot No. Begins with ST)

MANUFACTURED FOR:
SIPCAM AGRO USA, INC.
2520 Meridian Parkway, Suite 525
Durham, NC 27713



SipcamAdvan

9500110-000-20090805

NET CONTENTS: 2.5 Gallons (9.5 Liters)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes or on skin. Do not breathe spray mist.

Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

Simazine is a chemical which can travel (seep or leach) through soil and enter ground water which may be used as drinking water. Simazine has been found in ground water as a result of its use as a herbicide. Users of this product are advised not to apply Simazine where the water table (ground water) is close to the surface and where the soils are very permeable, i.e., well-drained soils such as loamy sands. Users are advised to consult with their local agricultural agencies to obtain information on the location of ground water and the type of soil in your area.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Simazine Watershed Information Center (SWIC) to determine whether the use of this product is prohibited in your watershed. SWIC can be accessed through www.simazine-watershed.info or 1-888-365-2874. If the SWIC indicates that use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Sipcam Agro USA, Inc. for a refund.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: Coveralls, chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Polyvinyl Chloride (PVC) ≥ 14 mils, Viton ≥ 14 mils and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in a cool, dry location.

Pesticide Disposal: Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal:

Containers < 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Minibulk Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

SIM-TROL 4L is a herbicide that should be applied before weeds emerge or following removal of weed growth. It controls a wide variety of annual broadleaf and grass weeds when used at selective rates in agricultural crops and ornamental plantings.

Since SIM-TROL 4L enters weeds mainly through their roots, rainfall or irrigation is needed to move it into the root-zone. Very dry soil conditions and lack of rainfall following application may necessitate shallow cultivation.

SIM-TROL 4L controls most annual broadleaf and grass weeds such as:

allysum	fall panicum	lambquarters	shieldscrees
amaranths	fiddleneck	mustard	signalgrass (<i>Bracharia</i> spp.)
annual bluegrass	filaree	nightsshade	silver hairgrass
annual morningglory	fireweed	pepperweed	smartgrass
annual ryegrass	fivehook bassia	pineappleweed	Spanish needles
barnyardgrass (watergrass)	Flora's paintbrush	pigweed	speedwell
<i>Bracharia</i> spp.	Florida pusley	prickly lettuce	tansymustard
burclover	foxtails	purslane	wild oats
carelessweed	goosegrass	ragweed	wild mustard
carpetweed	groundsel	rattail fescue	wiregrass
common chickweed	henbit	redmaids	witchgrass
crabgrass (<i>Digitaria</i> spp.)	knawel (German moss)	Russian thistle	yellow flower pepperweed
downey brome (cheat)	junglerice	shepherdspurse	

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of this product in registered combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered nontriazine herbicide. Consult with your State Agricultural Extension Service for specific recommendations.

SIM-TROL 4L is non-corrosive to equipment, non-flammable, and has low electrical conductivity.

SIM-TROL 4L is a flowable formulation to be mixed with water and applied as a spray. Add SIM-TROL 4L to the spray tank during or after filling. Sufficient hydraulic (jet) or mechanical agitation should be provided during mixing and application to keep the material in suspension.

Do not apply when weather conditions favor drift from areas treated.

Apply this product only as specified on this label. Do not apply this product through any type of irrigation system.

Add SIM-TROL 4L directly to the spray tank partially filled with clear water, add any tank mix ingredients and then add remainder of water and provide constant agitation during mixing to keep mixture in suspension. Agitation should not be so violent as to cause air bubbles to form in mixture.

For ground application where the amount of water is not specified, apply SIM-TROL 4L in 20-40 gals. of water per acre.

For aerial application, use a minimum of one gal. of water for each 1 Qt. of SIM-TROL 4L per acre, unless specified differently.

APPLICATION PROCEDURES

Ground Application: Use conventional ground sprayers equipped with nozzles that provide accurate and uniform application. Be certain that nozzles are uniformly spaced and the same size. Calibrate sprayer before use and recalibrate at the start of each season and when changing carriers. Unless otherwise specified, use a minimum of 20 gals. of spray mixture per acre.

Use a pump with capacity to: (1) maintain 35-40 psi at the nozzles, (2) provide sufficient agitation in the tank to keep the mixture in suspension, and (3) to provide a minimum of 20% bypass at all times. Use centrifugal pumps which provide propeller shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gals./minute/100 gal. tank size circulated through a correctly positioned sparger tube or jets.

Use screens to protect the pump and to prevent nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles. Check nozzle manufacturer's recommendations.

For band applications, calculate amount to be applied per acre as follows:

Band width in inches X Broadcast rate per acre = Amount needed per acre of field
Row width in inches

Aerial Application: Use aerial application only where specified in the use directions. Apply in a minimum of 1 gal. of water for each qt. of SIM-TROL 4L applied per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Mixing procedures – All Uses:

- 1) Be sure sprayer is clean and not contaminated with any other materials, otherwise crop injury or sprayer clogging may result;
- 2) Fill tank $\frac{1}{4}$ full with liquid spray carrier (clean water, nitrogen solution, or complete liquid fertilizer);
- 3) Start agitation, then be certain that agitation is working sufficiently to create a rippling or rolling action on the water surface;
- 4) Transfer directly into the tank the proper amount of this product according to the area to be treated;
- 5) Continue filling the tank with liquid spray carrier until 90% full. Increase agitation as tank fills if necessary to maintain efficient mixing of tank contents;
- 6) If using emulsifiable oil, oil concentrate, or other pesticides after this product is thoroughly suspended;
- 7) Finish filling the tank;
- 8) When applying to the area to be treated, maintain agitation to avoid separation of tank contents, and empty tank as completely as possible before re-filling in order to prevent buildup of oil or emulsifiable concentrate residue;
- 9) If an oil or emulsifiable concentrate film starts to build up in the tank, drain it and clean with strong detergent solution or solvent;
- 10) Clean sprayer thoroughly immediately after use by flushing system with water containing a detergent.

COMPATIBILITY TEST: Always check compatibility of intended pesticide tank mixtures each time before use. Be especially careful when using fertilizer suspensions or fluid fertilizer concentrates, as serious compatibility problems are more likely to occur. Commercial application equipment with good agitation may improve compatibility in some instances, however do not prepare or attempt to apply tank mixes with obvious problems. The following compatibility test assumes an intended spray volume of 25 gallons per acre; for other spray volumes make proportionate changes in the amounts of ingredients:

- 1) Add 1 pint of liquid carrier (water, fertilizer suspension or solution) to each of two (2) one-quart jars with tight lids.
- 2) To **one** of the jars add $\frac{1}{4}$ teaspoon (1.2 milliliters) of a compatibility agent approved for this use ($\frac{1}{4}$ teaspoon in one quart of compatibility test mixture is equivalent to approximately 2 pints per 100 gallons of spray mixture). Shake or stir gently to mix. When an adjuvant is to be used with this product, Sipcam Agro USA, Inc. recommends the use of Complex[®], Unite[®] or a Chemical Producers and Distributors Association (CPDA) certified adjuvant.
- 3) To both jars add the appropriate amount of pesticide(s) intended to be tank mixed. If more than one type of formulation is to be used, first add dry product(s), then flowables or liquid suspension concentrates, and emulsifiable concentrates last. After each addition, shake or stir the mixture gently to thoroughly mix. The appropriate amount of each pesticide to be used for this test is as follows:
Dry products: For each pound to be applied per acre, add approximately 1.5 level teaspoons to each jar.
Liquid products: For each pint to be applied per acre, add 0.5 teaspoon (2.5 milliliters) to each jar.
- 4) After adding all ingredients, put lids on and tighten, then invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film in the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the contents of the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility:
(A) Slurry the dry pesticide(s) in water before addition; or
(B) Add $\frac{1}{2}$ of the compatibility agent to the fertilizer and the other $\frac{1}{2}$ to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If non-compatibility is still observed, do not use the mixture.

FRUIT AND NUT CROPS

Apply the spray to the orchard or vineyard floor avoiding contact with fruit, foliage or stems. Recommended rates are based on broadcast treatment. For band applications or spot applications around trees in fruit or nut plantings, reduce the broadcast rate of SIM-TROL 4L and water per acre in proportion to the area actually sprayed.

Use Precautions and Restrictions (all fruit and nut crops): To avoid crop injury, (1) Apply only to orchards or groves where trees have been established one year or more unless specified differently. (2) Make only one application per year, except as noted otherwise. (3) Do not use on gravelly, sand, or loamy sand soil. (4) Immediately following application, limit overhead sprinkler irrigation to $\frac{1}{2}$ inch.

ALMONDS, PEACHES AND NECTARINES: (California only): Apply 1-2 Qts. of SIM-TROL 4L per treated acre in a 2-4 ft. band on each side of the tree row. Apply before weeds emerge in late fall or early winter. Weeds controlled by 1 Qt. of SIM-TROL 4L include burclover, common chickweed, wild mustard, and shepherds-purse. Apply only once per year.

Use Precautions and Restrictions: To avoid crop injury, (1) Do not treat trees established in the grove less than 3 years. (2) Do not treat the Mission (Texas) variety of almonds. (3) Do not apply to almond trees propagated on plum rootstocks. (4) Do not replant almonds, peaches or nectarines in treated soil for 12 months after treatment. (5) Do not apply on soil with less than 1% organic matter. (6) Do not treat areas where water will accumulate.

APPLES, PEARS, SOUR CHERRIES: Apply 2-4 Qts. per acre.

AVOCADOS (California and Florida only): Apply 2-4 Qts. per acre after final preparation of grove.

BLUEBERRIES AND CANEBERRIES (blackberries, boysenberries, loganberries, raspberries): Apply 2-4 Qts. per acre in the spring or apply a split application of 2 Qts. per acre in the spring plus 2 Qts. per acre in the fall. Apply in a minimum of 40 gals. of water per acre.

On plantings less than 6 months old use $\frac{1}{2}$ the above rate.

To control quackgrass, apply 4 Qts. per acre in the fall or split the application, applying 2 Qts. per acre in the fall plus 2 Qts. per acre in the spring, when quackgrass is actively growing.

Use Precaution and Restriction: Do not apply when fruit is present.

CRANBERRIES (Massachusetts): Apply up to 4 Qts. per acre either before spring growth begins or in the fall after harvest.

Other areas: Apply 2 Qts. per acre before spring growth begins.

FILBERTS (Oregon and Washington only): Apply 2-4 Qts. per acre in the fall or apply a split application of 2 Qts. per acre in the fall plus 2 Qts. per acre in the spring.

Use Precautions and Restrictions: (1) If trees are planted on a hillside, excessive soil erosion may result from the elimination of weeds. (2) Do not apply when nuts are on the ground during the harvest period.

GRAPES: Apply 2-4.8 Qts. per acre any time between harvest and early spring.

Use Precaution and Restriction: Do not use in vineyards established less than three years, or crop injury may occur.

GRAPEFRUIT, LEMONS, ORANGES

Arizona (Lemons and Oranges only): Apply a split application of 1.6 Qts. per acre in the spring plus 1.6 Qts. per acre in the fall.

California: Apply 2-4 Qts. per acre. Do not use in the Imperial, Coachella, or Palo Verdes Valleys.

Florida (Grapefruit and Oranges only): Apply 4 Qts. of SIM-TROL 4L to weed-free soil during the spring and/or fall to control weeds expected to emerge during these periods. Apply prior to emergence of weeds or if weeds have emerged, apply in tank mixture with a contact herbicide. Use caution to keep the treatment off the foliage, fruit, or trunk of citrus trees.

For control of difficult species, such as balsamapple vine and spanishneedles, and partial control of honeyvine milkweed, apply 8 Qts. of SIM-TROL 4L as a single application in the spring as a 50% band application to the grove acre. Apply in the spring growing season between January and April. Do not make a fall SIM-TROL 4L application if this treatment was used in the spring. When emerged weeds are present, apply SIM-TROL 4L in tank mixture with a recommended contact herbicide. Follow all directions, precautions, limitations, etc. on the tank mix products.

Texas (Grapefruit and Oranges only): Apply 4-4.8 Qts.

Use Precautions and Restrictions (All areas): To avoid crop injury, (1) Do not use in nurseries. (2) Do not apply to bedded grapefruit, lemons or oranges (except for FL grapefruit and oranges). (3) Do not apply to trees under stress from freeze damage for one year after the freeze. (4) In FL, do not exceed 8 Qts. of SIM-TROL 4L during any one growing season.

MACADAMIA NUTS: Apply 2-4 Qts. in 50 gals. of water per acre before harvest and just prior to weed emergence. Repeat application as necessary. Do not apply when nuts are on the ground during the harvest period.

OLIVES: Apply 2-4 Qts. per acre following grove preparation in the fall. Repeat annually in midwinter.

PEACHES, PLUMS, SWEET CHERRIES: Apply 2-4 Qts. per acre. Apply in late fall to early spring prior to weed emergence.

*Use Precautions and Restrictions: To avoid crop injury, (1) Peaches: use only in AR, LA, MO, OK, TX, and the states east of the Miss. River. For CA, see specific directions in the **Almonds, Peaches, and Nectarines (CA only)** section. (2) Plums and sweet cherries: use only in MO and states east of the Miss. River except TN.*

PECANS: Apply 2-4 Qts. per acre before weeds emerge in the spring.

Use Precautions and Restrictions: To avoid crop injury (1) Do not use west of the Pecos River in TX or in AZ, CA, or NM. (2) Do not make applications to transplanted trees that have been established less than two years in the grove. (3) Do not apply when nuts are on the ground. (4) Do not allow animals to graze treated areas.

STRAWBERRIES (Oregon and Washington): For control of chickweed, groundsel, mustard, and shepherdspurse, apply broadcast 1 Qt. per acre. In fields where overhead irrigation is used to activate this product, apply after harvest at time of bed renovation. In fields where overhead irrigation is not available, apply during early October through November.

Use Precautions and Restrictions: To avoid crop injury, (1) Make only one application per growing season. (2) Do not apply within 4 months after transplanting.

WALNUTS: Apply 2-4 Qts. per acre.

Use Precautions and Restrictions: (1) Leveling and furrowing operations after application will lessen effectiveness of weed control. (2) Do not apply when nuts are on the ground.

SIM-TROL 4L plus Bromacil for Grapefruit and Oranges (Florida only)

Use in grapefruit and oranges in Florida for control of balsamapple, black nightshade, carpetweed, crabgrass, cudweed, dayweed, Florida pusley, horseweed, pepperweed, pigweed, poojorie, ragweed, rattlebox, spanishneedles and sandbur, and for partial control of bermudagrass, bahiagrass, pangolagrass paragrass, and torpedograss. Apply 3.2-6.4 Qts. of SIM-TROL 4L plus 2.4-3.2 lbs. ai of bromacil per acre beneath trees in a minimum of 40 gals. of water per acre before or soon after weed growth begins. When mixing, add bromacil product to water in spray tank, agitate thoroughly, then add SIM-TROL 4L and agitate thoroughly again. Avoid contact of foliage and fruit with spray or mist. Apply only once per year. Use the lower rate for light weed infestations or all applications in bedded citrus areas. Use the higher rates for heavy weed infestations only in ridge grown citrus areas. Temporary yellowing of citrus leaves may occur following treatment.

Use Precautions and Restrictions: To avoid possible injury, (1) Do not use in nurseries or around trees that have established in groves for less than four years or where trees are under stress from freeze damage for one year after the freeze. (2) Do not use on soil with less than 1% organic matter or on poorly drained soil. (3) Do not treat trees planted in irrigation furrows. (4) Do not treat diseased trees such as those with foot rot. (5) Do not use in groves interplanted with other trees or desirable plants, nor in home grapefruit or orange plantings, or in areas where roots of other valuable plants or trees may extend. (6) Treated areas may be planted to citrus trees one year after application. (7) Do not rotate to other crops within two years after application. (8) Apply only once per year and avoid contact with foliage and fruit with spray or mist.

SIM-TROL 4L plus Paraquat

This tank mix is effective in the following fruit and nut crops for kill of existing vegetation and for residual control of the annual broadleaf and grass weeds claimed for SIM-TROL 4L applied alone. This combination is also effective for top kill and suppression of perennial weeds. In FL, this mixture may be applied in spring or fall to emerged weeds.

Use this tank mix on these crops:

Almonds (CA only)	Filberts	Macadamia nuts	Pears
Apples	Grapefruit (CA & TX only)	Olives	Pecans
Avocados (CA & FL ¹ only)	Grapes	Oranges ²	Plums ⁴
Cherries (sour and sweet ⁴)	Lemons (AZ & CA only)	Peaches ³	Walnuts

Apply the SIM-TROL 4L rate given under the appropriate crop on this label plus 0.56-0.94 lbs. paraquat cation in 50-200 gals. (30-50 gals. for pecans) of water per acre to the orchard floor avoiding contact with fruit, foliage, or stems. Add a nonionic surfactant, such as X-77[®], at 0.5 Pt. per 100 gals. of spray. Apply when weeds are succulent and new growth is 1-6 inches tall. For mature woody weeds or difficult to control perennial weeds, re-treat or spot treat with paraquat if regrowth occurs.

Add SIM-TROL 4L to the spray tank first (refer to **Mixing Procedures** section of this label), then add paraquat, and add the surfactant last. Provide constant agitation during mixing and application to keep the mixture in suspension.

Use **Precautions and Restrictions**: To avoid crop injury, (1) Apply the tank mix only once per year. (2) Use a shield for young trees or vines.

Refer to the SIM-TROL 4L and paraquat labels for further directions, specific weeds controlled, and precautions and limitations on each crop.

¹In avocados in FL, this tank mix also controls balsamapple, rattail amaranth, and at the higher rate of each herbicide, it suppresses coral vine.

²In oranges in FL, apply 4 Qts. of SIM-TROL 4L per acre per application. Do not exceed 8 Qts. of SIM-TROL 4L during any one growing season.

³Limited to CA, AR, LA, MO, OK, TX, and states east of the Miss. River. As appropriate, refer to SIM-TROL 4L sections **ALMONDS, PEACHES AND NECTARINES: (CA only)** or **PEACHES, PLUMS, SWEET CHERRIES** for rate of SIM-TROL 4L and other information.

⁴Limited to MO and states east of the Miss. River except TN.

Tank Mixture with Glyphosate

This tank mixture is effective in grape vineyards and in the following bearing or nonbearing tree crops for control of existing vegetation and for residual control of the annual broadleaf and grass weeds claimed for this product applied alone. This combination is also effective for partial control of perennial weeds contacted by the spray mixture during application.

Use this tank mixture on these crops:

Almonds** (CA only)	Filberts**	Macadamia nuts**	Pecans**
Apples*	Grapefruit* (CA, FL, TX)	Oranges* (AZ, CA, FL & TX)	Plums* ²
Avocados* (CA & FL only)	Grapes*	Peaches* ¹	Walnuts**
Cherries (sour and sweet ²)	Lemons* (AZ and CA)	Pears*	

Use the appropriate rate given elsewhere on this label for SIM-TROL 4L applied alone to the crop being treated. Add to the spray tank 1-5 lbs. ai of glyphosate per acre depending on weeds present and their growth state. Also add an agriculturally approved nonionic surfactant at 0.5% by volume of spray solution only if glyphosate product does not have nonionic surfactant added. Apply the mixture in 10-40 gals. of water per acre as a postemergence spray to the weeds at the appropriate weed growth stage given on the glyphosate product label.

Add SIM-TROL 4L to the spray tank first, then add glyphosate product. Provide constant agitation during mixing and application to keep the mixture in suspension. Refer to **Application Procedures** section of this label for further directions.

PRECAUTIONS: To avoid crop injury, take extreme care to avoid contact of herbicide solution, spray, drift, or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of trees or vines. Observe precautions on both the SIM-TROL 4L and glyphosate product labels for each crop involved.

Refer to the labels of both herbicides for further directions, specific weeds controlled, precautions and limitations on each crop.

*Allow a minimum of 14 days between last application and harvest.

**Allow a minimum of 21 days between last application and harvest of these crops.

¹Limited to AR, CA, LA, MO, OK, TX, and states east of the Mississippi River. For CA, see specific directions in the section **ALMONDS, PEACHES AND NECTARINES: (CA only)**

²Plums and sweet cherries: limited to MO and states east of the Mississippi River except TN.

Tank Mixture with Norflurazon (Solicam®)

For improved control of such weeds as clover cutleaf (except CA), evening primrose (except CA), dandelion (except CA), henbit, horseweed or mare's tail, lambsquarters, and puncture vine, apply SIM-TROL 4L in tank mixture with norflurazon on these crops:

Oranges	Grapefruit	Lemons
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Apply 4 Qts. per acre of SIM-TROL 4L plus 3.1-3.9 lbs. ai of norflurazon in 20-100 gallons of water per acre. Use the same rates in all coarse-textured soils. Do not apply this combination more than 2 times per year. SIM-TROL 4L + norflurazon may be applied in tank mixture with paraquat or glyphosate.

Refer to the labels of the respective herbicides in the mixtures when applying tank mixtures.

Use **Precautions and Restrictions**: (1) Keep SIM-TROL 4L + norflurazon mixtures from contacting foliage, fruits and stems of citrus trees during spraying. (2) Do not apply within 12 weeks of citrus harvest.

SIM-TROL 4L plus Oryzalin (Surflan®)

Use the tank mix in the following crops for preemergence control of all weeds claimed on both labels:

Almonds	Cherries	Oranges	Plums
Apples	Grapes	Peaches	English Walnuts
Avocados	Grapefruit	Pears	
Caneberries	Lemons	Pecans	

Apply the SIM-TROL 4L rate given under the appropriate crop on this label plus 2-4 lbs. ai of oryzalin in 20-40 gals. of water per acre. Refer to the oryzalin product label for complete tank mix directions. Observe all precautions and limitations on the SIM-TROL 4L and oryzalin labels.

FIELD CROPS

CORN: Nitrogen solutions or complete liquid fertilizers may replace all or part of the water as a carrier for SIM-TROL 4L. Do not apply after corn has emerged as there is danger of liquid fertilizers causing crop injury.

Preemergence: Apply before weeds and corn emerge. Use the appropriate rate in the table below.

Preplant: Apply in the spring after plowing at the appropriate rate in the table below. Apply before, during or after final seedbed preparation. If soil is tilled or worked after application, avoid deep incorporation of SIM-TROL 4L. Best results will be obtained when SIM-TROL 4L is applied within 2 weeks before planting.

Use **Precaution and Restriction**: Under dry weather conditions, preplant applications may give better weed control.

Soil Texture	Broadcast rate per acre
Coarse-textured soil: Sand, silt, and loam that is low in organic matter	2 Qts.
Medium-textured soil: Soil containing a moderate amount of clay and organic matter	2.4 Qts.
Fine-textured soil: Loam that is high in organic matter and clay (including dark prairie soils of Corn Belt)	3 Qts.
Organic soil: Peat, muck, and high-organic clay	4 Qts.

To control quackgrass: Apply 3-4 Qts. per acre in the fall. Plow two to three weeks later, or if erosion is a problem, delay plowing until spring. Do not plant any crop except corn in the spring following treatment. Do not graze treated area.

NOTE: If weeds develop, particularly under relatively dry conditions, a shallow cultivation will generally result in better weed control.

Winter Annual Broadleaf Control – Preemergence Fall Application

For preemergence control of winter annual weeds, such as common chickweed, henbit, shepherdspurse, tansymustard, wild mustard, annual bluegrass, downy brome, and others, broadcast 1 Qt. per acre of SIM-TROL 4L after harvest of the preceding crop and prior to weed emergence on land to be planted to corn the following year. A tillage operation may precede the application. Do not apply to frozen ground. If SIM-TROL 4L is used in the fall corn weed control program, do not exceed 2 Qts. of SIM-TROL 4L preemergence in the spring.

Use Precautions and Restrictions: (1) Do not apply more than 4 Qts. of SIM-TROL 4L to corn in any one year. (2) Land treated with SIM-TROL 4L should not be planted to any crop except corn until the following year as injury may occur. (3) After harvest of a treated crop, plow and thoroughly till the soil in fall or spring to minimize possible injury to spring-seeded rotational crops, regardless of the rate used. (4) If more than 3 Qts. of SIM-TROL 4L are used per acre (or equivalent rate in a band), a crop of untreated corn should precede the next rotational crop. (5) Do not apply SIM-TROL 4L preplant incorporated in corn in the High Plains and Intermountain areas of the West (including central and western KS, western NE, western OK, and the Panhandle of TX) where rainfall is sparse and erratic or where irrigation is required. (6) In the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use SIM-TROL 4L to control weeds in corn only when corn is to follow corn, or a crop of untreated corn is to precede another rotational crop. (7) In western MN and eastern parts of the Dakotas, NE, and KS, do not plant soybeans following corn treated with SIM-TROL 4L if more than 2 Qts. of SIM-TROL 4L per acre (or equivalent rate in a band) was applied as injury may occur. (8) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes and grasses the year after SIM-TROL 4L application as injury may occur.

Tank Mixtures on Corn

ATRAZINE: The tank-mix combination of SIM-TROL 4L plus ATRAZINE 4L or ATRAZINE 90DF may be applied either before, during or after planting corn but before weeds emerge to control early germinating annual weeds and late competing grasses. One application will control most annual broadleaf and grass weeds including fall panicum, crabgrass, barnyardgrass, foxtail, velvetleaf, carpetweed, morning-glory, lambsquarters, pigweed, and ragweed.

Preplant Application: Apply the tank mixture as a broadcast treatment in the spring after plowing either before, during, or after final seedbed preparation. If soil is tilled or worked after application avoid deep incorporation of SIM-TROL 4L plus ATRAZINE 4L or ATRAZINE 90DF. Best results will be obtained when the tank mix is applied within two weeks before planting.

Preemergence Application: Apply the tank mixture during or shortly after planting but prior to crop and weed emergence.

Soil	Preplant and preemergence broadcast rates in 10-40 gals. of water per acre	
	SIM-TROL 4L	ATRAZINE 4L*
Coarse-textured soil: sand, loamy sand, sandy loam	1 Qt.	1 Qt.
Medium-textured soil: silt loam and clay loam low in organic matter	1.2 Qt.	1.2 Qt.
Fine-textured soil: silt loam and clay loam with medium to high organic matter and clay (including dark prairie soils of the Corn Belt)	1.5 Qt.	1.5 Qt.

*When using Atrazine 90DF, use equivalent rates. One Qt. of Atrazine 4L equals 1.125 lbs. of Atrazine 90DF.

PARQUAT: Use in a tank mixture where corn will be planted directly in a cover crop, established sod, or previous crop residues. This combination controls existing vegetation and provides residual control of the annual broadleaf and grass weeds listed under **General Information**.

Add SIM-TROL 4L to the spray tank, mix thoroughly with water, and then add paraquat and a non-ionic surfactant. Provide constant agitation during mixing and application to keep the mixture in suspension.

Apply 4-6 Pts. of SIM-TROL 4L plus 0.28-0.47 lb. of paraquat cation in 20-60 gals. of water per acre as a broadcast spray either before or after planting but before corn emerges. Add a nonionic surfactant at the rate of 0.5 pt. per 100 gals. of spray volume.

For further information, see general information, caution and warning statements, precautions, and notes on the SIM-TROL 4L and the paraquat labels.

NURSERIES, CHRISTMAS TREE PLANTINGS, SHELTER BELTS

NURSERIES (See list below): Apply 2-3 Qts. of SIM-TROL 4L in at least 25 gals. water per acre in fall or spring at least one year after transplanting.

CHRISTMAS TREE PLANTING AND SHELTER BELTS (See list below): Remove weed growth before application. Apply 2-4 Qts. of SIM-TROL 4L in at least 25 gals. of water per acre after transplanting. Use the same rate for annual maintenance applications.

For quackgrass control apply 4 Qts. per acre in the fall or apply a split application of 2 Qts. per acre in the fall plus 2 Qts. per acre in early spring, after quackgrass begins growth.

Use Precautions and Restrictions: To avoid tree injury, (1) Do not use SIM-TROL 4L on seedbeds or cutting beds. (2) In CA, OR, and WA, do not apply to Christmas trees or shelter-belts sooner than one year after transplanting. In other areas, do not apply to Christmas tree or shelterbelt transplants less than two years of age. (3) Do not use until soil is firmly settled around roots. (4) Do not apply more than once a year, except as directed for quackgrass control.

Apply SIM-TROL 4L to these species of trees and shrubs, as recommended above:

Conifers		Deciduous Trees and Woody Ornamentals	
arborvitae	Scotch pine	American elm	Siberian elm
Austrian pine	Fraser fir	barberry	Russian olive
balsam fir	hemlock	boxelder	red maple
blue spruce	red spruce	bush honeysuckle	red oak
Douglas fir	red pine (Norway pine)	caragana	*sugar maple (except CA)
juniper	white cedar	cotoneaster	white ash (except CA)
Mugho pine	white pine	dogwood	
Norway spruce	white spruce	honey locust	
red cedar	yew (<i>Taxus spp.</i>)	Oregon grape (<i>Mahonia spp.</i>)	

* Use Precaution and Restriction: Do not use on sugar maple trees intended for production.

Oryzalan (Surflan) Tank Mix: On Christmas tree plantings, use this tank mix for preemergence control of weeds listed on the oryzalan product label. Use on field grown conifer species listed on the labels for each herbicide plus grand fir, alpine fir, Engelmann spruce, black spruce, Colorado blue spruce, Coulter pine, giant redwood, and Veitchi fir. Broadcast the mixture as a directed spray to the soil surface or as an overtop spray, using 2-4 qts. of SIM-TROL 4L and 2-4 lbs. ai of oryzalan. Apply in sufficient water per acre to uniformly treat the area. Follow overtop sprays with sprinkler irrigation to move the herbicide from leaf surfaces to the soil. Remove weed growth before application. Mix weed residues, prunings, or trash into the soil, or remove them before treatment. Soil should be in good tilth and free of clods at time of application. Shallow cultivation (1-2 inches) after treatment will not reduce weed control. Observe all precautions and limitations on the SIM-TROL 4L and oryzalan labels.

Use Precautions and Restrictions: To avoid plant injury, (1) Do not use on seedbeds or on unrooted cuttings. (2) Do not use in greenhouses or other enclosed areas.

TURFGRASSES FOR SOD (For Florida Only)

St. Augustinegrass, Centipedegrass, and Zoysia Grass: Apply 2-4 Qts. of SIM-TROL 4L per acre according to soil texture as indicated below.

Muck or Peat	4 Qts.	Old beds: within 2 days after lifting of sod
		New beds: 3-4 days after sprigging or plugging
Sandy Soil	2 Qts.	Old beds: within 2 days after lifting of sod
		New beds: 7-10 days after sprigging or plugging

Apply an additional 2 Qts. on muck or peat, or 1 Qt. on sandy soil if weed growth recurs.

Use Precautions and Restrictions: To avoid turf injury, (1) Do not apply within 30 days before cutting or lifting. (2) Do not apply in combination with surfactants or other spray additives. (3) Use only on turfgrass reasonably free of infestations of insects, nematodes, and diseases. (4) On newly sprigged turfgrass, temporary slowing of growth may follow application.

TURFGRASS FOR FAIRWAYS, LAWNS, SOD PRODUCTION* AND SIMILAR AREAS

*In states other than FL: Bermudagrass, Centipedegrass, St. Augustinegrass, and Zoysia Grass.

Apply SIM-TROL 4L after September 1 (after October 1 for annual bluegrass) before emergence of winter annual weeds. SIM-TROL 4L will control annual bluegrass, bur-clover, lawn burweed, common and mouseear chickweed, corn speedwell, henbit, hop clover, spurweed and parsley-piert. For control of summer annual weeds listed in the **General Information** section of this label, apply SIM-TROL 4L in late winter before the weeds emerge. Apply in a minimum of 15 gallons of water per acre. Irrigate with ½ inch of water if rainfall does not occur within 10 days after preemergence treatment.

Where annual bluegrass is the major weed, use 1 Qt. of SIM-TROL 4L per acre (0.75 fl.oz./1,000 sq.ft.). Use 2 Qts. per acre (0.75-1.5 fl.oz./1,000 sq.ft.) for control of other weeds. However, do not exceed 1 Qt. per acre per treatment on newly sprigged turfgrass or on hybrid bermudagrass such as Tiflawn, Tifway and Ormond.

For control of summer annuals which emerge after the initial application, apply an additional 1 Qt. per acre at least 30 days after the initial application, but not after June 1. Do not make more than two applications per year.

Use Precautions and Restrictions: On newly sprigged turfgrass, hybrid bermudagrass, nondormant bermudagrass, or nondormant Zoysia grass, temporary slowing of growth and yellowing may occur following application. To avoid turf injury, (1) use only on turfgrass reasonably free of infestations of insects, nematodes and diseases. (2) Do not use on golf greens. (3) Do not use north of NC, (except may be used in VA Coastal Plains) or on soil with a pH above 7.8. (4) Do not use on muck or alkaline soils. (5) Do not apply over the rooting area of trees or ornamentals not listed on this label. (6) Do not seed or overseed with desirable turfgrass within 4 months before or 6 months after treatment. (7) Do not apply this product on newly seeded grasses until they have over-wintered and have a well-developed rhizome system. (8) Do not exceed 2 Qts. SIM-TROL 4L per acre within 12 months of seeding grasses. (9) Do not graze or feed turf clippings to animals.

NOTICE OF WARRANTY

Sipcam Agro USA, Inc. warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of **Sipcam Agro USA, Inc.** In no case shall **Sipcam Agro USA, Inc.** be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. **Sipcam Agro USA, Inc. MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

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