DATE: 4.4.22 FORM: 1490-G NAME: SureGuard Herbicide KIND: Booklet Label AMOUNT: 5 Pounds

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### ACCEPTED FOR REGISTRATION

# MAY 20 2022

New York State Department of Environmental Conservation Division of Materials Management Pesticide Product Registration



## **GROUP** 14 HERBICIDE

Classified for "RESTRICTED USE" in New York State under 6NYCRR Part 326

# 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)-2/H-1,4benzoxazin-6-yl]-4,5,6,7-tetrahydro-1*H*-isoindole-1, 3(2*H*)-dione) SureGuard<sup>®</sup> Herbicide is a water dispersible granule containing 51% active ingredient.

EPA Reg. No. 59639-120 EPA Est. 11773-IA-1@, 228-IL-2@, 39578-TX-1©, 5481-ID-1@, 5905-GA-1©, 62171-IMS-1@, 62171-IMS-3@, 67545-AZ-1©, 67997-IA-1, 67997-IA-7, 70815-GA-1©, 70815-GA-2©, 70815-GA-3, 71764-NC-1, 86555-MO-1©, 89332-GA-2©, 97524-GA-1© Superscript is first letter of lot number.

# **NET WEIGHT 5 POUNDS**

KEEP OUT OF REACH OF CHILDREN CAUTION SEE NEXT PAGE 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 ambu-	
	lance, then give artificial respiration, prefera-	
	bly by mouth-to-mouth, if possible. Call a poison control center or doctor for fur-	
	ther treatment advice.	
lf on skin or	Take off contaminated clothing.	
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:	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:		
	ately 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 uncon-	
	scious person.	
Have the prod	HOT LINE NUMBER	
	uct container or label with you when calling a	
poison control center or doctor or going for treatment. You may also contact <b>800-892-0099</b> for emergency medical treat-		

#### 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:

ment information

- 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 run-off 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 run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off 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, BISKS 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 Buver and User (referred to collectively herein as "Buver") 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 carrvover 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 Buver 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 FULL-EST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH **BISKS 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 vield, 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

#### (continued)

#### 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 vield 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 EXCLU-SIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAX-IMUM 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 PROD-UCT 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 Buver 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 latter, 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.

#### 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), 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 can be used safely on a widespread application. Neither the seller nor the manufacturer of *SureGuard* Herbicide has investigate dt he 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.
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- 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. LLC at the following toll free number 800-898-2536.

#### 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 *Sure-Guard* 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.

- 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.
- 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.
- Add 60 ml (4 Tbsp or 2 fl oz) of additive to the quart jar and gently mix.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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:

- Completely drain the spray tank and rinse the sprayer thoroughly, including the inside and outside of the tank and all inline screens.
- Fill the tank with clean water and flush all hoses, booms, screens and nozzles.
- Top off tank with clean water and household ammonia. Use 1 gal of 3% household ammonia for every 100 gals of water.
- 4. Čirculate through sprayer for 5 minutes.

- Then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes.
- Loosen any diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm.
- 7. Drain tank completely.
- 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 $\it SureGuard$ Herbicide at 10 oz per acre

Application Volume	Amount of SureGuard Herbicide to mix in 1 gal of water	Amount of SureGuard Herbicide to mix in 2 gals of water	Amount of SureGuard 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 nonzles 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

SUREGUARD HERBICIDE RATES 0Z/A	SUREGUARD HERBICIDE RATES GRAMS/GAL	SUREGUARD HERBICIDE RATES PER GAL
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

COMMON NAME	SCIENTIFIC NAME
Alyssum, Hoary	Berteroa incana
Amaranth	
Palmer	Amaranthus palmeri
Spiny	Amaranthus spinosus
American Burnweed	Erechetities hieracifolia
Barnyardgrass*	Echinochloa crus-galli
Beggarweed, Florida	Desmodium tortuosum
Bittercress, Hairy	Cardamine hirsuta
Bluegrass, Annual*	Poa annua
Burclover, California	Medicago polymorpha
Carpetweed	Mollugo verticillata
Chamberbitter	Phyllanthus urinaria
Chickweed	
Common	Stellaria media
Mouseear	Cerastium vulgatum
Crabgrass	
Large*	Digitaria sanguinalis
Smooth*	Digitaria ischaemum
Southern*	Digitaria ciliaris
Croton, Tropic	Croton glandulosus var. septentrionalis
Dandelion*	Taraxacum officinale
Dogfennel	Eupatorium capillifolium
Doveweed	Murdannia nudiflora
Eclipta	Eclipta prostrata
Filaree, Redstem*	Erodium cicutarium
Foxtail	
Bristly*	Setaria verticillata
Giant*	Setaria faberi
Green*	Setaria viridis
Yellow*	Setaria glauca
Galinsoga, Hairy	Galinsoga ciliata
Geranium, Carolina	Geranium carolinianum
Goosegrass*	Eleusine indica
Groundsel, Common	Senecio vulgaris
Groundsel Tree	Baccharis halimifolia
Henbit	Lamium amplexicaule
Horseweed*	Conyza canadensis
Indigo, Hairy	Indigofera hirsuta
Ivy, Ground*	Glechoma hederacea
Jimsonweed	Datura stramonium
Kochia	Kochia scoparia
Kyllinga, Green*	Kyllinga brevifolia
Ladysthumb	Polygonum persicaria
Lambsquarters,	ol I: II
Common	Chenopodium album
Liverwort	Marchantia polymorpha
Lovegrass, California*	Eragrostis diffusa

\*Preemergence control only.

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

#### COMMON NAME SCIENTIFIC NAME

Common in and
Mallow
Common
Little
Venice
Marsh Parsley
Marsh Yellowcress
Mayweed*
Morningglory
Entireleaf
lvyleaf
Red/Scarlet
Smallflower
Tall
Moss
Mulberry Weed
Mustard
Tumble
Wild
Nightshade
Black
Eastern Black
Hairy
Northern Willowherb
Panicum
Fall*
Texas*
Parsley-Piert
Pearlwort, Birdseye*
Pennycress, Field
Phyllanthus,
Longstalked
Pigweed
Prostrate
Redroot
Smooth
Tumble
Pineapple-weed*
Plantain
Broadleaf*
Buckhorn*
Poinsettia, Wild
Puncturevine
Purslane, Common
Pusley, Florida
Ragweed
Common
Giant
Redmaids
Redweed
Rocket, Yellow
Senna, Coffee
Sesbania, Hemp
coosania, nomp

Malva neglecta	
Malva parviflora	
Hibiscus trionum	
Apium leptophyllum	
Rorippa islandica	
Anthemis cotula	
Ipomoea hederacea var. integri	uscula
Ipomoea hederacea	uoounu
Ipomoea coccinea	
Jacquemontia tamnifolia	
Ipomoea purpurea	
Bryum spp.	
Fatuoa villosa	
Sisymbrium altissimum	
Brassica kaber	
Colomora di anno 1	
Solanum nigrum	
Solanum ptycanthum	
Solanum sarrachoides Epilobium cillatum	
Ephobium cinatum	
Panicum dichotomiflorum	
Panicum texanum	
Alchemilla arvensis	
Sagina procumbens	
Thlaspi arvense	
Phyllanthus tenellus	
Amaranthus blitoides	
Amaranthus retroflexus	
Amaranthus hybridus	
Amaranthus albus	
Matricaria matricarioides	
Plantago major	
Plantago lanceolata	
Euphorbia heterophylla	
Tribulus terrestris	
Portulaca oleracea	
Richardia scabra	
Ambrosia artemisiifolia	
Ambrosia trifida	
Calandrinia ciliata	
Melochia corchorifolia	
Barbarea vulgaris	
Cassia occidentalis	
Sesbania exaltata	

(continued)

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

COMMON NAME	SCIENTIFIC NAME
Shepherd's-Purse	Capsella bursa-pastoris
Sida, Prickly (Teaweed)	
Signalgrass*	Brachiaria platyphylla
Smartweed,	
Pennsylvania	Polygonum pensylvanicum
Sowthistle, Annual	Sonchus oleraceus
Spiderwort, Tropical	Commelina benghalensis
Spurge	
Petty	Euphorbia peplus
Prostrate	Euphorbia humistrata Engelm
Spotted	Euphorbia maculata
Starbur, Bristly*	Acanthospermum hispidum
Tassel-flower	Emilia spp.
Thickhead	Crassocephalum crepidoides
Thistle	
Canada*	Cirsium arvense
Russian	Salsola iberica
Velvetleaf	Abutilon theophrasti
Waterhemp	
Common	Amaranthus rudis
Tall	Amaranthus tuberculatus
Woodsorrel, Yellow*	Oxalis stricta
woodoonioi, iciiow	

\*Preemergence control only.

#### 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.

\*Preemergence control only.

#### 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. 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 CONTAINER AND FIELD GROWN CONIFERS

Tank mixing SureGuard Herbicide with other preemergence and postemergence herbicides registered for use on conifers may provide a broader spectrum of weed control than Sure-Guard 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 glyphosate\* oryzalin prodiamine simazine\*

\*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	Thuja occidentalis
Oriental	Thuja orientalis
Fir	
Concolor	Abies concolor
Cork Bark	Abies lasiocarpa
Douglas	Pseudotsuga menzesii
Fraser	Abies fraseri
Grand	Abies grandis
Noble	Abies procera
Turkish	Abies bommuelleriana
Hemlock	
Eastern	Tsuga canadensis
Western	Tsuga heterophylla
Juniper	
Blue Star	Juniperus scopularum
Creeping	Juniperus horizontalis
Japanese Garden	Juniperus chinensis
Tamarix	Juniperus sabina
Pine	
Austrian	Pinus nigra
Eastern White	Pinus strobus
Jack	Pinus banksiana
Japanese Black	Pinus thunbergiana
Loblolly	Pinus taeda
Lodgepole	Pinus contorta
Longleaf	Pinus palustris
Mugo	Pinus mugo
Ponderosa	Pinus ponderosa
Sand	Pinus clausa
Scotch	Pinus sylvestris
Shortleaf	Pinus echinata
Slash	Pinus elliottii
Virginia	Pinus virginiana
Spruce	
Blue	Picea pungens
Dwarf Alberta	Picea glauca conica
Norway	Picea abies
Sitka	Picea sitchensis
Yew	
English	Taxus baccata
Japanese	Taxus cuspidata

#### 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 trans-

planted less than one year, unless completely protected by nonporous 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 preemergence 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 glyphosate*	pendimethalin prodiamine
oryzalin	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 phytotox-icity. Testing SureGuard Herbicide on a small number of plants wild etermine 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 3. TOLERANT DECIDUOUS TREE SPECIES

COMMON NAME	SCIENTIFIC NAME
Apricot*	Prunus spp.
Ash	Fraxinus spp.
Birch	Betula spp.
Buckeye	Aesculus spp.
Cherry <sup>*</sup>	Prunus spp.
Chestnut	Castanea spp.
Citrus*	Citrus spp.
Dogwood	Cornus spp.
Eucalyptus	Eucalyptus spp.
Ginkgo	Ginkgo spp.
Hawthorn	<i>Crataegus</i> spp
Honeylocust	<i>Gleditsia</i> spp.
Larch	Larix spp.
Lilac	<i>Syringa</i> spp.
Maple**	Acer spp.
Mrytle, Crepe	Lagerstroemia indica
Oak	Quercus spp.
Poplar	Populus spp.
Peach*	Prunus spp.
Plum*	Prunus spp.
Pecan*	Carya spp.
Redbud	Cercis canadensis
Sweetgum	Liquidambar styraciflua
Sycamore	Platanus spp.
Walnut, Black	Juglans nigra
Willow	Salix 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 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, 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 Sure-Guard 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 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 no will control trol 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 active-

ly 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 noncrop 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 enclosed 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, camparounds, office complexes, parks, parking areas, recreational sites, schools and other similar sites. Bermudagrass exhibits tolerance to *SureGuard* Herbicide only when applied to completely 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 (ex. 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 apply if rain is expectto cutting or lifting sod. 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 reapply *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	Cynodon spp.

# **STORAGE AND DISPOSAL**

**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 HANDLING:** 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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**GROUP 14** HERBICIDE



# SureGuard<sup>®</sup>





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 I * Flumioxazin Other Ingredients	49%
* (2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-	
benzoxazin-6-yl]-4,5,6,7-tetrahydro-1 <i>H</i> -isoindole-1, 3(2 <i>H</i> )-dione) SureGuard® Herbicide is a water dispersible granule containing	

SureGuard<sup>®</sup> Herbicide is a water dispersible granule contai 51% active ingredient.

EPA Reg. No. 59639-120 EPA Est. 11773-IA-1@, 228-IL-2@, 39578-TX-1©, 5481-ID-1@, 5505-GA-1©, 62171-MS-1@, 62171-MS-3@, 67545-AZ-1@, 67997-IA-1, 67997-IA-7, 70815-GA-1@, 70815-GA-2@, 70815-GA-3, 71764-NC-1, 86555-MO-1@, 89332-GA-2@, 97524-GA-1@ Superscript is first letter of lot number. KEEP OUT OF REACH OF CHILDREN CAUTION SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS

Manufactured for: Valent U.S.A. LLC P.O. Box 5075 San Ramon CA 94583

# **NET WEIGHT 5 POUNDS**