

AMICARBAZONE

GROUP

5

HERBICIDE

**XONERATE®**

2SC

**Herbicide**

envu™

For Selective Control of Weeds in Turf on Golf Courses, Sod Farms, Residential and Commercial Turf Sites, Park and Recreation Areas, Athletic Fields, School Grounds and other Turf Areas and Conifers in Nurseries and Field Plantings (including Christmas Trees)

Active Ingredient:	By Wt.
Amicarbazone: .....	23.25%
Other Ingredients: .....	76.75%
<b>Total:</b> .....	<b>100.00%</b>

XONERATE® 2SC herbicide contains 2.0 pounds per gallon of active ingredient Amicarbazone.

EPA Reg. No. 101563-365

EPA Est. No.

Read the label before use

**KEEP OUT OF REACH OF CHILDREN****CAUTION/PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See booklet for additional precautionary information.

**SKU: D00001668**

22053786B 250407AV1

**Net Contents: 12 FL OZS**

PRODUCED FOR

Environmental Science U.S., LLC

5000 CentreGreen Way, Suite 400, Cary, NC 27513

## FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with warm water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

*(continued)*

<b>FIRST AID <i>(continued)</i></b>
<b>NOTE TO PHYSICIAN</b>
No specific antidote is available. Treat the patient symptomatically.
<b>MEDICAL HOTLINE NUMBER</b>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Environmental Science U.S., LLC Emergency Response Telephone No. 1-800-424-9300 for emergency medical treatment information.

**For Technical Support or Information regarding the use of this product, call 1-800-331-2867.**

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

#### **CAUTION**

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (made of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber (includes natural rubber blends and laminates)  $\geq 14$  mils, polyethylene, polyvinylchloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils)
- Shoes plus socks

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

### **ENGINEERING CONTROL STATEMENT**

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

## **USER SAFETY RECOMMENDATIONS**

### **Users should:**

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **PHYSICAL CHEMICAL HAZARDS**

Do not mix or allow this product to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment wash waters or rinsate. Do not use the same spray equipment for other purposes unless thoroughly cleaned.

Do not allow sprays to drift onto adjacent desirable plants. Drift or runoff may adversely affect non-target plants.

XONERATE® 2SC herbicide has properties which may result in ground water contamination. Use of XONERATE 2SC herbicide in areas where soils are permeable and ground-water is near the surface must be avoided.

To prevent damage to crops and other desirable plants, read and follow all directions and precautions on this label before using.

**GROUNDWATER ADVISORY:** Amicarbazone is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**SURFACE WATER ADVISORY:** This product may contaminate surface water via runoff of rainwater or drift of spray in wind. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of Amicarbazone and its degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur with 48 hours. Sound erosion control practices

will reduce this product's potential to reach aquatic sediment via runoff.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from

contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States or local tribes may have in effect additional requirements regarding wellhead setbacks and operational containment. State, Local, or Tribal regulations may be more restrictive than those listed on this product label. The most restrictive requirements must be followed.

This product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

## **DIRECTIONS FOR USE**

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

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

## **AGRICULTURAL USE REQUIREMENTS**

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

**Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of 12 hours following application.**

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

*(continued)*

## **AGRICULTURAL USE REQUIREMENTS** ***(continued)***

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, including plants, soil, or water: wear coveralls, chemical-resistant gloves (made of barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber (includes natural rubber blends and laminates)  $\geq$  14 mils, polyethylene, polyvinylchloride (PVC)  $\geq$  14 mils, or viton  $\geq$  14 mils), and shoes plus socks.

## **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

Read these entire **DIRECTIONS FOR USE** and **WARRANTY AND DISCLAIMER STATEMENT** before using this product.

## **PRODUCT INFORMATION**

XONERATE2SC herbicide is formulated as a 23.25% suspension concentrate (SC) herbicide.

XONERATE2SC herbicide is a selective, postemergence herbicide that may be used for the control of certain weeds in established turfgrasses. XONERATE2SC herbicide may be applied postemergence to tolerant turfgrasses at rates of 3 to 29 fl oz/A. XONERATE2SC herbicide also has preemergence activity on certain weed species at rates of 14.5 to 29.0 fl oz/XONERATE2SC herbicide/A. See additional information for specific turfgrass species in section titled *Timing and Rates of Application*.

Apply XONERATE2SC herbicide either alone, in tank mix combination, sequentially prior to or after additional herbicides, except as labeled. When tank mixing, always observe all precautionary statements and limitations on labeling of all products.

Water is the recommended liquid carrier for XONERATE2SC herbicide.

## **Resistance-Management Recommendations**

For resistant management, please note that XONERATE2SC herbicide contains a Group 5 herbicide as classified by the Weed Science Society (WSSA) classification group. Any weed population may contain plants naturally resistant to

Group 5 herbicides. These resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of XONERATE2SC herbicide and other Group 5 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed management program for herbicide use that includes scouting, uses historical information related to herbicide use and that considers mechanical controls methods, cultural (e.g. timing to favor the turf and not the weeds, biological (weed-competitive varieties) and other integrated management practices.

- Scout area before herbicide application for weed identification and growth stage.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different site of action, if available.

Contact your local extension specialist or university researcher for additional pesticide resistance management and/or integrated weed management recommendations for specific turf types and weed biotypes.

**Read the entire DIRECTIONS FOR USE before using XONERATE 2SC herbicide.**

## **USE RESTRICTIONS**

- Do not apply this product using aerial application equipment.
- Do not apply this product if the soil pH is greater than 7.4.
- Do not mix, load or clean spray equipment within 50 feet of any wells or aquatic systems, including marshes, ponds, ditches, streams, lakes, etc.
- Do not apply within 50 feet of well-heads or the above mentioned aquatic systems.
- Do not apply more than 29 fl oz/A of XONERATE2SC herbicide per year.
- Do not apply more than 29 fl oz/A of XONERATE2SC herbicide per single application.
- Do not allow this chemical to drift onto other crops or non-target plants.
- Do not apply this product through any type of irrigation system. Do not apply to turf under moisture stress. If necessary irrigate before application to eliminate moisture stress.
- Do not apply XONERATE 2SC herbicide less than four weeks before cutting or lifting sod.
- Do not apply to cool-season turf that has received an application of products that contain mefludide within the previous 3 months.

## USE PRECAUTIONS

- Use on turfgrass species other than those listed in the **Cool-Season Turfgrasses** and **Warm-Season Turfgrasses** tables may result in unacceptable injury.
- For best results, apply to cool-season turf only when temperatures are expected to remain above 55°F for 48 hours before or after application.
- Use XONERATE2SC herbicide on turfgrasses that have been established for a minimum of six months (twelve months for Kentucky Bluegrass), unless otherwise directed on this label.
- Plants other than turfgrasses may be planted in treated areas no less than 12 months after the last application.
- To minimize turf injury, irrigate within 24 hours after application with 0.1 to 0.2 inches water.
- Allow at least 1 week between last application and overseeding with desirable cool-season turf grasses.
- Apply to actively-growing weed populations.
- Application to turfgrasses that are under stress from adverse weather, excess heat, pests, disease, chemicals, mechanical injury or other related stress factors may result in unacceptable injury.
- Applications to XONERATE2SC herbicide are not advisable when annual bluegrass is maintained as a desirable turf.

## **MANDATORY SPRAY DRIFT**

### **Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 ft above the ground surface.
- Applicators must select nozzle and pressure that deliver medium to coarse droplets in accordance with the American Society of Agriculture & Biological Engineers Standard 572 (ASAE Standard 572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## **Handheld Technology Applications**

- Take precautions to minimize spray drift.

### **Controlling Droplet Size – Ground Boom**

**Volume:** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow volume.

**Pressure:** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

**Spray nozzle:** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

**BOOM HEIGHT – Ground Boom:** For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce the effects of evaporation.

### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature

with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipated indicates good vertical air mixing. Avoid applications during temperature inversions.

## **WIND**

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **SENSITIVE AREAS**

Areas sensitive to this product are defined as bodies of water (ponds, lakes, rivers, streams, and wetlands), known habitats of threatened or endangered species, and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

## **LATERAL MOVEMENT**

Under certain conditions, XONERATE2SC herbicide may have the potential to move laterally onto sensitive grasses. If high amounts of rainfall are predicted prior to application, it is advised to leave at least a 5 ft barrier between the sensitive

species and edge of treated area to ensure an adequate buffer is established if lateral movement occurs.

## **RECOMMENDED TURFGRASS SITES**

XONERATE 2SC herbicide may be applied to tolerant turf species on golf courses, seed and sod production fields, residential sites (including home lawns), schools, playgrounds, parks, recreational areas, sports fields, common areas and grass roadsides maintained as a lawn.

### **Turfgrass Tolerance**

Apply to turfgrasses established for six months, unless otherwise directed on this label. With the exception of Kentucky bluegrass, cool-season turfgrasses established in the fall months can be treated the following spring. Kentucky bluegrass should be established for twelve months before application of XONERATE 2SC herbicide. The use of XONERATE 2SC herbicide on turf that is not well-established, or that has been weakened by weather, pests, diseases, chemicals, mechanical injury or other related stress factors may result in adverse turf injury.

This product must only be applied to sites that are composed of the following turfgrass species, unless trial use has indicated that the turf species not listed here is tolerant to XONERATE 2SC herbicide.

<b>Cool-Season Turfgrasses†</b>	
Bentgrass, Creeping	<i>Agrostis stolonifera</i>
Bluegrass, Kentucky	<i>Poa pratensis</i>
Fescue, Fine	<i>Festuca</i> spp.
Fescue, Tall	<i>Festuca arundinacea</i>
Ryegrass, Perennial	<i>Lolium perenne</i>
<b>Warm-Season Turfgrasses†</b>	
Bahiagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Buffalograss	<i>Buchloe dactyloides</i>
Centipedegrass	<i>Eremochloa ophiuroides</i>
Kikuyugrass	<i>Pennisetum clandestinum</i>
Seashore Paspalum	<i>Paspalum vaginatum</i>
St. Augustinegrass	<i>Stenotaphrum secundatum</i>
Zoysiagrass	<i>Zoysia japonica</i>
† Cool- and warm-season turfgrasses have demonstrated acceptable tolerance to XONERATE 2SC herbicide. However, not all cultivars have been evaluated.	

When applied as directed under the conditions described, established turfgrasses are tolerant to this product. However, not all cultivars have been tested. As there are numerous cultivars of the listed turfgrasses as well as a wide range of mowing heights, end users are advised to determine tolerance on a small trial area on their site prior to application to all the intended turfgrass areas. Observe trial areas for two to three weeks after application. If injury is not considered adverse, then the remaining turf area may be treated. Temporary yellowing of the turf may occur after application. This effect is temporary and the turf will recover in 14 to 21 days.

### **Mixing Instructions – Liquid Carriers**

XONERATE 2SC herbicide is a suspension concentrate formulation that must be diluted before application.

If the product is to be tank mixed with other pesticide products, it is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

The proper mixing sequence for XONERATE 2SC herbicide and recommended tank mixtures with the appropriate liquid carrier is as follows:

1. Fill the spray tank or nurse tank 1/4 full with the appropriate liquid carrier or water.
2. Start the recirculation and agitation system and continue throughout mixing and application.
3. If the compatibility test indicates the need for a compatibility agent, add the recommended amount to the spray tank.
4. If tank mixing with wettable powders, dry flowable or water dispersible granule products in water as the carrier, these may be added now.
5. Add the appropriate quantity of XONERATE 2SC herbicide to the spray tank.
6. If tank mixing with suspension concentrates, add the products to the spray tank.
7. If tank mixing with emulsifiable concentrates or soluble products, add the products to the spray tank.
8. If mixing any additional spray adjuvants in the mixture, add them after all other products have been mixed.
9. XONERATE 2SC herbicide and all registered mixtures need to remain agitated once mixed and then sprayed out.
10. Do not allow mixtures to stand for prolonged periods of time.

## **Compatibility**

XONERATE 2SC herbicide can be tank-mixed with other pesticides and liquid fertilizers not shown on this label; however, compatibility needs to be determined before mixing. A compatibility test can be conducted with the following method:

1. In a small container (jar with lid), add 0.5 to 1 qt of the spray carrier.
2. Add all ingredients of the tank mix in the same ratio as the anticipated use into spray carrier.
3. Vigorously shake the mixture and allow to stand for 5 to 10 minutes.
4. Rapid precipitation, settling, changes in color, etc. and/or failure to resuspend indicates that the mixture is physically incompatible and must not be applied.
5. If the mixture is physically compatible, the tank mix must be tested to determine safety (no adverse turfgrass injury) before treating large areas. Observe treated areas for 2 to 3 weeks after application. If injury is not considered adverse, then the remaining turf area may be treated.

## **Sprayer Equipment Clean-out**

After applying XONERATE 2SC herbicide the sprayer must be thoroughly cleaned with the following procedure:

1. Drain the tank completely, then wash out tank, boom and hoses with clean water.

2. Drain the tank again.
3. Fill the tank half-full with water and add ammonia at a dilution rate of 1% v/v (i.e. one gallon household ammonia per 100 gal of rinsate). Completely fill tank with water. Operate the sprayer for 10 minutes to flush hoses, boom and nozzles.
4. Drain the sprayer system. Rinse the tank with clean water and flush the hoses, boom and nozzles. Remove and clean spray tips and screens separately.
5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State and local guidelines.

To avoid injury or exposure to non-target crops, thoroughly clean all mixing and spray equipment, including pumps, nozzles, lines and screens on an approved rinse pad or on a field site where an approved crop is grown. Do not drain or flush sprayer on or near desirable plants. Do not contaminate any body of water.

## **SPRAY APPLICATION**

### **Broadcast Treatment**

Accurately calibrate the sprayer prior to mixing the herbicide treatments. Apply XONERATE 2SC herbicide at a minimum total spray volume of 20 gal/A using broadcast boom equipment. Power sprayers equipped with a spray wand/gun may also be used for broadcast. Application must be made at a sufficient spray pressure and volume to provide

accurate and uniform application of spray particles to a given area without causing spray drift to non-target areas. If mixed with other labeled herbicides, the spray volume may be no less than the minimum volume recommended by any tank mix product used or 20 gal/A, whichever is greater. Use appropriately-sized mesh screens and in-line strainers. Agitate thoroughly before and during application with either bypass or mechanical agitation. Rinse the sprayer thoroughly with clean water immediately after each use.

**Improper spray pattern overlaps produce areas of over-application and may increase the potential for turf damage.**

### **Spot Treatment**

Backpack and compression sprayers may be used for small turfgrass areas and spot treatments. Power sprayers equipped with a spray wand/gun may also be used for spot application. Wands fitted with a flat fan nozzle tip must be held stationary at the proper height during application. A side-to-side or swinging arm motion may result in uneven spray coverage. Spray target weed to ensure even coverage. Spraying to wet may increase risk of unwanted turf injury.

**Improper spray pattern overlaps produce areas of over-application and may increase the potential for turf damage.**

**For Spot Applications: Use the Following**

Gallons	Fluid Ounces of XONERATE 2SC Herbicide	Milliliters of XONERATE 2SC Herbicide
1	0.07 fl oz	2 mL
2	0.14 fl oz	4 mL
4	0.28 fl oz	8 mL

Note: These rates are equivalent to 3 fl oz/A

**WEEDS CONTROLLED OR SUPPRESSED**

Depending on the use rate, XONERATE 2SC herbicide will control or suppress the following broadleaf and grass weeds in turf.

**WEEDS CONTROLLED OR SUPPRESSED by XONERATE 2SC HERBICIDE**

Common Name	Scientific Name	Controlled	Suppressed
Alexandergrass (Creeping signalgrass)	<i>Urochloa plantaginea</i>	X	
Betony, Florida	<i>Stachys floridana</i>		X
Bittercress, hairy	<i>Cardamine hirsuta</i>	X	
Bluegrass, annual (annual biotypes)	<i>Poa annua</i> var. <i>annua</i>	X	

(continued)

**WEEDS CONTROLLED OR SUPPRESSED by XONERATE 2SC HERBICIDE**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Controlled</b>	<b>Suppressed</b>
Bluegrass, annual (perennial biotypes)	<i>Poa annua var. reptans</i>		X
Bluegrass, roughstalk	<i>Poa trivialis</i>		X
Burweed, lawn (spurweed)	<i>Soliva sessilis</i>	X	
Carpetweed	<i>Mollugo verticillata</i>	X	
Chickweed, common	<i>Stellaria media</i>	X	
Chickweed, sticky	<i>Cerastium glomeratum</i>	X	
Clover, hop (field clover)	<i>Trifolium campestre</i>		X
Clover, hop large (golden clover)	<i>Trifolium aureum</i>		X
Cocklebur, common	<i>Xanthium strumarium</i>		X
Crabgrass spp.	<i>Digitaria sanguinalis</i>		X <sup>1</sup>
Creeping beggarweed	<i>Desmodium incanum</i>		X
Cudweed spp.	<i>Gnaphalium</i> spp.	X	

(continued)

**WEEDS CONTROLLED OR SUPPRESSED by XONERATE 2SC HERBICIDE**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Controlled</b>	<b>Suppressed</b>
Diamond-flower, old world	<i>Hedyotis corymbosa</i>		X
Dichondra	<i>Dichondra</i> spp.	X	
Downy Brome	<i>Bromus tectorum</i>		X
Drymary, heartleaf	<i>Drymaria cordata</i>	X	
Foxtail spp.	<i>Setaria</i> spp.		X
Hemp sesbania	<i>Sesbania exaltata</i>		X
Henbit	<i>Lamium amplexicaule</i>	X	
Horsenettle	<i>Solanum carolinense</i>		X
Jimsonweed	<i>Datura stramonium</i>	X	
Kochia	<i>Kochia scoparia</i>		X
Lambsquarters, common	<i>Chenopodium album</i>	X	
Lovegrass, India	<i>Eragrostis pilosa</i>		X
Morningglory spp.	<i>Ipomoea</i> spp.	X	
Mustard, wild	<i>Brassica kaber</i>	X	

(continued)

**WEEDS CONTROLLED OR SUPPRESSED by XONERATE 2SC HERBICIDE**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Controlled</b>	<b>Suppressed</b>
Nightshade, eastern black	<i>Solanum ptychanthum</i>		X
Panicum, fall	<i>Panicum dichotomiflorum</i>	X	
Parsley-piert	<i>Aphanes microcarpa</i>	X	
Pennycress, field	<i>Thlaspi arvense</i>	X	
Pepperweed, Virginia	<i>Lepidium virginicum</i>	X	
Pigweed spp.	<i>Amaranthus</i> spp.	X	
Prickly sida	<i>Sida spinosa</i>		X
Purslane, common	<i>Portulaca oleracea</i>	X	
Radish, wild	<i>Raphanus raphanistrum</i>	X	
Ragweed, common	<i>Ambrosia artemisiifolia</i>	X	
Ragweed, giant	<i>Ambrosia trifida</i>		X
Shepherd's-purse	<i>Capsella bursa-pastoris</i>	X	

(continued)

**WEEDS CONTROLLED OR SUPPRESSED by XONERATE 2SC HERBICIDE**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Controlled</b>	<b>Suppressed</b>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>	X	
Speedwell spp.	<i>Veronica</i> spp.	X	
Spurge, spotted	<i>Chamaesyce maculata</i>	X	
Tropical Signalgrass	<i>Urochloa subquadripara</i>	X <sup>2</sup>	
Toadflax, oldfield	<i>Linaria canadensis</i>	X	
Velvetleaf	<i>Abutilon theophrasti</i>	X	
Waterhemp	<i>Amaranthus</i> spp.	X	
Whitehead broom	<i>Spermacoce verticillata</i>		X
Woodsorrel, yellow	<i>Oxalis stricta</i>	X	

<sup>1</sup> Does not control India crabgrass (*Digitaria longiflora*).

<sup>2</sup> Refer to Tropical signalgrass section for additional application information.

## Timing and Rates of Application

### COOL-SEASON TURFGRASSES

- Annual bluegrass (*Poa annua*) weed control in established
  - Creeping bentgrass,
  - Kentucky bluegrass,
  - Fine fescues, tall fescue and perennial ryegrass

Established Cool-Season Turf for Control of Annual bluegrass ( <i>Poa annua</i> )						
Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year (at max use rate)	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Creeping Bentgrass</b> <i>(Agrostis stolonifera)</i> <b>Tees and Green Surrounds</b>	3	0.047	14	Up to 4	12	0.19

(continued)

**Established Cool-Season Turf for Control of Annual bluegrass (*Poa annua*)**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year (at max use rate)	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Creeping Bentgrass</b> ( <i>Agrostis stolonifera</i> ) <b>Fairways and Roughs</b>	3	0.047	14	Up to 4	12	0.19
<p>Creeping bentgrass ('A1', 'A4', G6, 'L93', 'Pennway', 'Pencross', and 'Seaside') has demonstrated acceptable tolerance to XONERATE2SC herbicide even when maintained at tee mowing heights. Other creeping bentgrass cultivars may be tolerant; however, the end user is advised to do a tolerance test on a small area before spraying all the intended turfgrass areas. Additionally, all potential tank mixtures with fungicides, insecticides, and other herbicides have not been evaluated and must be tested on a small scale basis before widespread use.</p>						

(continued)

For annual bluegrass (*Poa annua*) control on creeping bentgrass, apply XONERATE 2SC herbicide in the spring months, two to four weeks after the resumption of active bentgrass growth. Apply at 3.0 fl oz/A and repeat the application at 14-day intervals up to a maximum of 4 applications per year.

- Apply XONERATE 2SC herbicide when air temperatures are ranging from 55 to 80°F. Do not apply XONERATE 2SC herbicide to creeping bentgrass when the daytime air temperature is expected to exceed 80°F.
- Do not apply XONERATE 2SC herbicide to creeping bentgrass in the summer or early fall months.

XONERATE 2SC herbicide is effective in controlling *Poa annua* and results from controlling *Poa annua* infestations may be mistaken as temporary injury or thinning of the creeping bentgrass turf. XONERATE 2SC herbicide is recommended only for creeping bentgrass areas with 10% or less population density of *Poa annua*. Applications to creeping bentgrass areas with high populations (> 10%) of *Poa annua* can result in a decrease of overall turf appearance due to the elimination of *Poa annua*. Creeping bentgrass will gradually fill in the resultant bare areas. Cultural practices to hasten the growth of creeping bentgrass will aid in the regeneration process. Treated areas may be reseeded at 7 or more days after the last application of XONERATE 2SC herbicide. Do not retreat reseeded areas until turfgrass has become established.

XONERATE 2SC herbicide may be tank mixed with labeled herbicides including 2,4-D, MCPP, dicamba or two and three-way herbicides that contain mixtures of 2,4-D, MCPP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds.

XONERATE 2SC herbicide may also be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

**Established Cool-Season Turf for Control of Annual bluegrass (*Poa annua*)**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year (at max use rate)	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
Kentucky Bluegrass ( <i>Poa pratensis</i> )	3 OR	0.047	14	Up to 4	12	0.19
	4 OR	0.063	14	Up to 3	12	0.19
	6	0.094	21	Up to 2	12	0.19

(continued)

For annual bluegrass (*Poa annua*) control in Kentucky bluegrass, apply XONERATE 2SC herbicide in the spring months. Apply XONERATE 2SC herbicide according to one of the following schedules: 1) at 3 fl oz/A and repeat the application at 14-day intervals up to a maximum of 4 applications per year; 2) at up to 4 fl oz/A and repeat the application at 14-day intervals up to a maximum of 3 applications per year; or 3) up to 6 fl oz/A and repeat the application at a 21-day intervals up to a maximum of 2 applications per year.

- Do not apply XONERATE 2SC herbicide to Kentucky bluegrass when the day-time air temperature is expected to exceed 85°F.
- **Kentucky Bluegrass should be established for twelve months before application of XONERATE 2SC herbicide.**

XONERATE 2SC herbicide may be tank mixed with various recommended herbicides including 2,4-D, MCPP, dicamba or two and three-way herbicides that contain mixtures of 2,4-D, MCPP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds.

XONERATE 2SC herbicide may also be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

**Established Cool-Season Turf for Control of Annual bluegrass (*Poa annua*)**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year (at max use rate)	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Tall Fescue</b> ( <i>Festuca arundinacea</i> )	4	0.063	14	Up to 3	12	0.19
<b>Fine Fescue</b> ( <i>Festuca spp.</i> )						
<b>Perennial Ryegrass</b> ( <i>Lolium perenne</i> )	6-9	0.094-0.14	21	Up to 2	18	0.28

(continued)

For annual bluegrass (*Poa annua*) control in fine fescues, tall fescues and perennial ryegrass, apply XONERATE 2SC herbicide according to one of the following schedule: 1) up to 4 fl oz/A and repeat the application at 14 day intervals up to a maximum of 3 applications per year; or 2) 6 to 9 fl oz/A and repeat the application at 21-day intervals up to a maximum of two applications per year.

- Do not apply XONERATE 2SC herbicide to fine fescues, tall fescues and perennial ryegrass when the daytime air temperature is expected to exceed 85 °F.

Perennial ryegrass and tall fescues may be seeded at 7 or more days after the last application of XONERATE 2SC herbicide.

XONERATE 2SC herbicide may be tank mixed with various recommended herbicides including 2,4-D, MCP, dicamba or two and three-way herbicides that contain mixtures of 2,4-D, MCP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds.

XONERATE 2SC herbicide may also be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

## **WARM-SEASON TURFGRASSES**

- Annual bluegrass (*Poa annua*) weed control in
  - Overseeded Bermudagrass Tees and Fairways and
- Annual bluegrass (*Poa annua*) weed control, annual broad-leaf weed control, and tropical signalgrass control in
  - Established bahiagrass, bermudagrass, buffalograss, centipedegrass, kikuyugrass, seashore paspalum, St. Augustinegrass, and zoysiagrass.
- Crabgrass species (except India species) control in
  - St. Augustinegrass

<b>Established Warm-Season Turf for Control of Annual Bluegrass (<i>Poa annua</i>)</b>						
<b>Turfgrass Species</b>	<b>Single Maximum Use Rate</b>		<b>Reapplication Intervals</b>	<b>Maximum Applications/Year</b>	<b>Maximum Yearly Rate</b>	
	<b>fl oz product/A</b>	<b>lbs Ai/A</b>	<b>Days</b>		<b>fl oz product/A/year</b>	<b>lbs Ai/A/year</b>
<b>Bermudagrass Tees and Fairways Spring application of XONERATE2SC Herbicide following Fall overseeding with Perennial Ryegrass</b>	6-9	0.094-0.14	14-21 day	Up to 3 at the low rate Up to 2 at the high rate	18	0.28

(continued)

To control annual bluegrass in bermudagrass overseeded the previous fall with perennial ryegrass apply XONERATE 2SC herbicide in early- to mid-spring month. A five month lapse between fall overseeding and application of XONERATE 2SC herbicide is needed to ensure that perennial ryegrass is actively-growing and has recovered from winter-induced stress. Apply at a rate of 6-9 fl oz/A and repeat the application at 14 to 21-day intervals. The maximum number of applications depends on the application rate: at the low rate, up to 3 application may be made per year; at the high rate, up to 2 application may be made per year.

- Do not apply XONERATE 2SC herbicide to perennial ryegrass when the day-time air temperature is expected to exceed 80 °F.
- **Do not apply XONERATE 2SC herbicide to perennial ryegrass that has received an application of products that contain mefludide within the previous 3 months unless severe injury and/or removal is acceptable.**
- Do not apply XONERATE 2SC herbicide to emerged *Poa trivialis* unless the objective is to suppress or remove *Poa trivialis*.

XONERATE 2SC herbicide may be tank mixed with various recommended herbicides including 2,4-D, MCPP, dicamba, sulfentrazone or two and three-way herbicides that contain mixtures of 2,4-D, MCPP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds. XONERATE 2SC herbicide may also be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

Established Warm-Season Turf for Control of Annual Bluegrass ( <i>Poa annua</i> )						
Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
Bermudagrass Fall application of XONERATE 2SC herbicide prior to overseeding with Perennial Ryegrass or <i>Poa trivialis</i> (Roughstalk Bluegrass)	14-29	0.22-0.45	Not applicable	1	29	0.45
<p>This application will control annual bluegrass and aid in the transition from perennial ryegrass to bermudagrass. Apply only one application of XONERATE 2SC herbicide at a rate of 14-29 fl oz/A seven or more days before overseeding bermudagrass with either perennial ryegrass or <i>Poa trivialis</i>.</p> <p><b>• XONERATE 2SC HERBICIDE APPLIED TO SEEDLING POA TRIVIALIS WILL RESULT IN SEVERE TURF INJURY.</b></p>						

Established Warm-Season Turf for Control of Annual Bluegrass ( <i>Poa annua</i> )						
Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Bahiagrass</b> <i>(Paspalum notatum)</i> <b>Bermudagrass</b> <i>(Cynodon dactylon)</i> <b>Buffalograss</b> <i>(Bouteloua dactyloides)</i> <b>Centipedegrass</b> <i>(Eremochloa ophiuroides)</i>	9-14.5	0.14-0.23	14-21	Up to 2	29	0.45

(continued)

Established Warm-Season Turf for Control of Annual Bluegrass ( <i>Poa annua</i> )						
Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Kikuyugrass</b> <i>(Pennisetum clandestinum)</i> <b>Seashore Paspalum</b> <i>(Paspalum vaginatum)</i> <b>St. Augustinegrass</b> <i>(Stenotaphrum secundatum)</i> <b>Zoysiagrass</b> <i>(Zoysia spp.)</i>	9-14.5	0.14-0.23	14-21	Up to 2	29	0.45

(continued)

For postemergence annual bluegrass in tolerant warm-season turf, XONERATE 2SC herbicide may be applied to warm-season turfgrasses that are dormant, partially dormant or actively growing. Apply XONERATE 2SC herbicide at rates of 9-14.5 fl oz/A and repeat the application at 14- to 21-day intervals, up to a maximum of two applications per year.

• **Do not use XONERATE 2SC herbicide on St. Augustinegrass when air temperatures are greater than 90°F.**

XONERATE 2SC herbicide can be tank mixed with labeled herbicides that contain metsulfuron, 2,4-D, dicamba or mixtures of 2,4-D, MCP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds. If sedge species are present on the site, XONERATE 2SC herbicide can be tank mixed with herbicides labeled for control of sedges. Consult the tank mix partner label for turfgrass species tolerance, weeds controlled and maximum weed sizes at applications. This product can be tank mixed with DISMISS® Turf herbicide (EPA Reg. No. 101563-284 containing sulfentrazone) or DISMISS NXT herbicide (EPA Reg. No. 101563-315 containing sulfentrazone and carfentrazone-ethyl) for the control of sedges. Follow the most restrictive labeled timing between XONERATE 2SC herbicide and any tank mix partner.

XONERATE 2SC herbicide may be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

**Established Warm-Season Turf for Control of Annual Broadleaf Weeds**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Bahiagrass</b> <i>(Paspalum notatum)</i> <b>Bermudagrass</b> <i>(Cynodon dactylon)</i> <b>Buffalograss</b> <i>(Bouteloua dactyloides)</i> <b>Centipedegrass</b> <i>(Eremochloa ophiuroides)</i> <b>Kikuyugrass</b> <i>(Pennisetum clandestinum)</i>	9-14.5	0.14-0.23	14-21	Up to 2	29	0.45

*(continued)*

**Established Warm-Season Turf for Control of Annual Broadleaf Weeds**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Seashore Paspalum</b> <i>(Paspalum vaginatum)</i> <b>St. Augustinegrass</b> <i>(Stenotaphrum secundatum)</i> <b>Zoysiagrass</b> <i>(Zoysia spp.)</i>	9-14.5	0.14-0.23	14-21	Up to 2	29	0.45

*(continued)*

For annual broadleaf weed control in tolerant warm-season turf, XONERATE2SC herbicide may be applied to warm-season turfgrasses that are dormant, partially dormant or actively growing. Apply XONERATE 2SC herbicide at rates of 9-14.5 fl oz/A and repeat the application at 14- to 21-day intervals, up to a maximum of two applications per year.

• **Do not use XONERATE2SC herbicide on St. Augustinegrass when air temperatures are greater than 90°F.**

XONERATE2SC herbicide can be tank mixed with labeled herbicides that contain metsulfuron, 2,4-D, dicamba or mixtures of 2,4-D, MCPP, clopyralid, dicamba, fluroxypyr, carfentrazone-ethyl, or triclopyr to enhance control of emerged broadleaf weeds. If sedge species are present on the site, XONERATE 2SC herbicide can be tank mixed with herbicides labeled for control of sedges. Consult the tank mix partner label for turfgrass species tolerance, weeds controlled and maximum weed sizes at applications. This product can be tank mixed with DISMISS Turf herbicide (EPA Reg. No. 101563-284 containing sulfentrazone) or DISMISS NXT herbicide (EPA Reg. No. 101563-315 containing sulfentrazone and carfentrazone-ethyl) for the control of sedges. Follow the most restrictive labeled timing between XONERATE 2SC herbicide and any tank mix partner.

XONERATE2SC herbicide may be tank mixed with preemergence herbicides for residual control of crabgrass species and other summer annual weeds.

**Established Warm-Season Turf for Control of Tropical Signalgrass**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Bahiagrass</b> <i>(Paspalum notatum)</i> <b>Bermudagrass</b> <i>(Cynodon dactylon)</i> <b>Buffalograss</b> <i>(Bouteloua dactyloides)</i> <b>Centipedegrass</b> <i>(Eremochloa ophiuroides)</i>	9-14.5	0.14-0.23	14	Up to 2	29	0.45

*(continued)*

**Established Warm-Season Turf for Control of Tropical Signalgrass**

Turfgrass Species	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
<b>Kikuyugrass</b> <i>(Pennisetum clandestinum)</i> <b>Seashore Paspalum</b> <i>(Paspalum vaginatum)</i> <b>St. Augustinegrass</b> <i>(Stenotaphrum secundatum)</i> <b>Zoysiagrass</b> <i>(Zoysia spp.)</i>	9-14.5	0.14-0.23	14	Up to 2	29	0.45

*(continued)*

XONERATE 2SC herbicide may be applied in the spring or fall months. Fall is the best application time to maximize tropical signalgrass control; initial fall applications typically are applied in September or October, depending on geographic location. Apply XONERATE 2SC herbicide at rates of 9-14.5 fl oz/A and repeat the application at a 14-day interval, up to a maximum of two applications per year.

• **Do not use XONERATE 2SC herbicide on St. Augustinegrass in the summer months when air temperatures are greater than 90°F.**

XONERATE 2SC herbicide can be tank mixed other herbicides. When tank mixing, please confirm compatibility.

When using with DISMISS South herbicide (EPA Reg. No. 101365-307) containing sulfentrazone and imazethapyr), **only use on established bermudagrass.**

**Established St. Augustinegrass for Control of Crabgrass species (except India crabgrass)**

Turfgrass Species	Single Maximum Use Rate		Reappli- cation Intervals	Maximum Applications/ Year	Maximum Yearly Rate	
	fl oz product/ A	lbs Ai/A	Days		fl oz product/ A/year	lbs Ai/ A/year
<b>St. Augustinegrass</b> ( <i>Stenotaphrum secundatum</i> )	9	0.14	21	Up to 2	18	0.28

XONERATE 2SC herbicide may be used in a tank-mixture for postemergence applications to reduce populations of blanket crabgrass and other crabgrass species (with the exception of India crabgrass) in established St. Augustinegrass. Apply XONERATE 2SC herbicide at rates of 9 fl oz/A and repeat the application at a 21-day interval, up to a maximum of two applications per year.

- **Do not use XONERATE 2SC herbicide on St. Augustinegrass when air temperatures are greater than 90°F.**
- **St. Augustinegrass may become slightly discolored by this application, but discoloration is transient. Complete recovery will occur within two weeks after the last application, depending upon growing conditions.**

XONERATE 2SC herbicide can be tank mixed with other herbicides including CELSIUS® WG herbicide (EPA Reg. No. 101563-141 containing dicamba, thiencazabone-methyl, and iodosulfuron-methyl-sodium). When tank mixing, please confirm compatibility.

## NURSERIES AND FIELD PLANTINGS (INCLUDING CHRISTMAS TREES)

Weed Control in Conifers						
Ornamentals	Single Maximum Use Rate		Reapplication Intervals	Maximum Applications/Year	Maximum Yearly Rate	
	fl oz product/A	lbs Ai/A	Days		fl oz product/A/year	lbs Ai/A/year
Conifer nurseries Field plantings (including Christmas trees)	11-29	0.17-29	21	Up to 2 at the low rate Only 1 at the high rate	29	0.45
<p>XONERATE 2SC herbicide can be used over-the-top or as a directed spray under the canopy in conifer nurseries and field plantings (including Christmas trees). Apply XONERATE 2SC herbicide at a rate of 11-29 fl oz/A. Repeat applications may be made at 21-day intervals but do not exceed 29 fl oz/A per year.</p> <p>• <b>DO NOT</b> use a mechanically pressurized handgun for application to Christmas trees.</p>						

## **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. For help with any spill, leak, fire or exposure involving this material, you may contact the Environmental Science U.S., LLC Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Environmental Science U.S., LLC Emergency Response Telephone No. is 1-800-424-9300.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

## **STORAGE AND DISPOSAL** ***(continued)***

### **CONTAINER HANDLING:**

**Rigid, nonrefillable in containers small enough to shake (5 gallons or 50 pounds or less). Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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. Offer for recycling if available or dispose of in a sanitary landfill or by incineration.

### **Conditions of Sale and Limitation of Warranty and Liability:**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Turf or plant injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or conditions beyond the control of Environmental Science U.S., LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Environmental Science U.S., LLC and Seller harmless for any claims relating to such factors.

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The logo for Environmental Science U.S., LLC, featuring the word "envu" in a lowercase, bold, sans-serif font. The letters are black, and there is a small trademark symbol (TM) to the upper right of the "u".

**PRODUCED FOR**  
**Environmental Science U.S., LLC**  
**5000 CentreGreen Way, Suite 400**  
**Cary, NC 27513**

AMICARBAZONE GROUP 5 HERBICIDE



**XONERATE**<sup>®</sup>

2SC

Herbicide

envu™

For Selective Control of Weeds in Turf on Golf Courses, Sod Farms, Residential and Commercial Turf Sites, Park and Recreation Areas, Athletic Fields, School Grounds and other Turf Areas and Conifers in Nurseries and Field Plantings (including Christmas Trees)

Active Ingredient:	By Wt.
Amicarbazone: .....	23.25%
Other Ingredients: .....	76.75%
Total: .....	100.00%

XONERATE<sup>®</sup> 2SC herbicide contains 2.0 pounds per gallon of active ingredient Amicarbazone.

EPA Reg. No. 101563-365

EPA Est. No.

Read the label before use

KEEP OUT OF REACH OF CHILDREN

**CAUTION/PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See booklet for additional precautionary information.

**SKU: D00001668**

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**Net Contents: 12 FL OZS**

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