



# SureGuard®

## HERBICIDE



**FOR USE IN CONTAINER AND FIELD GROWN CONIFERS AND DECIDUOUS TREES, AROUND ESTABLISHED WOODY ORNAMENTALS IN LANDSCAPES, TO MAINTAIN BARE GROUND NON-CROP AREAS AND DORMANT TURFGRASS**

Active Ingredient	By Wt.
*Flumioxazin .....	51%
Other Ingredients .....	49%
Total	100%
*(2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione)	

SureGuard® Herbicide is a water dispersible granule containing 51% active ingredient.

EPA Reg. No. 59639-120

EPA Est. 11773-IA-01<sup>®</sup>, 39578-TX-01<sup>®</sup>, 5905-IA-01<sup>®</sup>

Superscript is first letter of lot number.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

##### CAUTION

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust and spray mist. Avoid contact with skin, eyes or clothing.

#### FIRST AID

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If on skin or clothing:** 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.

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#### FIRST AID (continued)

**If in eyes:** 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.

**If swallowed:** 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 the poison control center or doctor.

Do not give anything by mouth to an unconscious person.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact **800-892-0099** for emergency medical treatment information.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

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

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes and socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### ENVIRONMENTAL HAZARDS:

This product is toxic to non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and runoff precautions on this label in order to minimize off-site exposures.

Under some conditions this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide runoff. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where runoff could occur will minimize water runoff and is recommended.

## **DIRECTIONS FOR USE**

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

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 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.

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 made of waterproof material, 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 Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forest, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

Do not enter or allow others to enter treated areas until sprays have dried.

### **DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY**

**IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.**

#### **RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield,  
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increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

**To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

**PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements, Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is later, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

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**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability**, which may not be modified by any oral or written agreement.

**TANK MIXES**

**NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, to the extent allowed by applicable law.**

Read and follow the entire label of each product to be used in the tank mix with this product.

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### PRODUCT INFORMATION

*SureGuard* Herbicide is a preemergence and early postemergence herbicide for control of selected grass and broadleaf weeds in and around ornamental woody shrubs, deciduous trees and conifers grown outdoors in containers or in the field (in ground) and to maintain bare ground non-crop areas and dormant warm season turfgrass.

*SureGuard* Herbicide controls weeds by inhibiting protoporphyrinogen oxidase, an essential enzyme required by plants for chlorophyll biosynthesis. Seedling weeds are controlled preemergence when exposed to sunlight following contact with the soil applied herbicide.

*SureGuard* Herbicide may cause spotting or speckling on foliage if the spray solution directly contacts actively growing plant foliage or green bark. Leaves that receive indirect (drift) spray contact may be affected in a similar manner. Translocation of *SureGuard* Herbicide is limited, and under most conditions established and vigorously growing woody

ornamentals will rapidly outgrow any injury symptoms. **However, direct application to actively growing foliage can cause severe injury or death with sensitive ornamental plant species, especially in herbaceous bedding plants and flowers.**

**IMPORTANT:** When applied as directed, plants listed on this label have shown tolerance to *SureGuard* Herbicide. However, *SureGuard* Herbicide is a very active herbicide and the user should exercise responsible judgment and caution until familiarity is gained with this product. Due to variability within species, crop growth stage, environmental conditions and application techniques, it is recommended that users test this product under local growing conditions on a small number of plants and evaluate for 4 to 6 weeks for phytotoxicity. Testing *SureGuard* herbicide on a small number of plants will determine if the herbicide can be used safely on a widespread application. Neither the seller nor the manufacturer of *SureGuard* Herbicide has investigated the safety to plants not listed on the label.

### USE RESTRICTIONS

- Do not apply in enclosed greenhouse structures, if plants are present.
- Do not move plants for 24 hours into enclosed greenhouses until the *SureGuard* Herbicide treated area has been watered.
- Do not apply when weather conditions favor spray drift from treated areas.
- Do not graze treated fields or hay to livestock.
- Do not incorporate into soil after application.
- Do not apply this product through any type of irrigation system.
- Do not apply when plants are under stress from insects, diseases, animals or winter injury, planting shock or any other stresses.
- Only apply to healthy established trees and ornamentals.
- Do not apply more than 12 oz of *SureGuard* Herbicide per acre per application.
- Do not apply more than 24 oz of *SureGuard* Herbicide per acre per year.

### RESISTANCE MANAGEMENT

Any weed population may contain or develop plants naturally resistant to herbicides in various modes of action. Resistant biotypes may eventually dominate the weed population if herbicides with the same mode of action are used repeatedly in the same field or in successive years. These resistant biotypes may not be adequately controlled by herbicides in a mode of action class for which resistance has developed. A gradual or total loss of weed control may occur over time. Other resistance mechanisms that are not linked to site of action, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

### To Delay Herbicide Resistance

- Avoid the use of herbicides that have a similar target site mode of action in consecutive years.
- Herbicide use should be based on an Integrated Pest Management (IPM) program that includes

scouting, record keeping, and consideration of cultivation practices, water management, weed free crop seed, crop rotation, and other chemical or cultural control practices.

- Monitor treated weed population for resistance development and report suspected resistance.
- Contact your local extension or crop expert (advisor) for any additional pesticide resistance management and/or IPM recommendations for specific crops and weed biotypes.
- For further information contact Valent U.S.A. Corporation at the following toll free number 800-682-5368.

#### **PREEMERGENCE APPLICATION**

Preemergence weed control with *SureGuard* Herbicide is most effective when applied to clean, weed free soil surfaces prior to weed emergence. Moisture is necessary to activate *SureGuard* Herbicide on soil for residual weed control. Dry weather following application of *SureGuard* Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, *SureGuard* Herbicide will control susceptible germinating weeds.

When adequate moisture is not received soon after *SureGuard* Herbicide is applied to soil, weed control may be improved by utilizing shallow cultivation. If weeds begin to emerge, irrigate (1/2" of water) or cultivate uniformly with shallow tillage equipment that will not damage the crop. Deep cultivation reduces the effectiveness of *SureGuard* Herbicide and should be avoided.

#### **POSTEMERGENCE APPLICATION**

The most effective postemergence weed control with *SureGuard* Herbicide occurs when applied in combination with a surfactant to weeds less than 2 inches in height. Apply *SureGuard* Herbicide only to actively growing weeds. Applying *SureGuard* Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. *SureGuard* Herbicide is most effective when applied under sunny conditions at temperatures above 65°F.

*SureGuard* Herbicide is rainfast one hour after application. Applications should not be made if rain is expected within one hour of application or efficacy may be reduced.

#### **SOIL CHARACTERISTICS**

Application of *SureGuard* Herbicide to soils with high organic matter and/or high clay content may require higher dosages than with soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

#### **CARRIER VOLUME AND SPRAY PRESSURE**

##### **PREEMERGENCE APPLICATION**

To ensure uniform coverage when using boom sprayers, use at least 10 gals of spray solution per acre. When making backpack applications, apply 50 to 100 gals of spray solution per acre. Nozzle selection should meet manufacturer's gallonage and pressure recommendation for preemergence herbicide application.

##### **POSTEMERGENCE APPLICATION**

To ensure thorough coverage when using boom sprayers apply at least 15 gals of spray solution per acre. Apply at least 20 gals per acre when using a boom sprayer if dense vegetation or heavy residue is present on the soil surface. When applying with a backpack sprayer, apply 1 gal of spray solution per 500 to 1,000 sq ft. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for postemergence herbicide application.

#### **ADDITIVES**

##### **POSTEMERGENCE APPLICATION**

When applying *SureGuard* Herbicide after weeds emerge, mix with an agronomically approved adjuvant. When an adjuvant is to be used with this product, Valent recommends the use of a Chemical Producers and Distributors Association certified adjuvant. Mix *SureGuard* Herbicide with a crop oil concentrate that contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant containing at least 80% active ingredient when applying *SureGuard* Herbicide as part of a postemergence weed control program. Mixing compatibility should be verified by a jar test before using. Do not mix *SureGuard* Herbicide with a surfactant when applying over the top of dormant woody ornamentals or conifer trees.

A spray-grade nitrogen source (either ammonium sulfate at 2.0 to 2.5 lb/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) may be added to the spray mixture along with a crop oil concentrate or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for crop oil concentrate or non-ionic surfactant.

##### **JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND *SureGuard* Herbicide**

A jar test should be performed before mixing commercial quantities of *SureGuard* Herbicide, when using *SureGuard* Herbicide for the first time, when using new adjuvants or when a new water source is being used.

1. Add 1 pt of water to a quart jar. The water should be from the same source and have the same temperature as the water used in the spray tank mixing operation.
2. Add 3 grams (approximately 1 level tsp) of *SureGuard* Herbicide for the 8 oz/A rate or 4 grams (approximately 1-1/2 tsp) for 12 oz/A rate to the jar. Gently mix until product disperses.
3. Add 60 ml (4 Tbsp or 2 fl oz) of additive to the quart jar and gently mix.
4. If nitrogen is being used, add 16 ml (1 Tbsp) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 grams of AMS to the quart jar in place of the 28 to 32% nitrogen.
5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.

6. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed the choice of adjuvant should be questioned:
  - a) Layer of oil or globules on the solution surface.
  - b) Flocculation: Fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

### APPLICATION EQUIPMENT

**Important:** Thoroughly clean spray equipment, including all tanks, hoses, booms, screens and nozzles, after application of *SureGuard* Herbicide. Equipment with *SureGuard* Herbicide residue remaining in the system may result in crop injury to subsequently treated crops.

### SPRAYER PREPARATION

Before applying *SureGuard* Herbicide, clean the spray tank, as well as all hoses and booms to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to the sulfonylurea and phenoxy herbicides, are active at very small amounts and can cause crop injury when applied to susceptible crops. Clean spray equipment according to the manufacturer's directions for the last product used before the equipment is used to apply *SureGuard* Herbicide. If two or more products were tank mixed prior to *SureGuard* Herbicide application, follow the most restrictive cleanup procedure on the label of all products.

### MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. To ensure a uniform spray mixture, pre-slurry the required amount of *SureGuard* Herbicide with water prior to addition to the spray tank. Use a minimum of 1 gal of water per 10 oz of *SureGuard* Herbicide.
3. While agitating, slowly add the pre-slurried *SureGuard* Herbicide to the spray tank. Agitation should create a rippling or rolling action on the water surface.
4. If tank mixing *SureGuard* Herbicide with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
5. Add any required adjuvants.
6. Fill spray tank to desired level with water. **Continue agitation until spray solution has been applied.**
7. Mix only the amount of spray solution that can be applied the day of mixing. **Apply *SureGuard* Herbicide within 12 hours of mixing.**

### SPRAYER CLEANUP

Spray equipment must be cleaned each day following *SureGuard* Herbicide application. After *SureGuard* Herbicide is applied, the following steps must be used to clean the spray equipment:

1. Completely drain the spray tank and rinse the

sprayer thoroughly, including the inside and outside of the tank and all in-line screens.

2. Fill the tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank with clean water and household ammonia. Use 1 gal of 3% household ammonia for every 100 gals of water.
4. Circulate through sprayer for 5 minutes.
5. Then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes.
6. Loosen any diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm.
7. Drain tank completely.
8. Add enough clean water to the spray tank to flush hoses, booms, screens and nozzles for 2 minutes.
9. Remove all nozzles and screens and rinse them with clean water.

### APPLICATION EQUIPMENT

Application equipment should be clean and in good repair. Nozzles should be uniformly spaced on boom and frequently checked for accuracy.

### BROADCAST APPLICATION

Apply *SureGuard* Herbicide, and *SureGuard* Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume.

### BAND APPLICATION

When banding, use proportionately less water and *SureGuard* Herbicide per acre.

### BACKPACK APPLICATION

When applying *SureGuard* Herbicide with a backpack sprayer follow all above restrictions. Calibrate backpack sprayers to deliver 1 gal of spray solution per 500 to 1,000 sq ft.

### For Backpack Applications of *SureGuard* Herbicide at 10 oz per acre

Application Volume	Amount of <i>SureGuard</i> Herbicide to mix in 1 gal of water	Amount of <i>SureGuard</i> Herbicide to mix in 2 gals of water	Amount of <i>SureGuard</i> Herbicide to mix in 3 gals of water
1 gal per 500 sq ft (= 87 GPA)	1-1/4 tsp	2-1/2 tsp	3-3/4 tsp
1 gal per 750 sq ft (= 58 GPA)	1-3/4 tsp	3-1/2 tsp	5-1/4 tsp
1 gal per 1,000 sq ft (= 43.5 GPA)	2-1/2 tsp	5 tsp	7-1/2 tsp

1 level teaspoon (tsp) holds 2.8 grams of *SureGuard* Herbicide

Example: Applicator wants to spray 1 gal of *SureGuard* Herbicide solution per 1,000 sq ft of ground

bed, and wants to mix up 2 gals of spray solution. Therefore, applicator should mix 5 teaspoons of *SureGuard* Herbicide in 2 gals of water.

### AERIAL APPLICATION

To obtain satisfactory weed control with aerial application of *SureGuard* Herbicide, coverage must be uniform. Do not spray when drift is possible or when wind velocity is more than 10 mph. Avoid spraying *SureGuard* Herbicide within 200 feet of dwellings, adjacent sensitive crops or environmentally sensitive areas. To obtain satisfactory application and drift, the following directions must be observed:

#### Volume Pressure

Apply *SureGuard* Herbicide in 5 to 10 gals of water per acre, with a maximum spray pressure of 40 PSI. Application at less than 5 gals per acre may not provide adequate weed control. Higher gallonage applications generally provide more consistent weed control.

#### Nozzles and Nozzle Operation

Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles such as diaphragm type nozzles to avoid unwanted discharge of spray solution. The nozzle must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

#### Adjuvants

Refer to the additive section or the tank mix partners label for adjuvant recommendation.

### CALIBRATION TABLE

<b>SUREGUARD HERBICIDE RATES OZ/A</b>	<b>SUREGUARD HERBICIDE RATES GRAMS/GAL</b>	<b>SUREGUARD HERBICIDE RATES PER GAL</b>
8	2.3	3/4 tsp
10	2.8	1 level tsp
12	3.4	1-1/4 tsp

### SPRAY DRIFT REDUCTION

Do not apply under circumstances where possible drift to unprotected persons or to food, forage or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

- Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. For ground boom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.
- Make aerial or ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site

on the upwind side, immediately prior to application.

- Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For ground boom applications, apply with nozzle height no more than 4 ft above the ground or crop canopy.

### WEEDS CONTROLLED

When *SureGuard* Herbicide is applied preemergence or postemergence at recommended rates and weed stages, the following grasses and broadleaf weeds are controlled.

**TABLE 1. WEEDS CONTROLLED BY SUREGUARD HERBICIDE**

<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>
Alyssum, Hoary	<i>Berteroa incana</i>
Amaranth	
Palmer	<i>Amaranthus palmeri</i>
Spiny	<i>Amaranthus spinosus</i>
American Burnweed	<i>Erechtites hieracifolia</i>
Barnyardgrass*	<i>Echinochloa crus-galli</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Bittercress, Hairy	<i>Cardamine hirsuta</i>
Bluegrass, Annual*	<i>Poa annua</i>
Burclover, California	<i>Medicago polymorpha</i>
Carpetweed	<i>Mollugo verticillata</i>
Chamberbitter	<i>Phyllanthus urinaria</i>
Chickweed	
Common	<i>Stellaria media</i>
Mouseear	<i>Cerastium vulgatum</i>
Crabgrass	
Large*	<i>Digitaria sanguinalis</i>
Smooth*	<i>Digitaria ischaemum</i>
Southern*	<i>Digitaria ciliaris</i>
Croton, Tropic	<i>Croton glandulosus</i> var. <i>septentrionalis</i>
Dandelion*	<i>Taraxacum officinale</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Doveweed	<i>Murdannia nudiflora</i>
Eclipta	<i>Eclipta prostrata</i>
Filaree, Redstem*	<i>Erodium cicutarium</i>

(continued)

\*Preemergence control only.

**TABLE 1. WEEDS CONTROLLED BY SUREGUARD HERBICIDE (continued)**

COMMON NAME	SCIENTIFIC NAME
Foxtail	
Bristly*	<i>Setaria verticillata</i>
Giant*	<i>Setaria faberi</i>
Green*	<i>Setaria viridis</i>
Yellow*	<i>Setaria glauca</i>
Galinsoga, Hairy	<i>Galinsoga ciliata</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass*	<i>Eleusine indica</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Groundsel Tree	<i>Baccharis halimifolia</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed*	<i>Conyza canadensis</i>
Indigo, Hairy	<i>Indigofera hirsuta</i>
Ivy, Ground*	<i>Glechoma hederacea</i>
Jimsonweed	<i>Datura stramonium</i>
Kochia	<i>Kochia scoparia</i>
Kyllinga, Green*	<i>Kyllinga brevifolia</i>
Ladysthumb	<i>Polygonum persicaria</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Liverwort	<i>Marchantia polymorpha</i>
Lovegrass, California*	<i>Eragrostis diffusa</i>
Mallow	
Common	<i>Malva neglecta</i>
Little	<i>Malva parviflora</i>
Venice	<i>Hibiscus trionum</i>
Marsh Parsley	<i>Apium leptophyllum</i>
Marsh Yellowcress	<i>Rorippa islandica</i>
Mayweed*	<i>Anthemis cotula</i>
Morningglory	
Entireleaf	<i>Ipomoea hederacea</i> var. <i>integriuscula</i>
Ivyleaf	<i>Ipomoea hederacea</i>
Red/Scarlet	<i>Ipomoea coccinea</i>
Smallflower	<i>Jacquemontia tamnifolia</i>
Tall	<i>Ipomoea purpurea</i>
Moss	<i>Bryum</i> spp.
Mulberry Weed	<i>Fatua villosa</i>
Mustard	
Tumble	<i>Sisymbrium altissimum</i>
Wild	<i>Brassica kaber</i>
Nightshade	
Black	<i>Solanum nigrum</i>
Eastern Black	<i>Solanum ptycanthum</i>
Hairy	<i>Solanum sarrachoides</i>
Northern Willowherb	<i>Epilobium cillatum</i>
Panicum	
Fall*	<i>Panicum dichotomiflorum</i>
Texas*	<i>Panicum texanum</i>
Parsley-Piert	<i>Alchemilla arvensis</i>
Pearlwort, Birdseye*	<i>Sagina procumbens</i>

(continued)

\*Preemergence control only.

**TABLE 1. WEEDS CONTROLLED BY SUREGUARD HERBICIDE (continued)**

COMMON NAME	SCIENTIFIC NAME
Pennycress, Field	<i>Thlaspi arvense</i>
Phyllanthus, Longstalked	<i>Phyllanthus tenellus</i>
Pigweed	
Prostrate	<i>Amaranthus blitoides</i>
Redroot	<i>Amaranthus retroflexus</i>
Smooth	<i>Amaranthus hybridus</i>
Tumble	<i>Amaranthus albus</i>
Pineapple-weed*	<i>Matricaria matricarioides</i>
Plantain	
Broadleaf*	<i>Plantago major</i>
Buckhorn*	<i>Plantago lanceolata</i>
Poinsettia, Wild	<i>Euphorbia heterophylla</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, Common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed	
Common	<i>Ambrosia artemisiifolia</i>
Giant	<i>Ambrosia trifida</i>
Redmaids	<i>Calandrinia ciliata</i>
Redweed	<i>Melochia corchorifolia</i>
Rocket, Yellow	<i>Barbarea vulgaris</i>
Senna, Coffee	<i>Cassia occidentalis</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Shepherd's-Purse	<i>Capsella bursa-pastoris</i>
Sida, Prickly (Teaweed)	<i>Sida spinosa</i>
Signalgrass*	<i>Brachiaria platyphylla</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>
Spiderwort, Tropical	<i>Commelina benghalensis</i>
Spurge	
Petty	<i>Euphorbia peplus</i>
Prostrate	<i>Euphorbia humistrata</i>
	<i>Engelm</i>
Spotted	<i>Euphorbia maculata</i>
Starbur, Bristly*	<i>Acanthospermum hispidum</i>
Tassel-flower	<i>Emilia</i> spp.
Thickhead	<i>Crassocephalum crepidoides</i>
Thistle	
Canada*	<i>Cirsium arvense</i>
Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp	
Common	<i>Amaranthus rudis</i>
Tall	<i>Amaranthus tuberculatus</i>
Woodsorrel, Yellow*	<i>Oxalis stricta</i>



**DIRECTIONS FOR USE IN ESTABLISHED CONTAINER AND FIELD GROWN CONIFERS**

Apply *SureGuard* Herbicide as a single or split application to established container and field grown conifers. The conifers listed in Table 2 have exhibited tolerance to *SureGuard* Herbicide only when the product is applied to dormant or hardened off plant material. If applied over the top of plant foliage, apply *SureGuard* Herbicide before spring bud break or after conifers have sufficiently hardened off. During periods of cool, cloudy weather, use caution to ensure conifers have hardened off prior to herbicide application. Do not apply to conifers within 1 year of seedling emergence.

**PREEMERGENCE APPLICATION**

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard* Herbicide per broadcast acre before weeds emerge. Apply to weed free, established conifers grown in containers or in the field (in ground). If possible, irrigate treated area with 0.5 to 0.75 inch of water immediately following application. *SureGuard* Herbicide may be sprayed directly over conifers listed in Table 2, provided bud break has not occurred or plants are hardened off. Needle burn may be observed on new flush if plants are actively growing at time of application. However, *SureGuard* Herbicide will typically not effect subsequent growth. If conifers are not dormant or hardened off at time of application, and foliar injury cannot be tolerated, apply *SureGuard* Herbicide as a directed spray, taking care to minimize direct contact or drift of sprays onto foliage. Mechanically incorporating *SureGuard* Herbicide after application will disturb soil surfaces, which may reduce herbicidal efficacy. When applied before weed germination, *SureGuard* Herbicide will control broadleaf and grassy weeds listed in Table 1.

**POSTEMERGENCE APPLICATION**

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard* Herbicide per broadcast acre after weeds have emerged. *SureGuard* Herbicide may be sprayed directly over conifers listed in Table 2, provided bud break has not occurred or plants are hardened off. Needle burn may be observed on new flush if plants are actively growing at time of application. However, *SureGuard* Herbicide will typically not affect subsequent growth. If conifers are not dormant or hardened off at the time of application, and foliar injury cannot be tolerated, apply *SureGuard* Herbicide as a directed spray, taking care to minimize direct contact or drift of sprays onto foliage.

If applied when weeds are actively growing and no larger than 2 inches in height, *SureGuard* Herbicide will provide postemergence control of broadleaf weeds and grasses listed in Table 1. Postemergent control of *SureGuard* Herbicide may be more effective with certain weed species, and may not control mature, stressed or hardened off weeds that are not actively growing at the time of application.

**TANK MIXTURES FOR CONTAINER AND FIELD GROWN CONIFERS**

Tank mixing *SureGuard* Herbicide with other pre-emergence and postemergence herbicides registered for use on conifers may provide a broader spectrum of weed control than *SureGuard* Herbicide applied alone. *SureGuard* Herbicide may also be applied as part of a postemergence burndown program for control of annual and perennial weeds. Tank mixing *SureGuard* Herbicide with glyphosate will increase the speed of burndown compared to glyphosate applied alone. *SureGuard* Herbicide may be tank mixed with products containing the following active ingredients labeled for use in conifers:

- clethodim                      oryzalin                      simazine\*
- glyphosate\*                  prodiamine

\*Do not apply glyphosate or simazine to containerized ornamentals.

**IMPORTANT:** Completely read and follow the label of any potential *SureGuard* Herbicide tank mix partner. When tank mixing *SureGuard* Herbicide with other herbicides, always follow the most restrictive label limitations and precautions on the label of any tank mix partner.

**TOLERANT CONIFERS**

*SureGuard* Herbicide may be applied to the conifer species listed in Table 2. If a desired conifer species is not listed in Table 2, users should evaluate the safety of *SureGuard* Herbicide on a small number of plants under commercial growing conditions, and monitor plant response for four to six weeks for phytotoxicity. Testing *SureGuard* Herbicide on a small number of plants will determine if *SureGuard* Herbicide can be used safely on a widespread basis.

**RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 2 applications at 12 oz/A or 3 applications at 8 oz/A per year.
- Do not re-apply *SureGuard* Herbicide within 30 days.

**TABLE 2. TOLERANT CONIFERS**

COMMON NAME	SCIENTIFIC NAME
Arborvitae	
American	<i>Thuja occidentalis</i>
Oriental	<i>Thuja orientalis</i>
Fir	
Concolor	<i>Abies concolor</i>
Cork Bark	<i>Abies lasiocarpa</i>
Douglas	<i>Pseudotsuga menziesii</i>
Fraser	<i>Abies fraseri</i>
Grand	<i>Abies grandis</i>
Noble	<i>Abies procera</i>
Turkish	<i>Abies bommuelleriana</i>
Hemlock	
Eastern	<i>Tsuga canadensis</i>
Western	<i>Tsuga heterophylla</i>

(continued)

**TABLE 2. TOLERANT CONIFERS** (continued)

COMMON NAME	SCIENTIFIC NAME
Juniper	
Blue Star	<i>Juniperus scopularum</i>
Creeping	<i>Juniperus horizontalis</i>
Japanese Garden	<i>Juniperus chinensis</i>
Tamarix	<i>Juniperus sabina</i>
Pine	
Austrian	<i>Pinus nigra</i>
Eastern White	<i>Pinus strobus</i>
Jack	<i>Pinus banksiana</i>
Japanese Black	<i>Pinus thunbergiana</i>
Loblolly	<i>Pinus taeda</i>
Lodgepole	<i>Pinus contorta</i>
Longleaf	<i>Pinus palustris</i>
Mugo	<i>Pinus mugo</i>
Ponderosa	<i>Pinus ponderosa</i>
Sand	<i>Pinus clausa</i>
Scotch	<i>Pinus sylvestris</i>
Shortleaf	<i>Pinus echinata</i>
Slash	<i>Pinus elliotii</i>
Virginia	<i>Pinus virginiana</i>
Spruce	
Blue	<i>Picea pungens</i>
Dwarf Alberta	<i>Picea glauca conica</i>
Norway	<i>Picea abies</i>
Sitka	<i>Picea sitchensis</i>
Yew	
English	<i>Taxus baccata</i>
Japanese	<i>Taxus cuspidata</i>

#### DIRECTIONS FOR USE IN CONTAINER AND FIELD GROWN DECIDUOUS TREES AND NON-BEARING FRUIT AND NON-BEARING NUT TREES

*SureGuard* Herbicide may be applied as single or split applications to container and field grown deciduous trees with an established root system. The deciduous trees listed in Table 3 have exhibited tolerance to *SureGuard* Herbicide only when applied to the soil and base of plants. Application of *SureGuard* Herbicide to deciduous foliage or green bark may result in unacceptable injury.

*SureGuard* Herbicide may be applied to established (or transplanted) container and field grown deciduous trees. Do not apply to trees that are less than one year old or have been transplanted less than one year, unless completely protected by non-porous wraps, grow tubes, waxed protectors or other forms of protection to young foliage and/or bark. Do not harvest fruit or nuts from treated trees within one year of application.

**IMPORTANT:** Direct application of *SureGuard* Herbicide to the soil surface and away from plant foliage and bark. Avoid direct spray contact on plant surfaces, foliage and green bark or injury may result. Application of *SureGuard* Herbicide after bud swell may cause injury if herbicide contacts foliage. Avoid application under environmental conditions that favor drift to non-targeted areas.

#### PREEMERGENCE APPLICATION

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard*

Herbicide per broadcast acre as a preemergence (to weed emergence) application. Apply *SureGuard* Herbicide to weed free deciduous trees grown in containers or in the field (in-ground). If possible, irrigate treated area with 0.5 to 0.75 inch of water immediately following application. *SureGuard* Herbicide may be applied to the soil surface and base of deciduous trees, provided that direct and indirect (drift) applications to plant foliage, flowers and green bark does not occur. Mechanically incorporating *SureGuard* Herbicide will disturb soil surfaces, which may reduce herbicidal efficacy. The use of spray shields that limit exposure of foliage and bark to *SureGuard* Herbicide is suggested. When applied before weed germination, *SureGuard* Herbicide will control broadleaf and grassy weeds listed in Table 1.

#### POSTEMERGENCE APPLICATION

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard* Herbicide per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). Make postemergence (to weed emergence) applications of *SureGuard* Herbicide when weeds are actively growing and are no larger than 2 inches in height. The addition of a surfactant enhances *SureGuard* Herbicide activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of *SureGuard* Herbicide. When applied after weed germination, *SureGuard* Herbicide will provide preemergence and postemergence control of broadleaf weeds and grasses listed in Table 1. If plant injury is a concern, use a spray shield to limit the exposure of trees to *SureGuard* Herbicide.

Postemergence control of *SureGuard* Herbicide may be more effective with certain weed species, and may not control mature, stressed or hardened off weeds that are not actively growing at the time of application.

#### TANK MIXTURES FOR FIELD AND CONTAINER GROWN DECIDUOUS TREES

Tank mixing *SureGuard* Herbicide with other pre-emergence and postemergence herbicides registered for use on deciduous trees may provide a broader spectrum of weed control than *SureGuard* Herbicide alone. *SureGuard* Herbicide may also be applied as part of a postemergence burndown program of control of annual and perennial weeds. Tank mixing *SureGuard* Herbicide with glyphosate will increase the speed of burndown compared to glyphosate applied alone. *SureGuard* Herbicide may be tank mixed with products containing the following active ingredient labeled for use in deciduous trees:

clethodim	oryzalin	prodiamine
glyphosate*	pendimethalin	simazine*

\*Do not apply glyphosate or simazine to containerized plants.

**IMPORTANT:** Completely read and follow the label of any herbicides mixed with *SureGuard* Herbicide. When tank mixing *SureGuard* Herbicide with other herbicides always follow the most restrictive limitations and precautions on the label of any tank mix partner.

## TOLERANT DECIDUOUS TREES, NON-BEARING FRUIT AND NON-BEARING NUT TREES

*SureGuard* Herbicide may be applied as a directed spray to the deciduous, non-bearing fruit and non-bearing nut trees species listed in Table 3. If a desired tree species is not listed in Table 3, users should evaluate the safety of *SureGuard* Herbicide on a small number of plants under commercial growing conditions and monitor plant response for four to six weeks for phytotoxicity. Testing *SureGuard* Herbicide on a small number of plants will determine if *SureGuard* Herbicide can be used safely on a wide-spread basis.

### RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 applications at 12 oz/A or 3 applications at 8 oz/A per year.
- Do not re-apply *SureGuard* Herbicide within 30 days.

**TABLE 3. TOLERANT DECIDUOUS TREE SPECIES**

COMMON NAME	SCIENTIFIC NAME
Apricot*	<i>Prunus</i> spp.
Ash	<i>Fraxinus</i> spp.
Birch	<i>Betula</i> spp.
Buckeye	<i>Aesculus</i> spp.
Cherry*	<i>Prunus</i> spp.
Chestnut	<i>Castanea</i> spp.
Citrus*	<i>Citrus</i> spp.
Dogwood	<i>Cornus</i> spp.
Eucalyptus	<i>Eucalyptus</i> spp.
Ginkgo	<i>Ginkgo</i> spp.
Hawthorn	<i>Crataegus</i> spp.
Honeylocust	<i>Gleditsia</i> spp.
Larch	<i>Larix</i> spp.
Lilac	<i>Syringa</i> spp.
Maple**	<i>Acer</i> spp.
Mrytle, Crepe	<i>Lagerstroemia indica</i>
Oak	<i>Quercus</i> spp.
Poplar	<i>Populus</i> spp.
Peach*	<i>Prunus</i> spp.
Plum*	<i>Prunus</i> spp.
Pecan*	<i>Carya</i> spp.
Redbud	<i>Cercis canadensis</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sycamore	<i>Platanus</i> spp.
Walnut, Black	<i>Juglans nigra</i>
Willow	<i>Salix</i> spp.

\* Non-bearing trees only.

\*\*Not for use on maple trees used for production of maple sap or syrup.

## DIRECTIONS FOR USE AROUND ESTABLISHED WOODY LANDSCAPE ORNAMENTALS AND TO MAINTAIN BARE GROUND NON-CROP AREAS

In residential and commercial landscapes, *SureGuard* Herbicide should only be applied by commercial licensed applicators. Application of *SureGuard* Herbicide in the vicinity of ornamental plants is limited to directed sprays around well established woody shrubs and trees such as azalea, euonymus, holly, and the conifers and deciduous trees listed in Tables 2 and 3. *SureGuard* Herbicide may also be applied to maintain bare ground in non-crop areas in apartment complexes, fence rows, gravel surfaces, ground mats, golf courses, lumberyards, office complexes, parks, parking areas, recreational sites, schools, sidewalks, storage areas and other similar industrial sites. Do not apply *SureGuard* Herbicide within any enclosed structure in residential or commercial landscapes.

*SureGuard* Herbicide offers postemergence and residual control of susceptible grasses and broad-leaf weeds, as well as additional mode of action to assist in the control of resistant weeds. The length of residual control is dependent on the rate applied, rainfall and temperature. Length of residual control will decrease as temperature and precipitation increase.

**IMPORTANT: Contact with *SureGuard* Herbicide spray or spray drift may cause severe injury or destruction of certain desirable plants, especially herbaceous species such as bedding plants or direct seeded annual and perennial flowers. Therefore, do not apply *SureGuard* Herbicide over the top of ornamental plants growing in the landscape, and do not allow *SureGuard* Herbicide spray to contact, drift or splash from soil onto the foliage, green stems, exposed roots or fruit of desirable plants. Avoid application of *SureGuard* Herbicide under conditions that favor drift of sprays onto desired ornamentals or turfgrass. The use of spray shields that limit the plant exposure to *SureGuard* Herbicide is highly recommended when applying *SureGuard* Herbicide near desirable plants.**

**Do not apply *SureGuard* Herbicide around landscape ornamentals until plants have been actively growing for at least 30 days after transplanting, or for at least two months before ornamentals will be planted into treated areas.**

### PREEMERGENCE APPLICATION (NO WEEDS ARE PRESENT)

Mix 1-1/4 to 2-1/2 tsp of *SureGuard* Herbicide per gal (10 oz/A) of spray solution, and apply 1 gal of spray solution to 500 - 1,000 sq ft (10 oz/A) prior to weed germination (see calibration table for backpack sprayers). Apply *SureGuard* Herbicide to weed free soil, mulch or gravel surfaces. Moisture is necessary to activate *SureGuard* Herbicide on soil for residual weed control. When applied before weed germination, *SureGuard* Herbicide will control the broadleaf weeds and grasses listed in Table 1.

Established landscape ornamentals have shown tolerance to *SureGuard* Herbicide **only** when applied to the soil at the base of the plant. For maximum plant safety when using around desirable ornamentals, direct applications of *SureGuard* Herbicide to the soil, and leave a sufficient untreated buffer to ensure spray solution does not contact desired plants. Do not harvest fruit or nuts from treated trees within one year of application.

#### **POSTEMERGENCE APPLICATION (WEEDS ARE PRESENT)**

Mix 1-1/4 to 2-1/2 tsp of *SureGuard* Herbicide per gal (10 oz/A) and apply 1 gal of spray solution to 500 - 1,000 sq ft to actively growing weeds (see calibration chart for backpack sprayers). Tank mixing *SureGuard* Herbicide with glyphosate will increase the spectrum of postemergent weed control over *SureGuard* Herbicide alone, provide faster postemergence weed control than glyphosate alone, and provide pre and postemergence control of the broadleaf weeds and grasses listed in Table 1.

Established landscape ornamentals have shown tolerance to applications of *SureGuard* Herbicide plus glyphosate **only** when applied to the soil at the base of the plant, and sprays do not directly contact or drift onto desirable plants. For maximum plant safety when using around desirable ornamentals, direct applications of *SureGuard* Herbicide plus glyphosate towards the soil, and leave a sufficient non-treated buffer to ensure spray solution does not contact desired plants.

Thorough spray coverage of weeds is necessary to maximize weed control. Spray coverage should be uniform, but do not spray to the point of runoff.

Do not harvest fruit or nuts from treated trees within one year of application.

**IMPORTANT:** Completely read and follow the glyphosate label. When tank mixing *SureGuard* Herbicide with other products, always follow the most restrictive use conditions on either label.

#### **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 2 applications per year.

#### **DIRECTIONS FOR USE TO MAINTAIN BARE GROUND NON-CROP AREAS IN AND AROUND ORNAMENTAL NURSERIES**

*SureGuard* Herbicide, when used as directed, can be used for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed-free. Apply *SureGuard* Herbicide only to:

- Bare ground areas around buildings and other structures. Do not apply within any structure.
- Bare ground along fence rows.
- Gravel surfaces and driveways.
- Ground matting and gravel pads prior to the addition of containerized plants (conifers, deciduous trees and ornamentals).

**IMPORTANT:** Follow all applicable directions as outlined above under General Information. See Table 1 for a list of grasses and broadleaf weeds controlled by *SureGuard* Herbicide.

*SureGuard* Herbicide offers residual and postemergence control of susceptible grasses and broadleaf weeds as well as additional mode of action to assist in the control of resistant weeds. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase.

#### **PREEMERGENCE APPLICATION**

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard* Herbicide per broadcast acre as a preemergence application. Preemergence (to weed emergence) applications of *SureGuard* Herbicide should be made to weed free surfaces. Moisture is necessary to activate *SureGuard* Herbicide for residual weed control. Dry weather following application of *SureGuard* Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, *SureGuard* Herbicide will control susceptible germinating weeds.

#### **POSTEMERGENCE APPLICATION**

Apply 8 to 12 oz (0.25 to 0.38 lb ai/A) of *SureGuard* Herbicide per broadcast acre plus a surfactant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). The addition of a surfactant enhances *SureGuard* Herbicide activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of *SureGuard* Herbicide. Emerged weeds are controlled postemergence with *SureGuard* Herbicide, however, translocation of *SureGuard* Herbicide within a weed is limited, and control is affected by spray coverage and by the addition of a surfactant. The most effective postemergence weed control with *SureGuard* Herbicide occurs when applied in combination with a surfactant to weeds less than 2 inches in height.

#### **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 2 applications at 12 oz/A or 3 applications at 8 oz/A per year.
- Do not re-apply *SureGuard* Herbicide within 30 days.

#### **DIRECTIONS FOR USE ON DORMANT WARM-SEASON TURFGRASS GROWN ON RESIDENTIAL SITES, GOLF COURSES, SOD PRODUCTION AND SIMILAR AREAS**

*SureGuard* Herbicide may be applied as a single or split application to well established dormant turfgrass listed in Table 4. *SureGuard* Herbicide will provide Preemergence and early postemergence control of annual bluegrass, chickweed, henbit and other winter annual weeds found in Table 1. *SureGuard* Herbicide will provide preemergence control of crabgrass, goosegrass and other summer annual weeds found in Table 1. *SureGuard* Herbicide may be applied to dormant turfgrass in such areas as apartment complexes, golf courses, sod farms, roadsides, sports fields, campgrounds, office complexes, parks, parking areas, recreational sites, schools and other similar sites. Bermudagrass exhibits tolerance to *SureGuard* Herbicide only when applied to com-

pletely dormant turf in the late fall and before active growth resumes in the late winter/early spring. Application of *SureGuard* Herbicide to actively growing turfgrass (warm season and cool season) or during green-up may cause unacceptable injury.

### BROADCAST APPLICATIONS

Apply 8 to 12 oz of *SureGuard* Herbicide per broadcast acre as a preemergence (to weed emergence) application. If weeds are present at the time of application apply *SureGuard* Herbicide plus an adjuvant (0.25% v/v non-ionic surfactant). Make postemergence (to weed emergence) applications of *SureGuard* Herbicide when weeds are actively growing and no larger than 2 inches in height. Thorough spray coverage is necessary to maximize the postemergence activity of *SureGuard* Herbicide. When applied after weed germination, *SureGuard* Herbicide will provide preemergence and postemergence control of broadleaf weeds and grasses listed in Table 1. Postemergence control of *SureGuard* Herbicide may be more effective on certain weed species, and may not control mature, stressed or hardened off weeds that are not actively growing at the time of application.

*SureGuard* Herbicide will provide best control of annual bluegrass when applied in the late fall while plants are small. Control may be less effective when applied in the winter under cold conditions when weeds are not actively growing. A second application of *SureGuard* Herbicide may be required to provide adequate season-long annual bluegrass control. *SureGuard* Herbicide will provide best control of crabgrass, goosegrass and other summer annual weeds when applied in the late winter before turfgrass resumes active growth.

### SPOT TREATMENTS

Mix 2-1/2 tsp per gal of *SureGuard* Herbicide and 2 tsp (1/3 fl oz) of non-ionic surfactant in one gal of water and apply one gal of spray solution per 1,000 sq ft. Occasionally shake the spray solution while spraying to ensure the spray solution remains well mixed. Spray the target weeds until the leaves are wet.

### TANK MIXING WITH OTHER TURFGRASS HERBICIDES

*SureGuard* Herbicide will suppress, but will not effectively control established winter perennial weeds such as dandelion and clover. *SureGuard* Herbicide may be tank mixed with metsulfuron to control winter perennial weeds.

**IMPORTANT:** If applied in the spring after turfgrass resumes active growth, *SureGuard* Herbicide will cause temporary discoloration of turf and delay greenup. Read and follow the label of any herbicides mixed with *SureGuard* Herbicide. When tank mixing *SureGuard* Herbicide with other herbicides, always follow the most restrictive limitations and precautions on the label of any tank mix partner.

### USE PRECAUTIONS

- Use Around Bentgrass and Poa Greens: *SureGuard* Herbicide has limited potential for lateral movement on level terrain, but can potentially move down slope after excessive rainfall and affect sensitive turf species such as bentgrass and *Poa trivialis*. When applied upslope from bentgrass greens or bermudagrass greens overseeded with *Poa trivialis*, allow an adequate buffer zone between greens and the treated area. If uncertain about the size of the buffer, 15 feet is suggested. Risk of movement is decreased when *SureGuard* Herbicide is applied to soil at less than field capacity. Avoid application when heavy rain is imminent or when the soil is saturated.

### RESTRICTIONS AND LIMITATIONS

- Do not apply to golf course putting greens.
- Do not apply to warm season turfgrass that has been overseeded with cool season turfgrass (eg., perennial rye, *Poa trivialis*).
- Do not irrigate within 1 hour before or after application.
- Do not apply if rain is expected within 1 hour after application.
- Do not mow turfgrass within 12 hours after application.
- Do not apply within 30 days prior to cutting or lifting sod.
- Do not apply more than 2 applications at 12 oz/A or 3 applications at 8 oz/A per year.
- Do not re-apply *SureGuard* Herbicide within 30 days.
- Do not apply in fall before turfgrass has ceased active growth or in late winter/ early spring after turfgrass has resumed active growth.
- Allow 8 weeks between application and seeding or sodding of turfgrass.

**TABLE 4. TOLERANT TURFGRASS SPECIES**

COMMON NAME	SCIENTIFIC NAME
Bermudagrass	<i>Cynodon</i> spp.

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## STORAGE AND DISPOSAL

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### PESTICIDE STORAGE

Keep pesticide in original container.  
Store in a cool, dry, secure place.  
Do not put formulation or dilute spray solution into food or drink containers.  
Do not store or transport near feed or food.  
Not for use or storage in or around the home.  
For help with any spill, leak, fire or exposure involving this material, call day or night **(800) 892-0099**.  
Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

### PESTICIDE DISPOSAL

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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 1/4 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.

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Manufactured for  
**Valent U.S.A. Corporation**

P.O. Box 8025

Walnut Creek CA 94596-8025

Form 1732-C

Made in U.S.A.

EPA Reg. No. 59639-120

EPA Est. 11773-IA-01<sup>®</sup>, 39578-TX-01<sup>®</sup>, 5905-IA-01<sup>®</sup>

Superscript is first letter of lot number.

Information contained in this booklet is accurate at the time of printing. Since product testing is a continuous process, please read and follow the directions on the product label for the most current directions and precautionary statements.

Always check with your state to verify state registration status or call 800-89-VALENT (898-2536).



For state registration and/or supplemental labels, please call or visit us online.

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***Always read and follow label instructions.***

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