

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

2749-593

EPA Reg. Number:

Date of Issuance:

8/23/2021

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Unconditional

Name of Pesticide Product:

Aceto Sulfosulfuron 75WDG Herbicide

Name and Address of Registrant (include ZIP Code):

Aceto Life Sciences, LLC c/o Product & Regulatory Associates, LLC 8595 Collier Blvd., Suite 107-51 Naples, FL 34114

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

| Signature of Approxing Official.                          | Date:     |
|---|-----------|
| Signature of Approving Official:                          | Date:     |
| Heather & Mc Farley                                       | 8/23/2021 |
| Heather McFarley, Acting Product Manager 24               |           |
| Fungicide and Herbicide Branch, Registration Division (7: | 505P)     |

EPA Form 8570-6

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 2749-593."
- 4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 03/17/2020

If you have any questions, please contact Marc Sheahin by phone at 703-347-8639, or via email at sheahin.marc@epa.gov.

Enclosure:

Stamped label

ACCEPTED
08/23/2021
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2749-593

## [Master Label]

**SULFOSULFURON** 

**GROUP** 

HERBICIDE

[Information in brackets [] is optional]

## ACETO SULFOSULFURON 75% WDG HERBICIDE

[Alternate brand names include] [Herald<sup>TM</sup> 75% WDG Herbicide]

ACETO SULFOSULFURON 75% WDG HERBICIDE is a herbicide for selective control of listed annual and perennial grasses and broadleaf weeds in Non-crop Use Sites, Pasture and Rangeland Use Sites, Winter and Spring Wheat.

Read the entire label before using this product.

Use only according to label instructions.

[See [inside booklet] [back panel] for [First Aid], Precautionary Statements] [and] [Directions for Use]]

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

| ACTIVE INGREDIENT:   | % BY WT. |
|--|----------|
| Sulfosulfuron: <i>N</i> -[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]-2-(ethylsulfonyl)imidazo |          |
| [1,2-a]pyridine-3-sulfonamide  | 75%      |
| OTHER INGREDIENTS:   | 25%      |
| TOTAL  | 100%     |

EPA Reg. No. 2749-XXX Net Contents: 10, 20 ounces EPA Est. No. 55 lb. (25kg)

Manufactured for: Aceto Life Sciences, LLC 4 Tri Harbor Court Port Washington, NY 11050

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

| First Aid  |   |  |
|--|---|--|
| IF IN EYES:  | <ul> <li>Hold eye open and rinse slowly and gently with water for 15-20<br/>minutes.</li> </ul> |  |
|  | • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.      |  |
|  | <ul> <li>Call poison control center or physician for treatment advice.</li> </ul>               |  |
| Have the product container or label with you when calling a poison control center or physician, or going for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887. |   |  |

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

## Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- · 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 STATEMENTS:**

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

## **USER SAFETY RECOMMENDATIONS:**

Users should remove clothing /PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

## **ENVIRONMENTAL HAZARDS**

This product is highly toxic to non-target plants. **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** contaminate water when disposing of equipment washwaters or rinsate.

**Ground Water Advisory:** This chemical has properties and characteristics associated with chemicals detected in ground water. 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 impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having 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 Sulfosulfuron from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### PHYSICAL AND CHEMICAL HAZARDS

**DO NOT** mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Aceto Supplemental 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.

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

## Windblown Soil Particles Advisory

ACETO SULFOSULFURON 75% WDG HERBICIDE has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying ACETO SULFOSULFURON 75% WDG HERBICIDE if prevailing local conditions may be expected to result in off-site movement.

## 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, forest, nurseries and green houses, 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 the label about personal protective equipment (PPE), 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 this 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, including plants, soil or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves, made of waterproof materials.

## 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.

Keep people and pets off treated areas until spray solution has dried.

#### **Product Information**

ACETO SULFOSULFURON 75% WDG HERBICIDE is a selective systemic pre- and post-emergent sulfonylurea herbicide for the control of various annual grasses and broad leaf weeds in selective pasture grasses and rangelands, non-crop areas and in winter and spring wheat. Sulfosulfuron exhibits systemic post-emergence herbicidal activity on a broad spectrum of annual and perennial sedges, grasses, and broadleaf weeds, but does not injure many warm season and some cool-season grasses. Sulfonylurea herbicides disrupt amino acid biosynthesis in susceptible plants by binding to the acetolactate synthase (ALS) enzyme.

Non-crop Use Sites: airports, conservation areas, ditch banks, dry ditches, dry canals, fallow areas, fencerows, industrial sites, natural areas, roadsides, utility rights-of-way, utility sites and substations and wildlife areas, turf including residential, commercial, apartment complexes, athletic fields cemeteries, golf courses airways, golf course rough golf course tees and other golf course areas, hotel properties, nurseries, office complexes, parks, school grounds, sod and turfgrass seed farms, landscape areas, ornamental nurseries.

**Time to Symptoms:** This product is absorbed through the roots and foliage of plants. Soon after application, growth of susceptible weeds is inhibited and in cropping situations susceptible weeds are no longer competitive with the crop. Following growth inhibition, affected plants may appear dark green and stunted, affected leaves will turn yellow and/or red, and the growing point of the plant may turn reddish-purple. These visible effects of control may not be observed for 1 to 3 weeks after application. Within 6 weeks after application the growing points die. Warm and moist conditions following application will accelerate herbicidal activity. Cool, dry conditions will delay herbicidal activity. Weeds stressed by drought are less susceptible to this product.

Rainfastness: Heavy rainfall soon after application (less than 2 hours) may wash this product off of the foliage and a repeat application may be required for adequate control.

## **Weed Resistance Management**

For resistance management, SULFOSULFURON 75% WDG Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to SULFOSULFURON 75% WDG Herbicide and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

See specific crop use directions for maximum single application rate, annual maximum number of applications and amount of active ingredient.

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

- Rotate the use of ACETO SULFOSULFURON 75% WDG Herbicide or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- 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 certified crop 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 and uses historical
  information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control
  methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the
  crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Users should scout before and 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 including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest 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 mode of action, if available.
- Users must report lack of performance to the registrant or their representative.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

## **Mixing Instructions**

ACETO SULFOSULURON 75% WDG HERICIDE is a water dispersible granule designed to be diluted with water at the rates listed in the specific crop use directions. Fill the spray tank with approximately ½ of the desired volume with water or carrier. With the agitation operating, add the specified amount of the formulation as listed in the targeted crop use directions. 002749-00LOG.20210820.Sulfosulfuron 75 WDG Proposed Label

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Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Add nonionic surfactant and other spray additives as the last ingredients in the tank. Allow time to fully disperse.

Since this product forms a suspension in water, it is important to maintain good agitation during mixing and spraying. If the spray suspension is allowed to settle for a short period of time, be sure to agitate the spray suspension for a minimum 10 minutes. Apply spray suspensions within 24 hours after mixing.

## Mixing for Hand-Held Sprayers

Hand-held sprayer applications must be made at a rate of 2 gallons of spray solution per 1000 square feet. Using the measuring scoop provided in the product packaging, follow the instructions below to prepare the proper spray solution.

## **Measuring Scoop Instructions**

Using the SMALL SCOOP (0.16-gram scoop) provided, refer to the following table for the Number of Scoops of product required to achieve the Desired Application Rate when mixed in 2 gallons of water.

| Desired Application<br>Rate (oz. of | Number of scoops<br>(small scoop) | Mix volume<br>(gallons of | Spray Rate (gallons/1000 ft <sup>2</sup> ) |
|-------------------------------------|-----------------------------------|---------------------------|--|
| 3/4                                 | 3                                 | 2.0                       | 2  |
| 1.0                                 | 4                                 | 2.0                       | 2  |
| 11/4                                | 5                                 | 2.0                       | 2  |

Using the LARGE SCOOP (0.8-gram scoop) provided, refer to the following table for the appropriate Mix Volume (gallons of water) required to achieve the **Desired Application Rate**.

| Desired Application<br>Rate (oz. of | Number of scoops<br>(large scoop) | Mix volume<br>(gallons of | Spray Rate (gallons/1000 ft <sup>2</sup> ) |
|-------------------------------------|-----------------------------------|---------------------------|--|
| 3/4                                 | 1                                 | 3.3                       | 2  |
| 1.0                                 | 1                                 | 2.5                       | 2  |
| 11/4                                | 1                                 | 2.0                       | 2  |
| 2.0                                 | 2                                 | 2.5                       | 2  |

Ensure that product is measured as a level scoop and is not rounded.

## **Spray Additives**

Spray additives including nonionic surfactant (NIS) and liquid nitrogen fertilizer (e.g., 28-0-0) are used with this product to improve performance. The typical nonionic surfactant contains a minimum of 80% NIS and is accepted by the EPA for use on food crops. The use rate is 1 to 2 quarts NIS concentrate per 100 gallons of spray mixture (025 to 0.5% v/v). NIS is the only spray additives required to improve efficacy. Use liquid nitrogen for those tank mix partners which required a liquid nitrogen additive to improve performance. Consult the tank mixture partner's labels for specific additive requirements and interactions. In place of the liquid nitrogen fertilizer, a high quality, spray grade ammonium sulfate (e.g., 21-0-0) is used at a use rate of 2 to 4 pounds per acre. Use NIS in the spray mixture.

#### **USE RESTRICTIONS:**

**DO NOT** use nonionic surfactants (NIS) or other additives that lower the pH of the spray suspension below pH 5. **DO NOT** mix oil-based adjuvants or adjuvants containing oil when this herbicide is tanked mixed with an emulsifiable concentrate pesticide product.

**DO NOT** use low rates of liquid fertilizer as a substitute for surfactant.

## pH Adjustment

Spray suspensions of between pH 6.0 and 8.0 are required for optimal performance of this product. Failure to adjust the pH of the spray suspension may result in reduced weed control. Follow the mixing procedure described on this label and adjust the pH of the spray suspension after the addition of nonionic surfactant. To adjust the pH, add between 2 to 4 quarts (depending on the starting pH of your water carrier) of a 7 % solution of ammonia for every 100 gallons of spray suspension.

#### **USE RESTRICTIONS:**

**DO NOT** use ammonia with chlorine bleach as your pH adjuster, as dangerous gases will form.

**DO NOT** mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## **Use Rate Equivalency**

Since ACETO SULFOULFURON 75% WDG HERBICIDE contains 75% w/w active ingredient per lb. of product, the following table expresses the use rate equivalency of oz. of this product in term of lb. sulfosulfuron on a per acre basis.

| oz. of Product | lb. Sulfosulfuron |
|----------------|-------------------|
| per acre       | per acre          |
| 1/4            | 0.011             |
| 1/3            | 0.0175            |
| 1/2            | 0.023             |
| 2/3            | 0.031             |
| 3/4            | 0.035             |
| 1.0            | 0.046             |
| 11/4           | 0.058             |
| 11/3           | 0.061             |
| 11/2           | 0.07              |
| 2.0            | 0.093             |
| 21/2           | 0.117             |
| 22/3           | 0.124             |

## **Application Methods**

This product may be applied using either ground or aerial (fixed-wing or helicopter) spray application equipment. Apply spray suspensions of this product using properly maintained and calibrated equipment capable of delivering desired volumes. Use equipment that is capable of continuous and vigorous agitation. Use an agitation system capable of creating a rippling or rolling action on the liquid surface when the tank is full.

Uniform, thorough spray coverage is important to achieve consistent weed control. Calibrate application equipment according to manufacturer's specifications. Use nozzle type arrangements that provide optimum spray distribution and maximum coverage while avoid contact to sensitive crop foliage.

Thoroughly clean application equipment immediately after use and prior to spraying a crop other than corn or grain sorghum. See Spray Equipment Cleanout section of this label for complete details.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product through any type of irrigation system.

**DO NOT** allow this herbicide suspension to mist, drift, or splash onto desirable vegetation or soil areas where sensitive crops will be planted, as minute quantities of this product can cause severe damage or destruction to susceptible plants on which treatment was not intended.

## **Aerial Application**

All treatments described on this label may be made using aerial equipment where appropriate, except where specifically prohibited, provided that the applicator complies with the precautions and restrictions described in the SPRAY DRIFT section of this label.

## **Injection Systems**

This product may be used in ground applicator injection spray systems. It may be diluted prior to injecting into the spray streams.

#### **USE RESTRICTIONS:**

**DO NOT** mix this product with the undiluted concentrate of other products when using injections systems, unless specifically directed.

## **Ground Applications**

When SULFOSULFURON 75% WDG HERBICIDE is applied by ground equipment, use in a minimum of 10 gallons of water per acre for a broadcast application. In dense weed populations and thick canopy cover, higher spray volumes are necessary, e.g., 15 – 20 gallons of water per acre. Use the proper spray volume and nozzles that will ensure thorough and uniform coverage of the targeted weeds. Use directed applications to avoid contacting sensitive crop foliage. Select nozzles that will provide optimum spray volume, distribution and coverage at a pressure (psi) that minimizes spray drift. Inspect nozzle distribution during application to avoid streaking and overspray.

## MANDATORY SPRAY DRIFT

## **Aerial Applications:**

- **DO NOT** release spray at a height greater than 10 ft. above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.

## **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour 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.

## 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 rate.
- 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.

## **Controlling Droplet Size – Aircraft**

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT – Ground Boom**

• Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

## **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT r**elease spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety. 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 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 dissipates 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.

#### **Boom-less Ground applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

## **Handheld Technology Applications:**

• Take precautions to minimize spray drift.

## **Spray Equipment Cleanout**

The mix tank and spray equipment cleanout are an important stewardship activity to avoid injury to desirable crops. It is important to clean all mixing and spraying equipment immediately after use and before using pesticide products including SULFOSULFURON 75% WDG HERBICIDE. This is especially important prior to spraying a crop other than grain sorghum and corn.

To clean the spraying equipment, follow the procedure outlined below:

- Completely drain the mix tank and/or sprayer, and then wash thoroughly the tank, sprayer, boom and nozzles with clean water. Drain the system again.
- Fill the mixing or spray tank half full with clean water and add domestic ammonium, normally a 3% v/v solution, at a dilution rate of 1% v/v ammonium or 1 gallon per 100 gallons of rinsate.
- Completely fill the tank(s) with additional clean water. Agitate and recirculate and flush out the boom and hoses. Let the system run for 10 15 minutes. Drain the system completely.
- Remove nozzles and screens and dislodge any visible solid material. Then soak them in a 1% v/v ammonium solution. Inspect the nozzles and screen and remove any visual residues.
- Repeat the above procedure for a second time.
- Flush the mix tank and/or sprayer, boom and hoses with clean water. Drain the system again and inspect for any visible residues. If present, repeat the cleaning cycle again.
- If the rinsate cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## **Tank Mixtures**

To improve this product's effectiveness, apply in combination with other pesticide products that are registered for the same crop and application techniques.

Tank mixtures of this product with other herbicide products may be used to provide a broader spectrum of weed control and an alternate mode of herbicidal action. Tank-mix this product with other herbicides or materials that are listed in the specific

use site sections of this label. Refer to each individual product label or supplemental labeling for all products in the tank mixture, and observe all instructions, precautions and limitations on the label, including application rates and restrictions related to soil texture, soil organic matter, wheat growth stage and crop rotation. Use the mixture according to the most restrictive precautionary statements for each product in the tank mixture.

A list of potential herbicide tank mixture partners is provided in the use direction section under each crop. This list is an example of products used but is not an all inclusive list. For current information on the best tank mixture partner in your area, consult with the local dealer, distributor or State Agricultural Extension service.

Mixing this product with herbicides or other materials that are not listed on this label may result in reduced performance.

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

Tank mixtures with broadleaf herbicides formulated as amines (including 2,4-D and others) may decrease the effectiveness.

When a generic active ingredient, including 2,4-D, dicamba, diuron or MSMA is listed on this label for tank-mixing with this product, the user is responsible for ensuring that the specific application being made is included on the label of the product being used in the tank mixture.

If this product is to be tank mixed with other herbicides, conduct a compatibility test prior to mixing. Use a small container and mix all components in a small amount, usually 0.5 to 1 quart of spray. Combine all products in the same ratio and order of addition as in the proposed spray mixture. Observe the mixture for indication of incompatibility which usual occurs in 10 to 30 minutes after mixing. If incompatibility is observed, try changing the order of addition of the components. The guideline on tank mixture partners is driven by formulation type. Start with wettable powders (WP's) including water soluble bags (WSB's), water dispersible granules (WDG's), suspension concentrated (SC's) or flowable (F's), all with very good agitation. Next follow with water miscible concentrates and emulsifiable concentrates (EC's) before adding drift control additives, nonionic surfactants (NIS's). After vigorous agitation, there must be a homogeneous suspension. Let the final tank mixture stand and observe for any rapid settling or floating of components. If any indications of physical incompatibility develop, **DO NOT** use this mixture for spraying.

## Non-Crop, Pastures and Rangeland Weeds Control Table

| Common Name           | Scientific Name       | Common Name           | Scientific Name         |
|-----------------------|-----------------------|-----------------------|-------------------------|
| Barley, volunteer     | Hardeum vulgare       | Flixweed              | Descurainia sophia      |
| Bedstraw, catchweed   | Galium aparine        | Horseweed             | Conyza canadensis       |
| Bentgrass creeping    | Agrostis stolonifera  | Johnsongrass          | Sorghum halepense       |
| Bluegrass, bulbous    | Poa bulbosa           | Mustard, tumble       | Sisymbrium altissimum   |
| Bluegrass, roughstalk | Poa trivialis         | Mustard, wild         | Sinapis arvensis        |
| Brome, downy          | Bromus tectorum       | Nutsedge, purple      | Cyperus rotundus        |
| Brome, ripgut         | Bromus rigidus        | Nutsedge, yellow      | Cyperus esculentus      |
| Buttercup             | Ranunculus arvensis   | Pennycress, field     | Thlaspi arvense         |
| Chamomile, mayweed    | Anthemis cotula       | Quackgrass            | Elytrigia repens        |
| Cheat                 | Bromus secalinus      | Shepherd's-purse      | Capsella bursa-pastoris |
| Chess, hairy          | Bromus commutatus     | Sunflower, common     | Helianthus annuus       |
| Cocklebur, common     | Xanthium strumariu    | Tansymustard, pinnate | Descurainia pinnata     |
| Fiddleneck, tarweed   | Amsinckia lycopsoides |                       |                         |

## Non-Crop, Pastures and Rangeland

**Non-crop Use Sites**: airports, conservation areas, Conservation Reserve Program (CRP), ditch banks, dry ditches, dry canals, fallow areas, fencerows, forestry conifer release, industrial sites, lumberyards, manufacturing sites, natural areas, petroleum tank farms and pumping installations, railroads, roadsides, storage areas, utility rights-of-way, utility sites and substations, warehouse areas and wildlife areas.

Pastures and Rangeland Use Sites: pastures, hayfields, rangelands and perennial native grasses.

#### **USE RESTRICTIONS:**

**DO NOT** allow this product to contact roots or foliage of desirable vegetation, areas where roots of desirable vegetation may extend, or areas where this product may be washed or moved into contact with roots of desirable vegetation. Desirable plants may be injured if planted into treated areas.

Non-crop, pasture and rangeland use rates are **NOT** allowable for applications on or around athletic fields, commercial turf sites, golf courses, residential turf sites or sod and turfgrass seed farms.

For optimum control of listed weeds, apply to actively growing weeds and **DO NOT** disturbed by mowing for at least 14 days before or 14 days after application.

## **Application Equipment and Techniques**

#### **Ground Broadcast Application**

Apply this product at the rates specified in 10 to 50 gallons of water per acre. Use properly calibrated ground application equipment. Utilize nozzles on the spray boom that provides optimum spray distribution and provided uniform coverage at the appropriate spray pressure to minimize streaking, skips, overlaps and spray drift during application.

#### **Aerial Application**

Apply this product at the rates specified in 5 to 15 gallons of water per acre unless otherwise specified.

## Hand-Held and High-Volume Application

Apply this product at the rates specified using hand-held spray gun, backpack sprayers and other similar types of sprayers, See the specific hand-held and high-volume use directions sections on this label. Apply a uniform and complete foliage spray to vegetation to be controlled. Use approximately 2 gallons of spray suspension per 1,000 square feet.

#### **USE RESTRICTIONS:**

**DO NOT** spray to the point of runoff. Use coarse sprays only to minimize off target movement.

## Bermudagrass and Bahiagrass Non-Crop Sites

Weeds: Control or Partial Control of Annual and Perennial Weeds listed in Weed Control Table

## **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4}$  – 2.0 oz. of this product/acre (0.035 – 0.093 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5-15 gallons of spray suspension per acre by air.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

## Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

## **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using the reduced application rates.

**DO NOT** use more than 2\% oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 30 days apart.

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in bermudagrass and bahiagrass.

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

#### **USE PRECAUTIONS:**

ESTABLISHED STANDS OF BERMUDAGRASS AND BAHIAGRASS ARE RESISTANT TO THIS PRODUCT AT RATES SPECIFIED ON THIS LABEL; HOWEVER, TANK MIXTURES OF THIS PRODUCT WITH OTHER HERBICIDES MAY INCREASE GRASS INJURY. USE THESE TANK MIXTURES ONLY WHEN SOME TEMPORARY INJURY OR DISCOLORATION OF THE BERMUDAGRASS AND BAHIAGRASS CAN BE ACCEPTED.

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: Control or Partial Control of Annual and Perennial Weeds in Weed Control Table

**Tank Mix Partners:** 2,4-D, chlorsulfuron, clopyralid, dicamba, diuron, glyphosate, imazapic, metsulfuron methyl, MSMA, sulfometuron methyl, triclopyr, Campaign® (EPA Reg. No. 524-351, glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Escort XP (EPA Reg. No. 432-1549, metsulfuron), Oust (EPA Reg. No. 352-401, sulfometuron), Oust XP (EPA Reg. No. 432-1552, sulfometuron), Plateau (imazapic, EPA Reg. No. 241-365), Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt), Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium), Telar XP (EPA Reg. No. 352-654 and EPA Reg. No. 432-1562, chlorsulfuron), Transline (EPA Reg. No. 62719-259, clopyralid).

A surfactant does not need to be added to the spray suspension when this product is tank-mixed with Campaign® (EPA Reg. No. 524-351, glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Roundup PROMAX® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt), or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium) herbicides.

## Release of Dormant Bermudagrass and Bahiagrass

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Control or partial control of winter annual weeds prior to spring green-up.

## **Tank Mix Partners:**

| Tank Mix Partner                                  | Application Rate**                                |
|---|---|
| Campaign® (EPA Reg. No. 524-351, glyphosate-      | 16-64 fl. oz./acre (.156 lb. ai / acre glyphosate |
| isopropylammonium and 2,4-D, isopropylamine salt) | isopropylammonium and .237595 lb. ai / acre 2,4-D |
|   | isopropylamine salt)                              |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine,   | 5-44 fl. oz./acre (.214 – 1.88 lb. ai / acre)     |
| N-(phosphonomethyl)- potassium salt)              |   |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529,   | 6.4-51 fl. oz./acre (.25 – 1.99 lb. ai / acre)    |
| glyphosate-isopropylammonium)                     |   |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

## In Dormant Bermudagrass Only

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: To increase the spectrum of broadleaf weed control, use Tank Mix Partners below.

002749-00LOG.20210820.Sulfosulfuron 75 WDG Proposed Label

#### **Tank Mix Partner**

Use Escort XP (EPA Reg. No. 432-1549, metsulfuron) or in dual mixture or three-way with Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium).

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Escort XP (EPA Reg. No. 432-1549, metsulfuron)  | Up to 1 oz. (0.004 lb. ai / acre)              |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-44 fl. oz./acre (.214 – 1.88 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-51 fl. oz./acre (.25 – 1.99 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

## **USE PRECAUTIONS:**

Use of Escort XP (EPA Reg. No. 432-1549, metsulfuron) may delay green-up of bermudagrass in the following spring. The use of this product with Escort XP (EPA Reg. No. 432-1549, metsulfuron) in highly maintained turfgrass areas will result in unacceptable turf injury.

In the state of Texas, applications of this product before September 30 will not delay green-up of bermudagrass in the following spring; however, some temporary discoloration of desirable spring germinating wildflowers may occur.

## **Release of Activity Growing Bermudagrass**

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: Control or partial control of johnsongrass and other weeds in actively growing bermudagrass.

#### **Tank Mix Partner**

Use the higher application rate within the range to control perennial weeds or annual weeds greater than 6 inches in height.

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-22 fl. oz./acre (.214 – 0.94 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-26 fl. oz./acre (.25 – 1.01 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

## **USE PRECAUTIONS:**

Use only on well-established stands of bermudagrass.

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: To increase the spectrum of weed control, use Tank Mix Partners below.

## **Tank Mix Partner**

Use Escort XP (EPA Reg. No. 432-1549, metsulfuron) or Oust (EPA Reg. No. 352-401, sulfometuron) or Telar (EPA Reg. No. 432-1561, chlorsulfuron) in dual mixture or three-way with Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium).

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Escort (EPA Reg. No. 432-1549, metsulfuron)     | 1 oz./acre (.004 lb. ai / acre)                |
| Oust (EPA Reg. No. 352-401, sulfometuron)       | 0.5 oz./acre (.023 lb. ai / acre)              |
| Telar (EPA Reg. No. 432-1561, chlorsulfuron)    | 0.5 oz./acre (.023 lb. ai / acre)              |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-22 fl. oz./acre (.214 – 0.94 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-26 fl. oz./acre (.25 – 1.01 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

\*\* These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product in tank mixtures with Escort (EPA Reg. No. 432-1549, metsulfuron), Oust (EPA Reg. No. 352-401, sulfometuron) or Telar (EPA Reg. No. 432-1561, chlorsulfuron) in highly maintained turfgrass areas.

## **Release of Actively Growing Bahiagrass**

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: Control or partial control of johnsongrass and other weeds in actively growing bahiagrass.

## **Tank Mix Partner**

Use the higher application rate within the range to control perennial weeds or annual weeds greater than 6 inches in height.

| Tank Mix Partner                                | Application Rate**                  |
|---|-------------------------------------|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 4 fl. oz./acre (.171 lb. ai / acre) |
| N-(phosphonomethyl)- potassium salt)            |                                     |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 5 fl. oz./acre (.195 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |                                     |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### **USE PRECAUTIONS:**

Use only on well-established stands of bahiagrass.

## **Tall Fescue Non-Crop Sites**

Weeds: Control or Partial Control of johnsongrass Annual and Perennial Weeds in Weed Control Table

## **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - 1.0$  oz. of this product/acre (0.035 – 0.047 lb. ai/acre)

Apply 10 - 50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

## Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 1.0 oz./acre of this product (0.047 lb. ai) per application.

**DO NOT** apply more than 1 application per year.

**DO NOT** use more than 1 oz. of this product (0.047 lb. ai) per acre per year.

#### **USE PRECAUTIONS:**

Use this product only on well-established stands of tall fescue. Even at rates listed in this section, use of this product may result in temporary chlorosis and discoloration, and may result in transient growth reduction of the desirable turf. These symptoms appear 7 to 10 days after application and are typically gone within 21 to 28 days.

## **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in tall fescue.

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

**Tank Mix Partners:** Escort (EPA Reg. No. 432-1549, metsulfuron), Escort XP (EPA Reg. No. 432-1549, metsulfuron), Garlon 3A (EPA Reg. No. 62719-37, triclopyr), Garlon 4 (EPA Reg. No. 62719-40, triclopyr), Transline (EPA Reg. No. 62719-259, clopyralid)

#### **Bermudagrass and Bahiagrass Pasture Sites**

Weeds: Control or Partial Control of Weeds in Weed Control Table

## **Broadcast Application Instructions**

Use Rate:  $1\frac{1}{3}$  - 2.0 oz. of this product/acre (0.062 – 0.093 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Apply this product in early spring through fall on well-established bermudagrass and bahiagrass pastures.

Grass forage maybe grazed immediately after applications.

However, for optimum weed control, **DO NOT** mow or harvest the pasture to be treated for 2 weeks before or 2 weeks after application.

For optimum johnsongrass control, make applications when the johnsongrass is actively growing, is at least 18-24 inches tall and up to heading stage.

## Hand-held and High-volume Application Instructions

Use Rate: 11/3 oz. of this product (0.062 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25%  $\ensuremath{v/v}\xspace$  ).

## **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2\% oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 40 days apart.

## Pastures and Rangeland Sites in States West of the Mississippi River

Weeds: Control or Partial Control of Weeds in Weed Control Table

## **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - \frac{1}{3}$  oz. of this product/acre (0.035 – 0.062 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5 - 15 gallons of spray suspension per acre by air.

Use the higher specified application rate of this product when weed growth is heavy or dense.

Apply this product in pasture and rangeland grasses in States west of the Mississippi River in the fall or spring to provide selective weed control.

Grass forage maybe grazed immediately after applications.

However, for optimum weed control, **DO NOT** mow or graze the pasture to be treated for 2 weeks before or 2 weeks after application.

This product is selective in crested wheatgrass and selectivity in other pasture grasses is increased when they are not actively growing.

For optimum weed control, make applications when the weeds are actively growing.

#### **USE RESTRICTIONS:**

**DO NOT** use more than 1½ oz./acre of this product (0.062. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year.

**DO NOT** make applications sooner than 30 days apart.

## **USE PRECAUTIONS:**

Temporary stunting or chlorosis of grasses may occur but desirable grasses will recover. If concern exists about selectivity on desirable grasses, a small area needs to be treated to confirm selectivity.

#### **Dormant Pastures and Rangelands.**

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in dormant pastures and rangelands.

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

Use Rate:  $\frac{3}{4} - \frac{1}{3}$  oz. of this product/acre (0.035 – 0.061 lb. ai)

Tank mixing this product with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) herbicide at rates below 12 ounces (0.513 lb. ai) per acre requires the addition of a nonionic surfactant to the spray suspension at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Make these applications when the desirable pasture grass species are dormant and a new flush of the target weeds is emerged and actively growing.

| Tank Mix Partner                                | Application Rate**                                |
|---|---|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 8 -11 fl. oz./acre (0.342 – 0.47 lb. ai / acre)   |
| N-(phosphonomethyl)- potassium salt)            |   |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 10 – 13 fl. oz./acre (0.39 – 0.505 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |   |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### Native Grasses and Conservation Reserve Program (CRP) Sites

Weeds: Control or Partial Control of Annual and Perennial Weeds in Weed Control Table

For use in perennial native grassland areas including land enrolled in the Federal Conservation Reserve Program (CRP). Native perennial grasses include; big bluestem, little bluestem, bushy bluestem, blue oats grama, side oats grama, buffalograss, Indiangrass, lovegrass, switchgrass.

## **Broadcast Application Instructions**

Use Rate:  $1\frac{1}{3} - 2.0$  oz. of this product/acre (0.069 - 0.093 lb. ai)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5-15 gallons of spray suspension per acre by air.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

## Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using reduced application rates.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 30 days apart.

**DO NOT** apply this product to newly seeded perennial native grasses prior to the 3-leaf growth stage. Native grasses listed in this section may be reseeded into treated areas, but no sooner than 14 days after treatment.

## **Crop Rotation Restrictions**

No crop, except wheat, may be planted into pasturelands, rangelands, or land taken out of the CRP that has been treated with this product within 12 months after application. For all crops, except wheat, a successful field bioassay, as described in this section, must be completed before planting.

**DO NOT** seed any crop, except wheat, any sooner than 3 months after the last application of this product. There are no crop rotation restrictions for wheat.

## **Field Bioassay**

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in the fields previously treated with this product. Crop response to the bioassay will determine if the crop(s) planted in the test strips can be safely grown in the previously treated fields.

## **Non-Fruit Bearing Trees Sites**

Weeds: Control of johnsongrass, tall fescue, purple and yellow nutsedge and other weeds in the Weed Control Table.

For use as a broadcast application around or over the top of selected hardwood and conifer tree species in conservation and wildlife areas.

This product has been shown to provide selective control on the following tree species: American Plum,

Bald Cypress, Bur Oak, Cottonwood, Green Ash, Pecan, Pin Oak, Swamp White Oak, Sycamore, Walnut

## **USE PRECAUTONS:**

Treated trees must be growing in areas where commercial fruit or nut harvest will not occur. Make over-the-top applications to non-bearing trees only. Treat over the top of transplanted trees after they are well established. Temporary yellowing and growth reduction may occur in some species.

## **Broadcast Application Instructions**

Use Rate: up to 1 1/3 oz. of this product/acre (0.061 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

## **USE RESTRICTIONS:**

**DO NOT** use more than  $1\frac{1}{3}$  oz./acre of this product (0.062 lb. ai) per application.

**DO NOT** apply more than 2 application per year.

**DO NOT** use more than  $2\frac{2}{3}$  oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 21 days apart.

**DO NOT** apply by air.

## Selective Herbaceous Weed Control in Forestry Conifer Release (\*)

Weeds: Control or Partial Control of Herbaceous Weeds.

Apply in spring or early summer after planting loblolly, slash or longleaf pine, and in fallow silvicultural nursery sites for these species.

Best results are obtained when using Tank Mix Partner.

## **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lbs. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5-30 gallons of spray suspension per acre by air. (Helicopter only)

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v). (Minimum 90% active surfactant)
Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

#### **USE RESTRICTIONS:**

\*Not for use in California.

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year at lower rate of 1 oz. (0.047 lb. ai).

**DO NOT** use more than 2.0 oz. of this product (0.093 lb. ai) per acre per year.

**DO NOT** make applications sooner than 30 days apart.

Aerial application by helicopter only.

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in Selective Herbaceous Weed Control in Forestry Conifer Release (\*.)

Any of these mixtures can be used as a broadcast spray or in a banded application around trees to reduce potential for soil erosion.

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

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

## **Tank Mix Partners:**

| Tank Mix Partner                                     | Application Rate**  |
|--|---|
| Arsenal Applicators Concentrate* (EPA Reg. No. 241-  | 4 fl. oz./acre (.125 lb. ai / acre)                         |
| 299, imazapyr)                                       |   |
| Arsenal Applicators Concentrate * (EPA Reg. No. 241- | 4 fl. oz./acre (.125 lb. ai / acre) + 1 fl. oz./ acre (.005 |
| 299, imazapyr) + Oust (EPA Reg. No. 352-401,         | lb. ai / acre)  |
| sulfometuron) or Oust XP (EPA Reg. No. 432-1552,     |   |
| sulfometuron)  |   |
| Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP | 1-2 fl. oz./acre (.046093 lb. ai / acre)                    |
| (EPA Reg. No. 432-1552, sulfometuron)                |   |
| Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP | 1-2 fl. oz./acre + 0.375-0.05 lb./acre (.046093 lb. ai      |
| (EPA Reg. No. 432-1552, sulfometuron) + Velpar (EPA  | / acre) + (.281562 lb. ai / acre)                           |
| Reg. No. 432-1576, hexazinone)                       |   |
| Oustar (EPA Reg. No. 432-1553, sulfometuron)         | 8-12 fl. oz./acre (.316474 lb. ai / acre)                   |
| Velpar (EPA Reg. No. 432-1576, hexazinone)           | 0.375-0.75 lb./ acre (.281562 lb. ai / acre)                |

<sup>\*</sup> Use of surfactant not advised with these products for slash and longleaf pine.

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

Any of these mixtures can be used as a broadcast spray or in a banded application around trees to reduce potential for soil erosion.

## **Warm-Season Turfgrasses**

This product has been shown to be safe for use on the established warm-season turfgrasses listed in this section.

Warm-season turf grasses include Bermudagrass (common or hybrid), Bahiagrass, Buffalograss, Centipedegrass, Kikuyugrass, St. Augustinegrass, Seashore paspalum and Zoysiagrass

Use of this product may result in temporary chlorosis, and may affect the growth pattern or delay green-up of the desirable turf. St. Augustine grass and seashore paspalum may be more sensitive to this product than other grasses depending on environmental conditions, cultivar differences and other influential factors. For St. Augustine grass and seashore paspalum, test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

#### **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Sedge Control:**

**DO NOT** use more than 1¼ oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

| Common Name           | Scientific Name       | Common Name      | Scientific Name    |
|-----------------------|-----------------------|------------------|--------------------|
| Kyllinga, false green | Kyllinga gracilima    | Nutsedge, yellow | Cyperus esculentus |
| Kyllinga, fragrant    | Kyllinga sesquifiorus | Sedge, globe     | Cyperus croceus    |
| Kyllinga, green       | Kyllinga brevifolia   | Sedges, annual   | Cyperus spp.       |
| Nutsedge, purple      | Cyperus rotundus      |                  |                    |

#### Tall Fescue (Festuca arundinacea) Control

Best control of tall fescue is obtained when this product is applied at 1½ oz. (0.058 lb. ai) per acre followed by a second application of 1½ oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 oz. (0.093 lb. ai) per acre.

## **USE RESTRICTIONS in Tall Fescue Control:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than  $2\frac{1}{2}$  oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

## $Dallisgrass\ (Paspalum\ dilatatum)\ Suppression\ in\ Bermudagrass$

The following application includes the use of MSMA. MSMA can cause injury to common and hybrid bermudagrass turf. Test the following tank-mix requirements on a small area prior to wide-scale use to determine if this application is suitable for your bermudagrass management objectives.

For suppression of dallisgrass in bermudagrass turf, apply this product, when dallisgrass is actively growing, at a rate of  $1\frac{1}{4}$  oz. of product (0.058 lb. ai) per acre in a tank mixture with 2 pounds of MSMA per acre and 0.25 % by volume nonionic surfactant (1 quart per 100 gallons of spray solution). Reapply this same tank mixture 2 to 4 days after initial application.

As an alternative program, apply MSMA at 2 pounds active ingredient per acre with 0.25 % by volume nonionic surfactant as an initial treatment, wait two days and apply 2.0 oz. of this product (0.093 lb. ai) per acre. Wait an additional two days and apply MSMA again at 2 pounds active ingredient per acre with 0.25 % by volume nonionic surfactant.

## Virginia Buttonweed (Diodia virginiana) Suppression

For suppression of buttonweed apply this product at 1½ oz. (0.058 lb. ai) per acre. This application will provide suppression or partial control of buttonweed for 4 to 6 weeks.

For enhanced buttonweed control, tank-mix this product with a broad-leaf herbicide labeled for buttonweed control in the desired warm-season turfgrass. 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.

#### Annual Bluegrass (Poa annua) Control in Non-Overseeded Turf

For selective control of annual bluegrass (Poa annua), apply this product at  $1\frac{1}{4}$  to 2.0 oz. (0.058 - 0.093 lb. ai) per acre. Use the higher rate of this product for control in areas of established, dense weed infestation.

Best results are obtained when weeds are in the early stage of growth and prior to tillering.

IN DORMANT BERMUDAGRASS ONLY, tank mixtures of this product with Roundup PRO® (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO® (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) herbicides may be used to increase the spectrum of vegetation controlled. Read and follow the label directions, precautionary statements and all other label information on Roundup PRO (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) herbicides. Refer to the Roundup PRO (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) product labels for approved application rates. Always apply tank mixtures according to the most restrictive precautionary statements of the products being used.

## Annual Bluegrass (Poa annua) Control Prior to Overseeding Turf with Perennial Ryegrass

Apply this product at 2.0 oz. (0.093 lb. ai) per acre to control Poa annua prior to overseeding warm-season turf with perennial ryegrass. Begin applications after Poa annua germination and 7 to 10 days prior to overseeding.

## Transition of Overseeded Perennial Ryegrass (Lolium perenne)

Best results are obtained by applying this product at  $1\frac{1}{4}$  oz. (0.058 lb. ai) per acre followed by a second application of  $1\frac{1}{4}$  oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application when daily temperatures are expected to exceed  $80^{\circ}$  F during the treatment period. If a single application is preferred, apply this product at oz. (0.093 lb. ai) per acre.

## **USE RESTRICTIONS** in Transition of Overseeded Perennial Ryegrass:

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

## Rescuegrass (Bromus catharticus) Control

For selective control of rescuegrass apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre followed by a second application of  $\frac{3}{4}$  oz. of this product (0.035 lb. ai) per acre at 4 to 10 weeks after the initial treatment. For best results, apply the initial treatment of this product in the fall or early winter when rescuegrass has germinated and is visible in the dormant turfgrass. Applications must be made when rescuegrass is actively growing and at the 2 to 4 leaf stage, but prior to tillering. If a single application is preferred, apply this product at  $\frac{1}{2}$  oz. (0.07 lb. ai) per acre.

## **USE RESTRICTIONS in Rescuegrass Control:**

**DO NOT** use more than 1½ oz./acre of this product (0.07 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than  $1\frac{1}{2}$  oz. of this product (0.07 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

Where atrazine can be used in warm-season turfgrass apply this product at 1.0 oz. (.046 lb. ai) per acre plus atrazine at 0.5 pounds active ingredients per acre. This treatment will provide both postemergence and residual control of rescuegrass.

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1¼ to 2.0 oz. (0.058 - 0.093 lb. ai) per acre. Use the higher rate of this product for control in areas of established, dense weed infestation. If using an initial rate of application of 1¼ oz. of this product (0.058 lb. ai) per acre, a second application of 1¼ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

## **USE RESTRICTIONS for Additional Weed Control in Warm Season Turfgrass:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year using lower application rates.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

#### Warm Season Additional Weeds Controlled Table

| Common Name                       | Scientific Name          | Common Name                               | Scientific Name          |
|-----------------------------------|--------------------------|---|--------------------------|
| Barley, little                    | Hardeum pusillum         | Dichondra, Caroline                       | Dichondra carolinensis   |
| Bedstraw, catchweed               | Galium aparine           | Garlic, wild                              | Allium vineale           |
| Beggarweed Florida <sup>1</sup> * | Desmodium torluosum      | Geranium, Carolina <sup>1</sup>           | Geranium, carolinianum   |
| Bentgrass creeping <sup>1</sup>   | Agrostis stolonifera     | Henbit                                    | Lamium amplexicaule      |
| Bluegrass, bulbous                | Poa bulbosa              | Ivy, ground <sup>1</sup>                  | Glechoma hederacea       |
| Bluegrass, roughstalk             | Poa trivialis            | Johnsongrass                              | Sorghum halepense        |
| Burweed, lawn                     | Salivialis               | Mustard, wild                             | Sisymbrium altissimum    |
| Buttercup                         | Ranunculus arvensis      | Pennycress, field                         | Thlaspi arvense          |
| Chamber bitter*                   | Phyllanthus urinaria     | Pennywort, lawn <sup>1</sup> (dollarweed) | Hydrocotyle bowlesioides |
| Chess, hairy                      | Bromus commutatus        | Quackgrass <sup>1</sup>                   | Elytrigia repens         |
| Chickweed, common                 | Stellaria media          | Ryegrass, perennial                       | Lolium perenne           |
| Clover, white                     | Trifloium repens         | Shepherd's-purse                          | Capsella bursa-pastoris  |
| Crowfootgrass                     | Dactyloctenium aegyptium | Violet, wild <sup>1</sup> *               | Viola nephrophylla       |
| Dandelion                         | Taraxacum officinale     | Woodsorrell, yellow*                      | Oxalis stricta           |

<sup>&</sup>lt;sup>1</sup> Suppression or partial control only.

## **Cool-Season Turfgrasses** [\*]

[\*] [ NOT FOR USE IN CALIFORNIA]

[Specifications in this section are not intended for use in residential turf.]

This product is for use on creeping bentgrass, Kentucky bluegrass and Kentucky bluegrass mixtures with perennial ryegrass and/or fine fescues.

On cool-season turfgrass, apply this product only when turfgrass is actively growing and mowing is required. Applications made in the fall after temperatures have decreased and regular mowing is no longer required may have an increased potential to cause turf injury and may delay spring green-up.

Use of this product may result in temporary chlorosis and discoloration, and may temporarily affect the growth pattern of the desirable turf. These symptoms appear 7 to 10 days after application and are typically gone within 21 to 28 days. Turf response

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<sup>[\*] [</sup>Not for Use in California].

is more pronounced under extreme environmental conditions. Perennial ryegrass, fine fescues and creeping bentgrass are more sensitive to this product. If undesirable turf response occurs, skip or delay additional applications to allow turf to recover to a desirable quality. Over-application may result in severe turf injury, thinning or loss of turfgrass stands. Test this product on a small area prior to wide-scale use to determine if this product is suitable for your turf management and cultural practices.

## **Weed Control in Established Creeping Bentgrass**

For use in established creeping bentgrass on golf course fairways, roughs, approaches and tees.

## Roughstalk Bluegrass (Poa trivialis) Control

For suppression, apply ¼ oz. of this product (0.011 lb. ai) per acre. For control, up to two additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 14 to 21-day intervals may be made. Make all applications between June 1 and September 15.

For severe Poa trivialis infestations, apply a single application of <sup>3</sup>/<sub>4</sub> oz. (0.035 lb. ai) per acre of this product in late summer, 21 to 28 days prior to overseeding creeping bentgrass in a renovation approach. This treatment will result in temporary chlorosis and discoloration, and will temporarily affect the growth pattern of the desirable turf.

As Poa trivialis is controlled, bare patches may occur in the turf. Creeping bentgrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

#### **USE RESTRICTIONS in Bluegrass Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 3 applications per year when using lower rates.

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz. of this product (0.035 lb. ai) per acre per year.

**DO NOT m**ake applications sooner than 14 days apart.

## Weed Control in Kentucky Bluegrass

Weed control specifications in this section are for use ONLY on established pure stands of Kentucky bluegrass.

#### **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at ¾ oz. (0.035 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of ¾ oz. of this product (0.035 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Sedge Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1½ oz. of this product (0.07 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

| Common Name      | Scientific Name     | Common Name    | Scientific Name |
|------------------|---------------------|----------------|-----------------|
| Kyllinga, green  | Kyllinga brevifolia | Sedge, globe   | Cyperus croceus |
| Nutsedge, purple | Cyperus rotundus    | Sedges, annual | Cyperus spp.    |
| Nutsedge, yellow | Cyperus esculentus  |                |                 |

## Roughstalk Bluegrass (Poa trivialis) Control

Apply this product at  $\frac{1}{2}$  oz. (0.023 lb. ai) per acre followed by a second application of  $\frac{1}{2}$  oz. of this product (0.023 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre.

## **USE RESTRCTIONS IN Roughstalk Bluegrass Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than 1.0 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

As Poa trivialis is controlled, bare patches may occur in the turf. Kentucky bluegrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

## **Tall Fescue Control**

Apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre followed by a second application of  $\frac{3}{4}$  oz. of this product (0.035 lb. ai) per acre at 21 to 28 days after the initial application.

#### **USE RESTRICTIONS in Fescue Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per acre per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT use** more than  $1\frac{1}{2}$  oz. of this product (0.07 lb. ai) per acre per year.

DO NOT make applications sooner than 21 days apart

## **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at ¾ oz. (0.035 lb. ai) per acre. A sequential application of ¾ oz. of this product (0.035 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

## **USE RESTRICTIONS for Additional Weeds Controlled:**

**DO NOT** use more than ¾ oz./acre of this product (0.035 lb. ai) per acre per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than  $1\frac{1}{2}$  oz. of this product (0.0.7 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

## **Cool Season Additional Weeds Controlled Table**

| Common Name         | Scientific Name      | Common Name               | Scientific Name         |
|---------------------|----------------------|---------------------------|-------------------------|
| Barley, little      | Hardeum pusillum     | Garlic, wild <sup>1</sup> | Allium vineale          |
| Bedstraw, catchweed | Galium aparine       | Henbit <sup>1</sup>       | Lamium amplexicaule     |
| Bluegrass, annual   | Poa annual           | Ivy, ground <sup>1</sup>  | Glechoma hederacea      |
| Bluegrass, bulbous  | Poa bulbosa          | Johnsongrass              | Sorghum halepense       |
| Burweed, lawn       | Salivialis           | Mustard, tumble           | Sisymbrium altissimum   |
| Buttercup           | Ranunculus arvensis  | Mustard, wild             | Sinapis arvensis        |
| Chamber bitter      | Phyllanthus urinaria | Pennycress, field         | Thlaspi arvense         |
| Chamomile, mayweed  | Anthemis cotula      | Quackgrass <sup>1</sup>   | Elytrigia repens        |
| Chickweed, common   | Stellaria media      | Shepherd's-purse          | Capsella bursa-pastoris |
| Clover, white       | Trifloium repens     | Violet, wild              | Viola nephrophylla      |
| Dandelion           | Taraxacum officinale | Woodsorrell, yellow*      | Oxalis stricta          |

<sup>1</sup> Suppression or partial control only.

#### Weed Control in Mixed Stands of Kentucky Bluegrass

This product is specified for use only on established stands of Kentucky bluegrass that include perennial ryegrass and/or fine fescues.

Avoid application of this product on stands with a high percentage of perennial ryegrass or fine fescue.

Perennial ryegrass and fine fescues are more sensitive to this product, therefore, as the percentage of these grasses increase in the mix, occurrence of undesirable turf response will also increase. If undesirable turf response occurs, skip or delay additional applications to allow turf to recover to a desirable quality.

Over-application may result in severe turf injury, thinning or loss of turfgrass stands.

#### **Sedge Suppression**

For the selective suppression of the weeds listed below apply this product at ½ oz. (0.023 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of ½ oz. of this product (0.023 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

## **USE RESTRICTIONS in Sedge Suppression:**

**DO NOT** use more than ½ oz./acre of this product (0.0.23 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

[Alternatively, for suppression of the weeds listed below, apply ¼ oz. of this product (0.011 lb. ai) per acre. For additional control, up to three additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 28- day intervals may be made, if needed.]

| Common Name      | Scientific Name    | Common Name    | Scientific Name |
|------------------|--------------------|----------------|-----------------|
| Nutsedge, purple | Cyperus rotundus   | Sedge, globe   | Cyperus croceus |
| Nutsedge, yellow | Cyperus esculentus | Sedges, annual | Cyperus spp.    |

## Roughstalk Bluegrass (Poa trivialis) Control

For suppression, apply ¼ oz. of this product (0.011 lb. ai) per acre. For control, up to two additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 14 to 21-day intervals may be made. Make all applications between June 1 and September 15.

## **USE RESTRICTIONS in Roughstalk Bluegrass Control:**

**DO NOT** use more than <sup>1</sup>/<sub>4</sub> oz./acre of this product (0.011 lb. ai) per application.

**DO NOT** apply more than 3 applications per year.

**DO NOT** use more than ¾ oz. of this product (0.035 lb. ai) per acre per year.

**DO NO**T make applications sooner than 14 days apart

For severe Poa trivialis infestations, apply a single application of ½ oz. (0.023 lb. ai) per acre of this product in late summer, 21 to 28 days prior to overseeding turfgrass in a renovation approach.

As Poa trivialis is controlled, bare patches may occur in the turf. Kentucky bluegrass, perennial ryegrass or fine fescues can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at ½ oz. (0.023 lb. ai) per acre. A sequential application of ½ oz. of this product (0.023 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Additional Weeds Controlled:**

**DO NOT** use more than ½ oz./acre of this product (0.023 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

[Alternatively, for suppression of the weeds listed in this section, apply  $\frac{1}{4}$  oz. of this product (0.011 lb. ai) per acre. For additional control, up to three additional applications of  $\frac{1}{4}$  oz. of this product (0.011 lb. ai) per acre at 28-day intervals may be made, if needed.

## **USE RESTRICTIONS** in Additional Weeds (Suppression and Control):

**DO NOT** use more than ½ oz./acre of this product (0.011 lb. ai) per application.

**DO NOT** apply more than 4 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

## **Cool Season Additional Weeds Suppression and Controlled Table**

| Common Name                      | Scientific Name      | Common Name                      | Scientific Name         |
|----------------------------------|----------------------|----------------------------------|-------------------------|
| Bedstraw, catchweed <sup>1</sup> | Galium aparine       | Henbit <sup>1</sup>              | Lamium amplexicaule     |
| Bluegrass, annual <sup>1</sup>   | Poa annual           | Ivy, ground <sup>1</sup>         | Glechoma hederacea      |
| Bluegrass, bulbous <sup>1</sup>  | Poa bulbosa          | Johnsongrass <sup>1</sup>        | Sorghum halepense       |
| Chamber bitter <sup>1</sup>      | Phyllanthus urinaria | Mustard, tumble                  | Sisymbrium altissimum   |
| Chamomile, mayweed <sup>1</sup>  | Anthemis cotula      | Mustard, wild                    | Sinapis arvensis        |
| Chickweed, common                | Stellaria media      | Pennycress, field                | Thlaspi arvense         |
| Clover, white <sup>1</sup>       | Trifloium repens     | Quackgrass <sup>1</sup>          | Elytrigia repens        |
| Dandelion <sup>1</sup>           | Taraxacum officinale | Shepherd's-purse                 | Capsella bursa-pastoris |
| Fescue, tall <sup>1</sup>        | Festuca arundinacea  | Woodsorrell, yellow <sup>1</sup> | Oxalis stricta          |
| Garlic, wild <sup>1</sup>        | Allium vineale       |                                  |                         |

<sup>1</sup> Suppression or partial control only.

#### **ORNAMENTALS**

This product is for use in woody ornamentals, perennial groundcovers and warm-season ornamental grasses.

For selective control or suppression of weeds listed in this section, apply this product at 1¼ oz. (0.058 lb. ai) per acre. A second application of 1¼ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed. Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.

[This product is for use in established woody ornamentals, perennial groundcovers and warm-season ornamental grasses growing in landscaped areas or field production nurseries. For selective control or suppression of weeds listed in this section, apply this product at 1¼ oz. (0.058 lb. ai) per acre. A second application of 1¼ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed. Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.]

[This product may be applied at rates as a post-directed spray around any established warm-season ornamental grass or established woody ornamental species in landscaped areas. Avoid contact of this product with leaves of desirable plants as foliar injury, discoloration or loss of the plant may result.]

#### **USE RESTRICTIONS in Ornamental Weed Control:**

**DO NOT** apply this product to container plants or production beds of potted plants.

**DO NOT** use more than 1½ oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

## **Ornamental Additional Weeds Controlled Table**

| Common Name                     | Scientific Name          | Common Name                               | Scientific Name          |
|---------------------------------|--------------------------|---|--------------------------|
| Barley, little                  | Hardeum pusillum         | Ivy, ground <sup>1</sup>                  | Glechoma hederacea       |
| Bedstraw, catchweed             | Galium aparine           | Johnsongrass                              | Sorghum halepense        |
|                                 |                          | Kyllinga, false green                     | Kyllinga gracilima       |
| Bluegrass, annual               | Poa annual               | Kyllinga, fragrant                        | Kyllinga sesquiflorus    |
| Bluegrass, bulbous              | Poa bulbosa              | Kyllinga, green                           | Kyllinga brevi           |
| Bluegrass, roughstalk           | Poa trivialis            | Mustard, wild                             | Sinapis arvensis         |
| Burweed, lawn                   | Salivialis               | Nutsedge, purple                          | Cyperus rotundus         |
| Buttercup                       | Ranunculus arvensis      | Nutsedge, yellow                          | Cyperus esculentus       |
| Chickweed, common               | Stellaria media          | Pennycress, field                         | Thlaspi arvense          |
| Clover, white                   | Trifloium repens         | Pennywort, lawn <sup>1</sup> (dollarweed) | Hydrocotyle bowlesioides |
| Crowfootgrass                   | Dactyloctenium aegyptium | Quackgrass <sup>1</sup>                   | Elytrigia repens         |
| Dandelion                       | Taraxacum officinale     | Ryegrass, perennial                       | Lolium perenne           |
| Fescue, tall                    | Festuca arundinacea      | Sedge, globe                              | Cyperus croceus          |
| Garlic, wild                    | Allium vineale           | Sedges, annual                            | Cyperus spp.             |
| Geranium, Carolina <sup>1</sup> | Geranium, carolinianum   | Shepherd's-purse                          | Capsella bursa-pastoris  |
| Henbit <sup>1</sup>             | Lamium amplexicaule      |   |                          |

<sup>1</sup> Suppression or partial control only.

## **Directed-spray Applications**

This product may be applied as a post-directed spray around any established warm-season ornamental grass or established woody ornamental species in landscaped areas or field production nurseries. Avoid contact of this product with leaves of desirable plants as foliar injury, discoloration or loss of the plant may result.

## **Over-the-top Applications**

This product may be applied as an over-the-top application on the ornamental and groundcover species listed below:

## Over-the-Top Ornamental and Ground Cover Species

| Common Name                | Scientific Name                | Common Name                 | Scientific Name                |
|----------------------------|--------------------------------|-----------------------------|--------------------------------|
| American Arborvitae        | Thuja occidentalis             | Lilac                       | Syringa vulgaris               |
| Azalea, Dwarf              | Rhododendron<br>atlanticum     | Mockorange, Japanese        | Pittosporum tobira             |
| Bougainvillea2             | Bougainvillea glabra           | Mondo Grass                 | Ophiopogon japonicus           |
| Boxwood, Green<br>Velvet   | Buxus 'Green Velvet'           | Monkey Grass, Big<br>Blue   | Liriope muscari 'Big<br>Blue'  |
| Euonymus,<br>Wintercreeper | Euonymus fortunei              | Monkey Grass,<br>Variegated | Liriope muscari<br>'Variegata' |
| Gardenia                   | Gardenia jasminoides           | Ninebark                    | Physocarpus opulifolius        |
| Holly, Blue                | Ilex x meserveae               | Oleander                    | Nerium oleander                |
| Holly, Chinese             | Ilex cornuta                   | Periwinkle, Greater         | Vinca major                    |
| Jasmine, Asiatic           | Trachelospermum<br>asiaticum   | Photinia, Fraser            | Photinia x fraseri             |
| Jasmine, Star              | Trachelospermum<br>jasminoides | Pine, Mugo                  | Pinus mugo                     |
| Juniper, Chinese           | Juniperus chinensis            | Rhododendron                | Rhododendron spp.              |
| Juniper, Creeping          | Juniperus horizontalis         | Rosemary                    | Rosmarinus officinalis         |
| Juniper, Shore             | Juniperus conferta             | Spirea, Goldmound           | Spirea x 'Goldmound'           |

<sup>2</sup> Single application only.

## **Preplant Applications**

This product may be applied prior to planting the ornamental species listed below. Wait 14 days after the last application of this product before planting.

## **Preplant Ornamental Species**

| Common Name                | Scientific Name                | Common Name                         | Scientific Name          |
|----------------------------|--------------------------------|-------------------------------------|--------------------------|
| Boxwood, Green<br>Velvet   | Buxus 'Green Velvet'           | Juniper, Creeping                   | Juniperus horizontalis   |
| Boxwood, Green<br>Mountain | Buxus 'Green<br>Mountain'      | Lilac, Dwarf Korean                 | Syringa meyeri 'Palibin' |
| Burning Bush, Dwarf        | Euonymus alatus<br>'Compacta'  | Pine, Mugo                          | Pinus mugo               |
| Euonymus,<br>Wintercreeper | Euonymus fortunei              | Privet, Golden                      | Ligustrum X vicaryi      |
| Forsythia                  | Forsythia x intermedia         | Redbud                              | Cercis canadensis        |
| Holly, Blue                | Ilex x meserveae               | Rhododendron                        | Rhododendron spp.        |
| Hydrangea, Panicled        | Hydrangea paniculata           | Serviceberry                        | Amelanchier alnifolia    |
| Ivy, English               | Hedera helix                   | Viburnum, American<br>Cranberrybush | Viburnum trilobum        |
| Jasmine, Winter            | Jasminium nudiflorum           | Viburnum, Prague                    | Viburnum x pragense      |
| Jasmine, Star              | Trachelospermum<br>jasminoides | Weigela                             | Weigela florida          |
| Juniper, Chinese           | Juniperus chinensis            |                                     |                          |

#### NATIVE GRASSES

This product has been shown to be safe for use on the warm-season native grasses listed in this section.

| Common Name     | Scientific Name            | Common Name  | Scientific Name       |
|-----------------|----------------------------|--------------|-----------------------|
| Big bluestem    | Andropogon gerardii        | Buffalograss | Bouteloua dactyloides |
| Little bluestem | Schizachyrium<br>scoparium | Indiangrass  | Sorghastrum nutans    |
| Bushy bluestem  | Andropogon glomeratus      | Lovegrass    | Eragrostis curvula    |
| Blue grama      | Bouteloua gracilis         | Switchgrass  | Panicum virgatum      |

Use of this product may result in temporary chlorosis or temporarily affect the growth pattern of these native grasses. If discoloration or excessive thinning of the native grasses occurs, skip or delay additional applications to allow the native grasses to recover to a desirable quality.

Test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

## **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

## **USE RESTRICITIONS for Sedge in Ornamental Weed Control:**

**DO NOT** use more than 1½ oz. /acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than  $2\frac{1}{2}$  oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

| Common Name           | Scientific Name       | Common Name      | Scientific Name    |
|-----------------------|-----------------------|------------------|--------------------|
| Kyllinga, false green | Kyllinga gracilima    | Nutsedge, yellow | Cyperus esculentus |
| Kyllinga, fragrant    | Kyllinga sesquifiorus | Sedge, globe     | Cyperus croceus    |
| Kyllinga, green       | Kyllinga brevifolia   | Sedges, annual   | Cyperus spp.       |
| Nutsedge, purple      | Cyperus rotundus      |                  |                    |

## Tall Fescue (Festuca arundinacea) Control

Best control of tall fescue is obtained when this product is applied at 1½ oz. (0.058 lb. ai) per acre followed by a second application of 1½ oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 oz. (0.093 lb. ai) per acre.

## **USE RESTRCTIONS in Tall Fescue Control:**

**DO NOT** use more than 1½ oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart

## **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

## **USE RESTRICTIONS in Additional Weeds Controlled:**

**DO NOT** use more than 1¼ oz. /acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

## **Ornamentals Additional Weeds Controlled Table**

| Common Name                       | Scientific Name          | Common Name                     | Scientific Name         |
|-----------------------------------|--------------------------|---------------------------------|-------------------------|
| Barley, little                    | Hardeum pusillum         | Dandelion                       | Taraxacum officinale    |
| Bedstraw, catchweed               | Galium aparine           | Dichondra, Carolina*            | Dichondra carolinensis  |
| Beggarweed Florida <sup>1</sup> * | Desmodium torluosum      | Garlic, wild                    | Allium vineale          |
| Bentgrass creeping <sup>1</sup>   | Agrostis stolonifera     | Geranium, Carolina <sup>1</sup> | Geranium, carolinianum  |
| Bluegrass, annual <sup>1</sup>    | Poa annual               | Henbit <sup>1</sup>             | Lamium amplexicaule     |
| Bluegrass, bulbous                | Poa bulbosa              | Ivy, ground                     | Glechoma hederacea      |
| Bluegrass, roughstalk             | Poa trivialis            | Johnsongrass                    | Sorghum halepense       |
| Burweed, lawn                     | Salivialis               | Mustard, wild                   | Sinapis arvensis        |
| Buttercup                         | Ranunculus arvensis      | Pennycress, field               | Thlaspi arvense         |
| Buttonweed, Virginia <sup>1</sup> | Diodia virginiana        | Quackgrass <sup>1</sup>         | Elytrigia repens        |
| Chamber bitter*                   | Phyllanthus urinaria     | Ryegrass, perennial             | Lolium perenne          |
| Chickweed, common                 | Stellaria media          | Shepherd's-purse                | Capsella bursa-pastoris |
| Clover, white                     | Trifloium repens         | Violet, wild <sup>1</sup> *     | Viola nephrophylla      |
| Crowfootgrass                     | Dactyloctenium aegyptium | Woodsorrell, yellow*            | Oxalis stricta          |
| Dallisgrass <sup>1</sup>          | Paspalum dilatatum       |                                 |                         |

<sup>&</sup>lt;sup>1</sup> Suppression or partial control only.

## Winter Wheat and Spring Wheat (\*\*)

(\*\* Not for Use in California) and New York)

Preharvest Interval (PHI):

- Wheat forage may be grazed immediately after application of this product.
- **DO NOT** harvest wheat for hay within 30 days of application of this product.
- **DO NOT** harvest wheat for grain within 55 days of application of this product.

For optimum control of listed weeds, apply to actively growing weeds and **DO NOT** disturbed by mowing for at least 14 days before or 14 days after application.

## **Application Equipment and Techniques**

Uniform and through spray coverage of weeds is required for optimum control. Use properly calibrated application equipment. Select nozzles that provide optimum spray distribution and ensures uniform coverage at the appropriate spray pressure to minimize streaking, skips, overlaps and spray drift during application.

To the extend consistent with applicable law, Aceto Life Sciences, L.L.C. will not be liable for rotational crop injury from spray overlaps.

## **Ground Broadcast Application**

Apply this product at the rates specified in 5 to 20 gallons of water per acre or in 10-40 gallons of liquid fertilizer solution per acre

#### **Aerial Application**

Apply this product at the rates specified in 5 to 15 gallons of water per acre.

<sup>[\*] [</sup>Not for Use in California].

## **Applications in Liquid Fertilizer Carrier**

This herbicide provides most consistent performance when applied with water as the spray carrier and surfactant is added to the spray solution. Liquid nitrogen fertilizer solutions (28-0-0 or 32-0-0) may, however, be used as a spray carrier in place of all or part of the water when the label directions are followed.

Fertilizer solutions must contain less than 50 percent liquid nitrogen and not exceed 30 pounds of actual nitrogen per acre.

Nonionic surfactants must be added at 1 quart per 100 gallons of spray suspension (0.25% v/v) to spray solutions containing liquid fertilizer.

#### **USE RESTRICTIONS:**

**DO NOT** use in fertilizer solutions of pH 5 or less.

## **USE PRECAUTIONS:**

Fall applications of this herbicide in liquid fertilizer solutions may cause rapid leaf burn, resulting in reduced weed control and reduced forage growth.

#### Tank mixtures with Insecticides

This product may be tank-mixed or used sequentially with insecticides labeled for use in wheat, except malathion.

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

## **USE RESTRICTIONS:**

**DO NOT** use this product with malathion, as crop injury may result.

**DO NOT** use tank mixtures of this product plus insecticides when the wheat crop has significant insect damage, is under drought stress, or when growth is negatively influenced by other environmental stresses, including nutrient deficiency, poor soil pH, or disease.

**DO NOT** apply this product within 60 days of crop emergence where an organophosphate insecticide has been applied as an in-furrow treatment, as crop injury may result.

#### Winter Wheat

When applied to winter wheat as directed in this section, the following weeds are either controlled or suppressed by this product as indicated for either preemergence application, postemergence application in the fall, or postemergence application in the spring.

## **Wheat Weeds Control Table**

| Common Name                    | Scientific Name         | Pre | Fall Post | <b>Spring Post</b> |  |
|--------------------------------|-------------------------|-----|-----------|--------------------|--|
| Barley, volunteer              | Hardeum vulgare         | С   | С         | S                  |  |
| Bedstraw, catchweed            | Galium aparine          | S   | С         | С                  |  |
| Bluegrass, bulbous             | Poa bulbosa             | •   | •         | С                  |  |
| Bluegrass, roughstalk          | Poa trivialis           | •   | С         | •                  |  |
| Brome, downy                   | Bromus tectorum         | С   | С         | S                  |  |
| Brome, Japanese                | Bromus japonicus        | С   | С         | S                  |  |
| Brome, ripgut                  | Bromus rigidus          | •   | S         | S                  |  |
| Chamomile, mayweed             | Anthemis cotula         | •   | С         | С                  |  |
| Cheat                          | Bromus secalinus        | С   | С         | S                  |  |
| Chess, hairy                   | Bromus commutatus       | С   | С         | S                  |  |
| Chickweed, common              | Stellaria media         | •   | S         | С                  |  |
| Fiddleneck, tarweed            | Amsinckia lycopsoides   | •   | S         | S                  |  |
| Flixweed                       | Descurainia sophia      | S   | S         | S                  |  |
| Henbit                         | Lamium amplexicaule     | S   | S         | •                  |  |
| Lady's-thumb                   | Polygonum persicaria    | •   | •         | S                  |  |
| Mustard, tumble                | Sisymbrium altissimum   | S   | С         | С                  |  |
| Mustard, wild                  | Sinapis arvensis        | С   | С         | С                  |  |
| Oat, wild (fall germinating)   | Avena fatua             | •   | S         | S                  |  |
| Oat, wild (spring germinating) | Avena fatua             | •   | •         | S                  |  |
| Pennycress, field              | Thlaspi arvense         | S   | S         | S                  |  |
| Quackgrass                     | Elytrigia repens        | •   | •         | С                  |  |
| Rescuegrass                    | Bromus catharticus      | •   | S         | S                  |  |
| Ryegrass, Italian              | Lolium multiflorum      | •   | S         | S**                |  |
| Shepherd's-purse               | Capsella bursa-pastoris | •   | •         | С                  |  |
| Tansymustard, pinnate          | Descurainia pinnata     |     |           | S                  |  |
| Wallflower, bushy              | Erysimum repandum       | •   | С         | С                  |  |

<sup>\*\*</sup> Spring application will provide suppression only in WA, ID, OR.

C = Control S = Suppression • = Not Control or Suppressed

This product can be applied in winter wheat either as a single preemergence application, a single postemergence application, or as a split postemergence application to control or suppress the weeds listed in this section. Best weed control is obtained when soil moisture is adequate to support vigorous wheat and weed growth.

Choose one of the following application scenarios.

## **Preemergence in Winter Wheat**

Use this product preemergence to winter wheat at  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre in a single application. Preemergence applications of this product must be made after drilling wheat but before wheat or weed emergence.

#### **USE RESTRICTIONS:**

**DO NOT** use preemergence application if dry soil conditions will cause delayed wheat and/or weed emergence.

Preemergence applications under dry soil conditions can:

- 1. Increase the risk of wheat injury due to slow and inconsistent winter wheat germination and growth prior to winter dormancy. (If winter wheat does not reach the 3-leaf stage prior to winter dormancy, a negative crop response the following spring can be expected.)
- 2. Result in poor weed control performance
- 3. Make this product vulnerable to wind erosion until fall moisture is received.

Under these conditions wait until crop and weeds have emerged and are showing good vigor, and then follow directions for postemergence application.

**DO NOT** use preemergence applications for no-till systems or when high crop residue levels (plant material) are present on the soil surface.

## Postemergence in Winter Wheat-Single Application

Apply this product at  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre in a single application when the target weeds listed in this section are actively growing. Use a nonionic surfactant at a rate of 2 quarts per 100 gallons of water (0.5% v/v) with this postemergence application.

In the states of KS, OK, TX and MT, the single postemergence application can be made after the wheat is in the 2- leaf stage, but prior to the jointing stage (Feekes' Scale 6). In all other states, postemergence application can be made after the wheat emerges, but prior to the jointing stage (Feekes' Scale 6).

#### Brome (Cheat, Downy Brome, Japanese Brome)

For best control of brome species, apply this product as a single postemergence fall application of  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre when brome is in the 2- to 3-leaf stage of growth. Best performance with fall applications of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence suppression of brome species, apply a single application of  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre when brome has recovered from cold weather (majority of foliage is green and not red or purple) and is actively growing. For best control, apply when brome is less than the 5-tiller stage of growth.

#### Mustards and other winter annual broadleaf weeds

For fall postemergence control of mustards and other winter annual broadleaf weeds, apply  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre in a single application. For best control, apply when weeds are less than 2 inches in diameter. Best performance with fall application of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence control of winter annual broad leaf weeds, apply  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre. For best control, make application when weeds are less than 2 inches in diameter. Use tank mixtures with broad-leaf herbicides when winter annual broadleaf weeds are greater than 2 inches in diameter.

## Postemergence in Winter Wheat-Split Application

[Optional Statement: For use only in the following states: Idaho, Montana, Oregon, Washington, and Wyoming]

As an alternative to a single postemergence application, this product may be applied to winter wheat in a split application. Start with an initial application of  $\frac{3}{8}$  oz. of product (0.017 lb. ai) per acre after winter wheat and target weeds have emerged and are beyond the 2-leaf stage, followed by a second application of  $\frac{3}{8}$  oz. of this product (0.017 lb. ai) per acre in the spring, no sooner than two weeks following the initial application but prior to boot stage (Feekes' Scale 9). Add a nonionic surfactant at a rate 2 quarts per 100 gallons of spray water (0.5% v/v) with this postemergence application.

## **USE RESTRICTIONS:**

**DO NOT** exceed \(^3\)4 oz. of this product (0.035 lb. ai) per acre per year for split applications only.

**DO NOT** use more than 3/8 oz./acre of this product (0.0175 lb. ai) per application.

**DO NOT** apply more than 2 application per year.

**DO NOT** use more than ¾ oz. of this product (0.035 lb. ai) per acre per year.

**DO NOT** make applications sooner than 14 days apart.

#### **Tank Mixtures for Winter Wheat**

For additional broadleaf weed control, this product may be applied as a spring postemergence application to winter wheat in a tank mixture with the following herbicides.

2,4-D amine <sup>1,2,3</sup> (EPA Reg. No. 81927-38),

Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690),

Buctril (bromoxynil) (EPA Reg. No. 264-437),

Buctril 4EC (bromoxynil) (EPA Reg. No. 264-540),

MCPA amine <sup>1,2,3</sup> (EPA Reg. No. 1381-104),

MCPA LV ester<sup>2</sup> (EPA Reg. No. 9779-265),

Sencor DF (metribuzin)<sup>3,4</sup> (EPA Reg. No. 264-738).

Tank mixtures with herbicides formulated as amines may decrease the effectiveness of this product.

Refer to individual tank-mix product label for application rate and restrictions related to soil texture, soil organic matter, and wheat growth stage.

Tank mixtures with metribuzin may be applied only in the spring.

See the MIXING section of this label for additional information on Tank Mixtures.

## Spring Wheat

When this product is applied to spring wheat as directed in this section, the following weeds are either controlled or suppressed as indicated for either preemergence or postemergence application:

| Weed Species      | Pre | Post |
|-------------------|-----|------|
| Oat, wild         | •   | С    |
| Avena fatua       |     |      |
| Sunflower, common | С   | С    |
| Helianthus annuus |     |      |
| Quackgrass        | •   | S    |
| Elytrigia repens  |     |      |
| Barley, volunteer | S   | S    |
| Hordeum vulgare   |     |      |

C = Control S= Suppression • = Not controlled or suppressed

In spring wheat, apply a single postemergence application of  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre when soil moisture is adequate to support vigorous wheat and weed growth, and prior to jointing stage (Feekes' scale 6). Use a nonionic surfactant at a rate of 2 quarts per 100 gallons of spray water (0.5% v/v) with this postemergence application.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product postemergence to durum wheat.

For wild oat control, apply ½ oz. of this product (0.031 lb. ai) per acre when wild oat is in the 1 to 4 true leaf stage.

## **Tank Mixtures for Spring Wheat**

For additional broadleaf weed control, this product may be applied to spring wheat in a tank mixture with the following herbicides:

<sup>&</sup>lt;sup>1</sup> Tank mixtures with this herbicide may result in reduced control of brome species.

<sup>&</sup>lt;sup>2</sup> Tank mixtures with this product may be made provided the specific product being used is registered for postemergence application to wheat.

<sup>&</sup>lt;sup>3</sup> Not required for use with split application rate of 3/8 oz. of this product (0.0175 lb. ai).

<sup>&</sup>lt;sup>4</sup> Different formulations of the active ingredient may be used, provided that the specific product being used is registered for postemergence application to wheat.

2,4-D amine<sup>1,2</sup> (EPA Reg. No. 81927-38),

Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690),

Buctril (bromoxynil) (EPA Reg. No. 264-437

Buctril 4EC (EPA Reg. No. 264-540),

Cheyenne (fenoxaprop + MCPA) (EPA Reg. No. 264-654),

Curtail (clopyralid + 2,4-D)1 (EPA Reg. No. 62719-48),

Dakota (fenoxaprop + MCPA) (EPA Reg. No. 83100-38-83979),

MCPA amine<sup>1,2</sup> (EPA Reg. No. (1381-104),

MCPA LV ester<sup>2</sup> (EPA Reg. No. 9779-265),

Stinger (clopyralid) (EPA Reg. No. 62719-73,)

Tiller (fenoxaprop + 2,4-D + MCPA) (EPA Reg. No. 264-649).

## **Crop Rotation Restrictions**

No crop other than wheat may be planted sooner than 3 months after application of this product.

The following tables provide crop rotation intervals (months) for selected crops based on soil pH and cumulative precipitation by geographic region. For soils with pH higher than listed or for cumulative precipitation less than listed, a successful field bioassay must be completed before planting, as described in this section under Field Bioassay. If a shorter rotation interval other than that listed for a crop is desired, a successful field bioassay must be completed before planting.

All crops other than those listed in these tables may be seeded into fields treated with this product only after the completion of a successful field bioassay.

## Field Bioassay

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in fields previously treated with this product. Crop response will determine if the crop(s) planted in the test strips can be adequately grown in these areas.

Table 1- OK, KS, NE, TX

| Crop   | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|--|---------|-----------------------------------|----------------------------|
| Millet   | <7.5    | 18                                | 3                          |
| Corn- IR<br>(imidazolinone<br>resistant)   | <7.5    | 18                                | 3                          |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean)                          | <7.5    | 18                                | 3                          |
| Winter Canola (varieties that exhibit resistance to sulfonylurea herbicides)         | <7.5    | 18                                | 3                          |
| Corn- normal   | <7.5    | 30                                | 12                         |
| Cotton   | <7.5    | 30                                | 12                         |
| Soybean  | <7.5    | 30                                | 12                         |
| Sorghum (grain)  | 6.0-7.5 | 30                                | 22                         |
| Sunflower  | <6.0    | 30                                | 17                         |
| Winter Canola (varieties that do not exhibit sensitivity to sulfonylurea herbicides) | 6.0-7.5 | 30                                | 22                         |

<sup>&</sup>lt;sup>1</sup> Tank mixtures with this herbicide may result in reduced control of grass species.

<sup>&</sup>lt;sup>2</sup>Tank mixtures with this herbicide may be made provided the specific product is registered for this use.

Table 2- WA, OR, ID

| Crop  | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|---|---------|-----------------------------------|----------------------------|
| Millet  | <7.5    | 18                                | 3                          |
| CLEARFIELD Canola   | <7.5    | 18                                | 3                          |
| Corn- IR<br>(imidazolinone<br>resistant)                    | <7.5    | 18                                | 3                          |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <7.5    | 18                                | 3                          |
| Potato  | <7.5    | 18                                | 12                         |
| Barley  | <7.5    | 24                                | 22                         |
| Canola  | <7.5    | 24                                | 22                         |
| Corn- normal  | <7.5    | 24                                | 22                         |
| Lentils   | <7.5    | 24                                | 22                         |
| Peas*- all classes  | >6.5    | 24                                | 22                         |
| (including chickpeas)                                       | <6.5    | 30                                | 17                         |
| Soybean   | <7.5    | 24                                | 22                         |

<sup>\*</sup> Peas must not be planted on clay or eroded hillsides treated with **THIS PRODUCT** without conducting a field bioassay as described in this section.

Table 3- CO, SD, WY

| Crop  | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval<br>(Months) |
|---|---------|-----------------------------------|-------------------------------|
| Millet  | <7.5    | 18                                | 3                             |
| Corn- IR<br>(imidazolinone<br>resistant)                    | <7.5    | 18                                | 3                             |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <7.5    | 18                                | 3                             |
| Corn- Normal  | <7.5    | 24                                | 22                            |
| Soybean   | <7.5    | 24                                | 22                            |
| Sorghum (grain)   | 6.5-7.5 | 45                                | 34                            |
| Sunflower   | <6.5    | 35                                | 22                            |

## Table 4- MT, ND

| Crop              | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|-------------------|---------|-----------------------------------|----------------------------|
| CLEARFIELD Canola | < 7.5   | 12                                | 12                         |

**Table 5- All Other Regions** 

| Crop  | Soil pH      | Cumulative Precipitation (Inches) | Rotation Interval<br>(Months) |
|---|--------------|-----------------------------------|-------------------------------|
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <6.5         | 30                                | 3                             |
| Soybean   | <6.5<br><7.5 | 30<br>24                          | 5<br>12                       |

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a dry and secure location.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

[Plastic bottle packaging:]

**CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse or pressure 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 <sup>1</sup>/<sub>4</sub> full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows**: Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once triple rinsed, recycle if available. Some agricultural pesticide containers can be taken to a container collection site or pick up for recycling. To find the nearest site, contact your chemical dealer or manufacturer. If recycling is not available, dispose of in a sanitary landfill or by incineration if allowed by state and local ordinances.

[55 lb. Drums with Liners:]

**CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into the handling or application equipment. Then offer for recycling if available, or dispose of liner in a sanitary landfill, or by incineration, or by burning, if allowed by state and local authorities. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

#### WARRANTY DISCLAIMER AND NOTICE

#### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS**: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aceto Life Sciences, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ACETO LIFE SCIENCES, LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Aceto Life Sciences, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ACETO LIFE SCIENCES, LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY**: To the extent consistent with applicable law, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ACETO LIFE SCIENCES, LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

All trademarks are the property of their respective owners.

Made in India [,] [formulated in USA] [&] [packaged in USA]

SULFOSULFURON GROUP 2 HERBICIDE

[Information in brackets [] is optional]

# ACETO SULFOSULFURON 75% WDG HERBICIDE

[Alternate brand names include] [Herald<sup>TM</sup> 75% WDG Herbicide]

ACETO SULFOSULFURON 75% WDG HERBICIDE is a herbicide for selective control of listed annual and perennial grasses and broadleaf weeds in Non-crop Use Sites, Pasture and Rangeland Use Sites, Winter and Spring Wheat.

Read the entire label before using this product.

Use only according to label instructions.

[See [inside booklet] [back panel] for [First Aid], Precautionary Statements] [and] [Directions for Use]]

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

| ACTIVE INGREDIENT:   | % BY WT. |
|--|----------|
| Sulfosulfuron: <i>N</i> -[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]-2-(ethylsulfonyl)imidazo |          |
| [1,2-a]pyridine-3-sulfonamide  | 75%      |
| OTHER INGREDIENTS:   | 25%      |
| TOTAL  | 100%     |

EPA Reg. No. 2749-XXX

Net Contents: 10, 20 ounces
EPA Est. No.

55 lb. (25kg)

Manufactured for: Aceto Life Sciences, LLC 4 Tri Harbor Court Port Washington, NY 11050

# KEEP OUT OF REACH OF CHILDREN **CAUTION**

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

| First Aid  |   |  |  |  |
|--|---|--|--|--|
| • Hold eye open and rinse slowly and gently with water for 15-20 minutes.  |   |  |  |  |
| <ul> <li>Remove contact lenses, if present, after the first 5 minutes, then<br/>continue rinsing eye.</li> </ul> |   |  |  |  |
|  | <ul> <li>Call poison control center or physician for treatment advice.</li> </ul> |  |  |  |
|  | ner or label with you when calling a poison control center or physician, or going |  |  |  |
| for treatment. FOR ME.   | DICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL                                    |  |  |  |
| CHEMTREC® TOLL F   | REE 1-800-424-9300 or 1-703-527-3887.   |  |  |  |

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- 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 STATEMENTS:**

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

# **USER SAFETY RECOMMENDATIONS:**

Users should remove clothing /PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

#### **ENVIRONMENTAL HAZARDS**

This product is highly toxic to non-target plants. **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** contaminate water when disposing of equipment washwaters or rinsate.

**Ground Water Advisory:** This chemical has properties and characteristics associated with chemicals detected in ground water. 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 impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having 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 Sulfosulfuron from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### PHYSICAL AND CHEMICAL HAZARDS

**DO NOT** mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Aceto Supplemental 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.

#### Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

#### Windblown Soil Particles Advisory

ACETO SULFOSULFURON 75% WDG HERBICIDE has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying ACETO SULFOSULFURON 75% WDG HERBICIDE if prevailing local conditions may be expected to result in off-site movement.

# 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, forest, nurseries and green houses, 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 the label about personal protective equipment (PPE), 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 this 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, including plants, soil or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves, made of waterproof materials.

#### 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.

Keep people and pets off treated areas until spray solution has dried.

#### **Product Information**

ACETO SULFOSULFURON 75% WDG HERBICIDE is a selective systemic pre- and post-emergent sulfonylurea herbicide for the control of various annual grasses and broad leaf weeds in selective pasture grasses and rangelands, non-crop areas and in winter and spring wheat. Sulfosulfuron exhibits systemic post-emergence herbicidal activity on a broad spectrum of annual and perennial sedges, grasses, and broadleaf weeds, but does not injure many warm season and some cool-season grasses. Sulfonylurea herbicides disrupt amino acid biosynthesis in susceptible plants by binding to the acetolactate synthase (ALS) enzyme.

**Time to Symptoms:** This product is absorbed through the roots and foliage of plants. Soon after application, growth of susceptible weeds is inhibited and in cropping situations susceptible weeds are no longer competitive with the crop. Following growth inhibition, affected plants may appear dark green and stunted, affected leaves will turn yellow and/or red, and the growing point of the plant may turn reddish-purple. These visible effects of control may not be observed for 1 to 3 weeks after application. Within 6 weeks after application the growing points die. Warm and moist conditions following application will accelerate herbicidal activity. Cool, dry conditions will delay herbicidal activity. Weeds stressed by drought

are less susceptible to this product.

**Rainfastness:** Heavy rainfall soon after application (less than 2 hours) may wash this product off of the foliage and a repeat application may be required for adequate control.

# **Weed Resistance Management**

For resistance management, SULFOSULFURON 75% WDG Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to SULFOSULFURON 75% WDG Herbicide and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

See specific crop use directions for maximum single application rate, annual maximum number of applications and amount of active ingredient.

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

- Rotate the use of ACETO SULFOSULFURON 75% WDG Herbicide or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- 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 certified crop 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 and uses historical
  information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control
  methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the
  crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Users should scout before and 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 including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest 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 mode of action, if available.
- Users must report lack of performance to the registrant or their representative.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

# **Mixing Instructions**

ACETO SULFOSULURON 75% WDG HERICIDE is a water dispersible granule designed to be diluted with water at the rates listed in the specific crop use directions. Fill the spray tank with approximately ½ of the desired volume with water or carrier. With the agitation operating, add the specified amount of the formulation as listed in the targeted crop use directions. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Add nonionic surfactant and other spray additives as the last ingredients in the tank. Allow time to fully disperse.

Since this product forms a suspension in water, it is important to maintain good agitation during mixing and spraying. If the spray suspension is allowed to settle for a short period of time, be sure to agitate the spray suspension for a minimum 10 minutes. Apply spray suspensions within 24 hours after mixing.

# **Spray Additives**

Spray additives including nonionic surfactant (NIS) and liquid nitrogen fertilizer (e.g., 28-0-0) are used with this product to improve performance. The typical nonionic surfactant contains a minimum of 80% NIS and is accepted by the EPA for use on food crops. The use rate is 1 to 2 quarts NIS concentrate per 100 gallons of spray mixture (025 to 0.5% v/v). NIS is the only spray additives required to improve efficacy. Use liquid nitrogen for those tank mix partners which required a liquid nitrogen additive to improve performance. Consult the tank mixture partner's labels for specific additive requirements and interactions. In place of the liquid nitrogen fertilizer, a high quality, spray grade ammonium sulfate (e.g., 21-0-0) is used at a use rate of 2 to 4 pounds per acre. Use NIS in the spray mixture.

#### **USE RESTRICTIONS:**

**DO NOT** use nonionic surfactants (NIS) or other additives that lower the pH of the spray suspension below pH 5. **DO NOT** mix oil-based adjuvants or adjuvants containing oil when this herbicide is tanked mixed with an emulsifiable concentrate pesticide product.

**DO NOT** use low rates of liquid fertilizer as a substitute for surfactant.

#### pH Adjustment

Spray suspensions of between pH 6.0 and 8.0 are required for optimal performance of this product. Failure to adjust the pH of the spray suspension may result in reduced weed control. Follow the mixing procedure described on this label and adjust the pH of the spray suspension after the addition of nonionic surfactant. To adjust the pH, add between 2 to 4 quarts (depending on the starting pH of your water carrier) of a 7 % solution of ammonia for every 100 gallons of spray suspension.

#### **USE RESTRICTIONS:**

**DO NOT** use ammonia with chlorine bleach as your pH adjuster, as dangerous gases will form.

DO NOT mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

#### **Use Rate Equivalency**

Since ACETO SULFOULFURON 75% WDG HERBICIDE contains 75% w/w active ingredient per lb. of product, the following table expresses the use rate equivalency of oz. of this product in term of lb. sulfosulfuron on a per acre basis.

| oz. of Product | lb. Sulfosulfuron |  |
|----------------|-------------------|--|
| per acre       | per acre          |  |
| 3/8            | 0.0175            |  |
| 2/3            | 0.031             |  |
| 3/4            | 0.035             |  |
| 1              | 0.047             |  |
| 11/3           | 0.062             |  |
| 2              | 0.093             |  |
| 22/3           | 0.124             |  |

# **Application Methods**

This product may be applied using either ground or aerial (fixed-wing or helicopter) spray application equipment. Apply spray suspensions of this product using properly maintained and calibrated equipment capable of delivering desired volumes. Use equipment that is capable of continuous and vigorous agitation. Use an agitation system capable of creating a rippling or rolling action on the liquid surface when the tank is full.

Uniform, thorough spray coverage is important to achieve consistent weed control. Calibrate application equipment according to manufacturer's specifications. Use nozzle type arrangements that provide optimum spray distribution and maximum coverage while avoid contact to sensitive crop foliage.

Thoroughly clean application equipment immediately after use and prior to spraying a crop other than corn or grain sorghum. See Spray Equipment Cleanout section of this label for complete details.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product through any type of irrigation system.

**DO NOT** allow this herbicide suspension to mist, drift, or splash onto desirable vegetation or soil areas where sensitive crops will be planted, as minute quantities of this product can cause severe damage or destruction to susceptible plants on which treatment was not intended.

# **Aerial Application**

All treatments described on this label may be made using aerial equipment where appropriate, except where specifically prohibited, provided that the applicator complies with the precautions and restrictions described in the SPRAY DRIFT section of this label.

# **Injection Systems**

This product may be used in ground applicator injection spray systems. It may be diluted prior to injecting into the spray streams.

#### **USE RESTRICTIONS:**

**DO NOT** mix this product with the undiluted concentrate of other products when using injections systems, unless specifically directed.

#### **Ground Applications**

When SULFOSULFURON 75% WDG HERBICIDE is applied by ground equipment, use in a minimum of 10 gallons of water per acre for a broadcast application. In dense weed populations and thick canopy cover, higher spray volumes are necessary, e.g., 15 – 20 gallons of water per acre. Use the proper spray volume and nozzles that will ensure thorough and uniform coverage of the targeted weeds. Use directed applications to avoid contacting sensitive crop foliage. Select nozzles that will provide optimum spray volume, distribution and coverage at a pressure (psi) that minimizes spray drift. Inspect nozzle distribution during application to avoid streaking and overspray.

#### MANDATORY SPRAY DRIFT

#### **Aerial Applications:**

- **DO NOT** release spray at a height greater than 10 ft. above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.

# **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

# **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour 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.

# **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 rate.
- 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.

# **Controlling Droplet Size – Aircraft**

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

• Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT release** spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety. 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 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 dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

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.

#### **Boom-less Ground applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### **Handheld Technology Applications:**

• Take precautions to minimize spray drift.

# **Spray Equipment Cleanout**

The mix tank and spray equipment cleanout are an important stewardship activity to avoid injury to desirable crops. It is important to clean all mixing and spraying equipment immediately after use and before using pesticide products including SULFOSULFURON 75% WDG HERBICIDE. This is especially important prior to spraying a crop other than grain sorghum and corn.

To clean the spraying equipment, follow the procedure outlined below:

• Completely drain the mix tank and/or sprayer, and then wash thoroughly the tank, sprayer, boom and nozzles with clean water. Drain the system again.

- Fill the mixing or spray tank half full with clean water and add domestic ammonium, normally a 3% v/v solution, at a dilution rate of 1% v/v ammonium or 1 gallon per 100 gallons of rinsate.
- Completely fill the tank(s) with additional clean water. Agitate and recirculate and flush out the boom and hoses. Let the system run for 10 15 minutes. Drain the system completely.
- Remove nozzles and screens and dislodge any visible solid material. Then soak them in a 1% v/v ammonium solution. Inspect the nozzles and screen and remove any visual residues.
- Repeat the above procedure for a second time.
- Flush the mix tank and/or sprayer, boom and hoses with clean water. Drain the system again and inspect for any visible residues. If present, repeat the cleaning cycle again.
- If the rinsate cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Tank Mixtures**

To improve this product's effectiveness, apply in combination with other pesticide products that are registered for the same crop and application techniques.

Tank mixtures of this product with other herbicide products may be used to provide a broader spectrum of weed control and an alternate mode of herbicidal action. Tank-mix this product with other herbicides or materials that are listed in the specific use site sections of this label. Refer to each individual product label or supplemental labeling for all products in the tank mixture, and observe all instructions, precautions and limitations on the label, including application rates and restrictions related to soil texture, soil organic matter, wheat growth stage and crop rotation. Use the mixture according to the most restrictive precautionary statements for each product in the tank mixture.

A list of potential herbicide tank mixture partners is provided in the use direction section under each crop. This list is an example of products used but is not an all inclusive list. For current information on the best tank mixture partner in your area, consult with the local dealer, distributor or State Agricultural Extension service.

Mixing this product with herbicides or other materials that are not listed on this label may result in reduced performance.

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

Tank mixtures with broadleaf herbicides formulated as amines (including 2,4-D and others) may decrease the effectiveness.

When a generic active ingredient, including 2,4-D, dicamba, diuron or MSMA is listed on this label for tank-mixing with this product, the user is responsible for ensuring that the specific application being made is included on the label of the product being used in the tank mixture.

If this product is to be tank mixed with other herbicides, conduct a compatibility test prior to mixing. Use a small container and mix all components in a small amount, usually 0.5 to 1 quart of spray. Combine all products in the same ratio and order of addition as in the proposed spray mixture. Observe the mixture for indication of incompatibility which usual occurs in 10 to 30 minutes after mixing. If incompatibility is observed, try changing the order of addition of the components. The guideline on tank mixture partners is driven by formulation type. Start with wettable powders (WP's) including water soluble bags (WSB's), water dispersible granules (WDG's), suspension concentrated (SC's) or flowable (F's), all with very good agitation. Next follow with water miscible concentrates and emulsifiable concentrates (EC's) before adding drift control additives, nonionic surfactants (NIS's). After vigorous agitation, there must be a homogeneous suspension. Let the final tank mixture stand and observe for any rapid settling or floating of components. If any indications of physical incompatibility develop, **DO NOT** use this mixture for spraying.

# Non-Crop, Pastures and Rangeland Weeds Control Table

| Common Name           | Scientific Name       | Common Name           | Scientific Name         |
|-----------------------|-----------------------|-----------------------|-------------------------|
| Barley, volunteer     | Hardeum vulgare       | Flixweed              | Descurainia sophia      |
| Bedstraw, catchweed   | Galium aparine        | Horseweed             | Conyza canadensis       |
| Bentgrass creeping    | Agrostis stolonifera  | Johnsongrass          | Sorghum halepense       |
| Bluegrass, bulbous    | Poa bulbosa           | Mustard, tumble       | Sisymbrium altissimum   |
| Bluegrass, roughstalk | Poa trivialis         | Mustard, wild         | Sinapis arvensis        |
| Brome, downy          | Bromus tectorum       | Nutsedge, purple      | Cyperus rotundus        |
| Brome, ripgut         | Bromus rigidus        | Nutsedge, yellow      | Cyperus esculentus      |
| Buttercup             | Ranunculus arvensis   | Pennycress, field     | Thlaspi arvense         |
| Chamomile, mayweed    | Anthemis cotula       | Quackgrass            | Elytrigia repens        |
| Cheat                 | Bromus secalinus      | Shepherd's-purse      | Capsella bursa-pastoris |
| Chess, hairy          | Bromus commutatus     | Sunflower, common     | Helianthus annuus       |
| Cocklebur, common     | Xanthium strumariu    | Tansymustard, pinnate | Descurainia pinnata     |
| Fiddleneck, tarweed   | Amsinckia lycopsoides |                       |                         |

# Non-Crop, Pastures and Rangeland

**Non-crop Use Sites**: airports, conservation areas, Conservation Reserve Program (CRP), ditch banks, dry ditches, dry canals, fallow areas, fencerows, forestry conifer release, industrial sites, lumberyards, manufacturing sites, natural areas, petroleum tank farms and pumping installations, railroads, roadsides, storage areas, utility rights-of-way, utility sites and substations, warehouse areas and wildlife areas.

Pastures and Rangeland Use Sites: pastures, hayfields, rangelands and perennial native grasses.

#### **USE RESTRICTIONS:**

**DO NOT** allow this product to contact roots or foliage of desirable vegetation, areas where roots of desirable vegetation may extend, or areas where this product may be washed or moved into contact with roots of desirable vegetation. Desirable plants may be injured if planted into treated areas.

Non-crop, pasture and rangeland use rates are **NOT** allowable for applications on or around athletic fields, commercial turf sites, golf courses, residential turf sites or sod and turfgrass seed farms.

For optimum control of listed weeds, apply to actively growing weeds and **DO NOT** disturbed by mowing for at least 14 days before or 14 days after application.

# **Application Equipment and Techniques**

# **Ground Broadcast Application**

Apply this product at the rates specified in 10 to 50 gallons of water per acre. Use properly calibrated ground application equipment. Utilize nozzles on the spray boom that provides optimum spray distribution and provided uniform coverage at the appropriate spray pressure to minimize streaking, skips, overlaps and spray drift during application.

#### **Aerial Application**

Apply this product at the rates specified in 5 to 15 gallons of water per acre unless otherwise specified.

#### **Hand-Held and High-Volume Application**

Apply this product at the rates specified using hand-held spray gun, backpack sprayers and other similar types of sprayers, See the specific hand-held and high-volume use directions sections on this label. Apply a uniform and complete foliage spray to vegetation to be controlled. Use approximately 2 gallons of spray suspension per 1,000 square feet.

#### **USE RESTRICTIONS:**

**DO NOT** spray to the point of runoff. Use coarse sprays only to minimize off target movement.

#### Bermudagrass and Bahiagrass Non-Crop Sites

Weeds: Control or Partial Control of Annual and Perennial Weeds listed in Weed Control Table

#### **Broadcast Application Instructions**

Use Rate:  $\sqrt[3]{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5-15 gallons of spray suspension per acre by air.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

#### Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using the reduced application rates.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 30 days apart.

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in bermudagrass and bahiagrass.

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

#### **USE PRECAUTIONS:**

ESTABLISHED STANDS OF BERMUDAGRASS AND BAHIAGRASS ARE RESISTANT TO THIS PRODUCT AT RATES SPECIFIED ON THIS LABEL; HOWEVER, TANK MIXTURES OF THIS PRODUCT WITH OTHER HERBICIDES MAY INCREASE GRASS INJURY. USE THESE TANK MIXTURES ONLY WHEN SOME TEMPORARY INJURY OR DISCOLORATION OF THE BERMUDAGRASS AND BAHIAGRASS CAN BE ACCEPTED.

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: Control or Partial Control of Annual and Perennial Weeds in Weed Control Table

**Tank Mix Partners:** 2,4-D, chlorsulfuron, clopyralid, dicamba, diuron, glyphosate, imazapic, metsulfuron methyl, MSMA, sulfometuron methyl, triclopyr, Campaign® (EPA Reg. No. 524-351, glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Escort XP (EPA Reg. No. 432-1549, metsulfuron), Oust (EPA Reg. No. 352-401, sulfometuron), Oust XP (EPA Reg. No. 432-1552, sulfometuron), Plateau (imazapic, EPA Reg. No. 241-365), Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt), Roundup PRO® Concentrate (EPA Reg. No. 524-529,

glyphosate-isopropylammonium), Telar XP (EPA Reg. No. 352-654 and EPA Reg. No. 432-1562, chlorsulfuron), Transline (EPA Reg. No. 62719-259, clopyralid).

A surfactant does not need to be added to the spray suspension when this product is tank-mixed with Campaign® (EPA Reg. No. 524-351, glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Roundup PROMAX® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt), or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium) herbicides.

#### Release of Dormant Bermudagrass and Bahiagrass

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Control or partial control of winter annual weeds prior to spring green-up.

#### **Tank Mix Partners:**

| Tank Mix Partner                                  | Application Rate**                                |  |
|---|---|--|
| Campaign® (EPA Reg. No. 524-351, glyphosate-      | 16-64 fl. oz./acre (.156 lb. ai / acre glyphosate |  |
| isopropylammonium and 2,4-D, isopropylamine salt) | isopropylammonium and .237595 lb. ai / acre 2,4-D |  |
|   | isopropylamine salt)                              |  |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine,   | 5-44 fl. oz./acre (.214 – 1.88 lb. ai / acre)     |  |
| N-(phosphonomethyl)- potassium salt)              |   |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529,   | 6.4-51 fl. oz./acre (.25 – 1.99 lb. ai / acre)    |  |
| glyphosate-isopropylammonium)                     |   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

# In Dormant Bermudagrass Only

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: To increase the spectrum of broadleaf weed control, use Tank Mix Partners below.

#### **Tank Mix Partner**

Use Escort XP (EPA Reg. No. 432-1549, metsulfuron) or in dual mixture or three-way with Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium).

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Escort XP (EPA Reg. No. 432-1549, metsulfuron)  | Up to 1 oz. (0.004 lb. ai / acre)              |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-44 fl. oz./acre (.214 – 1.88 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-51 fl. oz./acre (.25 – 1.99 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### **USE PRECAUTIONS:**

Use of Escort XP (EPA Reg. No. 432-1549, metsulfuron) may delay green-up of bermudagrass in the following spring. The use of this product with Escort XP (EPA Reg. No. 432-1549, metsulfuron) in highly maintained turfgrass areas will result in unacceptable turf injury.

In the state of Texas, applications of this product before September 30 will not delay green-up of bermudagrass in the following spring; however, some temporary discoloration of desirable spring germinating wildflowers may occur.

#### **Release of Activity Growing Bermudagrass**

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: Control or partial control of johnsongrass and other weeds in actively growing bermudagrass.

#### **Tank Mix Partner**

Use the higher application rate within the range to control perennial weeds or annual weeds greater than 6 inches in height.

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-22 fl. oz./acre (.214 – 0.94 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-26 fl. oz./acre (.25 – 1.01 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### **USE PRECAUTIONS:**

Use only on well-established stands of bermudagrass.

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

Weeds: To increase the spectrum of weed control, use Tank Mix Partners below.

#### **Tank Mix Partner**

Use Escort XP (EPA Reg. No. 432-1549, metsulfuron) or Oust (EPA Reg. No. 352-401, sulfometuron) or Telar (EPA Reg. No. 432-1561, chlorsulfuron) in dual mixture or three-way with Roundup PROMax® (EPA Reg. No. 524-579, glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO® Concentrate (EPA Reg. No. 524-529, glyphosate-isopropylammonium).

| Tank Mix Partner                                | Application Rate**                             |
|---|--|
| Escort (EPA Reg. No. 432-1549, metsulfuron)     | 1 oz./acre (.004 lb. ai / acre)                |
| Oust (EPA Reg. No. 352-401, sulfometuron)       | 0.5 oz./acre (.023 lb. ai / acre)              |
| Telar (EPA Reg. No. 432-1561, chlorsulfuron)    | 0.5 oz./acre (.023 lb. ai / acre)              |
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 5-22 fl. oz./acre (.214 – 0.94 lb. ai / acre)  |
| N-(phosphonomethyl)- potassium salt)            |  |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 6.4-26 fl. oz./acre (.25 – 1.01 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |  |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

# **USE RESTRICTIONS:**

**DO NOT** apply this product in tank mixtures with Escort (EPA Reg. No. 432-1549, metsulfuron), Oust (EPA Reg. No. 352-401, sulfometuron) or Telar (EPA Reg. No. 432-1561, chlorsulfuron) in highly maintained turfgrass areas.

#### **Release of Actively Growing Bahiagrass**

Use Rate:  $\frac{3}{4}$  – 2.0 oz. of this product/acre (0.035 – 0.093 lb. ai/acre)

Weeds: Control or partial control of johnsongrass and other weeds in actively growing bahiagrass.

#### **Tank Mix Partner**

Use the higher application rate within the range to control perennial weeds or annual weeds greater than 6 inches in height.

| Tank Mix Partner                                | Application Rate**                  |
|---|-------------------------------------|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 4 fl. oz./acre (.171 lb. ai / acre) |
| N-(phosphonomethyl)- potassium salt)            |                                     |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 5 fl. oz./acre (.195 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |                                     |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

# **USE PRECAUTIONS:**

Use only on well-established stands of bahiagrass.

#### **Tall Fescue Non-Crop Sites**

Weeds: Control or Partial Control of johnsongrass Annual and Perennial Weeds in Weed Control Table

#### **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - 1.0$  oz. of this product/acre (0.035 - 0.047 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

#### Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 1.0 oz./acre of this product (0.047 lb. ai) per application.

**DO NOT** apply more than 1 application per year.

**DO NOT** use more than 1 oz. of this product (0.047 lb. ai) per acre per year.

#### **USE PRECAUTIONS:**

Use this product only on well-established stands of tall fescue. Even at rates listed in this section, use of this product may result in temporary chlorosis and discoloration, and may result in transient growth reduction of the desirable turf. These symptoms appear 7 to 10 days after application and are typically gone within 21 to 28 days.

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in tall fescue.

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

**Tank Mix Partners:** Escort (EPA Reg. No. 432-1549, metsulfuron), Escort XP (EPA Reg. No. 432-1549, metsulfuron), Garlon 3A (EPA Reg. No. 62719-37, triclopyr), Garlon 4 (EPA Reg. No. 62719-40, triclopyr), Transline (EPA Reg. No. 62719-259, clopyralid)

# Bermudagrass and Bahiagrass Pasture Sites

Weeds: Control or Partial Control of Weeds in Weed Control Table

# **Broadcast Application Instructions**

Use Rate:  $1\frac{1}{3}$  - 2.0 oz. of this product/acre (0.062 – 0.093 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Apply this product in early spring through fall on well-established bermudagrass and bahiagrass pastures.

Grass forage maybe grazed immediately after applications.

However, for optimum weed control, **DO NOT** mow or harvest the pasture to be treated for 2 weeks before or 2 weeks after application.

For optimum johnsongrass control, make applications when the johnsongrass is actively growing, is at least 18-24 inches tall and up to heading stage.

#### Hand-held and High-volume Application Instructions

Use Rate:  $1\frac{1}{3}$  oz. of this product (0.062 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2<sup>2</sup>/<sub>3</sub> oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 40 days apart.

#### Pastures and Rangeland Sites in States West of the Mississippi River

Weeds: Control or Partial Control of Weeds in Weed Control Table

# **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - \frac{1}{3}$  oz. of this product/acre (0.035 – 0.062 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5 - 15 gallons of spray suspension per acre by air.

Use the higher specified application rate of this product when weed growth is heavy or dense.

Apply this product in pasture and rangeland grasses in States west of the Mississippi River in the fall or spring to provide selective weed control.

Grass forage maybe grazed immediately after applications.

However, for optimum weed control, **DO NOT** mow or graze the pasture to be treated for 2 weeks before or 2 weeks after application.

This product is selective in crested wheatgrass and selectivity in other pasture grasses is increased when they are not actively growing.

For optimum weed control, make applications when the weeds are actively growing.

#### **USE RESTRICTIONS:**

**DO NOT** use more than 1<sup>1</sup>/<sub>3</sub> oz./acre of this product (0.062. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year.

**DO NOT** make applications sooner than 30 days apart.

# **USE PRECAUTIONS:**

Temporary stunting or chlorosis of grasses may occur but desirable grasses will recover. If concern exists about selectivity on desirable grasses, a small area needs to be treated to confirm selectivity.

#### **Dormant Pastures and Rangelands.**

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in dormant pastures and rangelands.

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

Use Rate:  $\frac{3}{4} - \frac{1}{3}$  oz. of this product/acre (0.035 – 0.061 lb. ai)

Tank mixing this product with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) herbicide at rates below 12 ounces (0.513 lb. ai) per acre requires the addition of a nonionic surfactant to the spray suspension at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Make these applications when the desirable pasture grass species are dormant and a new flush of the target weeds is emerged and actively growing.

| Tank Mix Partner                                | Application Rate**                                |
|---|---|
| Roundup PROMax® (EPA Reg. No. 524-579, glycine, | 8 -11 fl. oz./acre (0.342 – 0.47 lb. ai / acre)   |
| N-(phosphonomethyl)- potassium salt)            |   |
| Roundup PRO® Concentrate (EPA Reg. No. 524-529, | 10 – 13 fl. oz./acre (0.39 – 0.505 lb. ai / acre) |
| glyphosate-isopropylammonium)                   |   |

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

# Native Grasses and Conservation Reserve Program (CRP) Sites

Weeds: Control or Partial Control of Annual and Perennial Weeds in Weed Control Table

For use in perennial native grassland areas including land enrolled in the Federal Conservation Reserve Program (CRP). Native perennial grasses include; big bluestem, little bluestem, bushy bluestem, blue oats grama, side oats grama, buffalograss, Indiangrass, lovegrass, switchgrass.

#### **Broadcast Application Instructions**

Use Rate:  $1 \frac{1}{3} - 2.0$  oz. of this product/acre (0.069 - 0.093 lb. ai)

Apply 10 - 50 gallons of spray suspension per acre by ground.

Apply 5-15 gallons of spray suspension per acre by air.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

# Hand-held and High-volume Application Instructions

Use Rate: 1.0 oz. of this product (0.047 lb. ai)/100 gallon of spray suspension.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

#### **USE RESTRICTIONS:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using reduced application rates.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 30 days apart.

**DO NOT** apply this product to newly seeded perennial native grasses prior to the 3-leaf growth stage. Native grasses listed in this section may be reseeded into treated areas, but no sooner than 14 days after treatment.

#### **Crop Rotation Restrictions**

No crop, except wheat, may be planted into pasturelands, rangelands, or land taken out of the CRP that has been treated with this product within 12 months after application. For all crops, except wheat, a successful field bioassay, as described in this section, must be completed before planting.

**DO NOT** seed any crop, except wheat, any sooner than 3 months after the last application of this product. There are no crop rotation restrictions for wheat.

#### Field Bioassay

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in the fields previously treated with this product. Crop response to the bioassay will determine if the crop(s) planted in the test strips can be safely grown in the previously treated fields.

# **Non-Fruit Bearing Trees Sites**

Weeds: Control of johnsongrass, tall fescue, purple and yellow nutsedge and other weeds in the Weed Control Table.

For use as a broadcast application around or over the top of selected hardwood and conifer tree species in conservation and 002749-00LOG.20210820.Sulfosulfuron 75 WDG Proposed Label

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wildlife areas.

This product has been shown to provide selective control on the following tree species: American Plum, Bald Cypress, Bur Oak, Cottonwood, Green Ash, Pecan, Pin Oak, Swamp White Oak, Sycamore, Walnut

#### **USE PRECAUTONS:**

Treated trees must be growing in areas where commercial fruit or nut harvest will not occur. Make over-the-top applications to non-bearing trees only. Treat over the top of transplanted trees after they are well established. Temporary yellowing and growth reduction may occur in some species.

#### **Broadcast Application Instructions**

Use Rate: up to 1 1/3 oz. of this product/acre (0.061 lb. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v).

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

# **USE RESTRICTIONS:**

**DO NOT** use more than 11/3 oz./acre of this product (0.062 lb. ai) per application.

**DO NOT** apply more than 2 application per year.

**DO NOT** use more than 2½ oz. of this product (0.124 lb. ai) per acre per year for all applications.

**DO NOT** make applications sooner than 21 days apart.

**DO NOT** apply by air.

# Selective Herbaceous Weed Control in Forestry Conifer Release (\*)

Weeds: Control or Partial Control of Herbaceous Weeds.

Apply in spring or early summer after planting loblolly, slash or longleaf pine, and in fallow silvicultural nursery sites for these species.

Best results are obtained when using Tank Mix Partner.

# **Broadcast Application Instructions**

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lbs. ai/acre)

Apply 10-50 gallons of spray suspension per acre by ground.

Apply 5-30 gallons of spray suspension per acre by air. (Helicopter only)

Use a nonionic surfactant at a rate of 1 quart per 100 gallons of water (0.25% v/v). (Minimum 90% active surfactant)

Use the higher specified application rate of this product to control large established weeds or when weed growth is heavy or dense.

Follow-up applications can be made after suitable weed re-growth.

#### **USE RESTRICTIONS:**

\*Not for use in California.

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year at lower rate of 1 oz. (0.047 lb. ai).

**DO NOT** use more than 2.0 oz. of this product (0.093 lb. ai) per acre per year.

**DO NOT** make applications sooner than 30 days apart.

Aerial application by helicopter only.

#### **Tank Mixture Partners**

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in Selective Herbaceous Weed Control in Forestry Conifer Release (\*.)

Any of these mixtures can be used as a broadcast spray or in a banded application around trees to reduce potential for soil erosion.

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

Use Rate:  $\frac{3}{4} - 2.0$  oz. of this product/acre (0.035 - 0.093 lb. ai/acre)

#### **Tank Mix Partners:**

| Tank Mix Partner                                     | Application Rate**  |
|--|---|
| Arsenal Applicators Concentrate* (EPA Reg. No. 241-  | 4 fl. oz./acre (.125 lb. ai / acre)                         |
| 299, imazapyr)                                       |   |
| Arsenal Applicators Concentrate * (EPA Reg. No. 241- | 4 fl. oz./acre (.125 lb. ai / acre) + 1 fl. oz./ acre (.005 |
| 299, imazapyr) + Oust (EPA Reg. No. 352-401,         | lb. ai / acre)  |
| sulfometuron) or Oust XP (EPA Reg. No. 432-1552,     |   |
| sulfometuron)  |   |
| Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP | 1-2 fl. oz./acre (.046093 lb. ai / acre)                    |
| (EPA Reg. No. 432-1552, sulfometuron)                |   |
| Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP | 1-2 fl. oz./acre + 0.375-0.05 lb./acre (.046093 lb. ai      |
| (EPA Reg. No. 432-1552, sulfometuron) + Velpar (EPA  | / acre) + (.281562 lb. ai / acre)                           |
| Reg. No. 432-1576, hexazinone)                       |   |
| Oustar (EPA Reg. No. 432-1553, sulfometuron)         | 8-12 fl. oz./acre (.316474 lb. ai / acre)                   |
| Velpar (EPA Reg. No. 432-1576, hexazinone)           | 0.375-0.75 lb./ acre (.281562 lb. ai / acre)                |

<sup>\*</sup> Use of surfactant not advised with these products for slash and longleaf pine.

Any of these mixtures can be used as a broadcast spray or in a banded application around trees to reduce potential for soil erosion.

# Winter Wheat and Spring Wheat (\*\*)

(\*\* Not for Use in California) and New York)

Preharvest Interval (PHI):

- Wheat forage may be grazed immediately after application of this product.
- **DO NOT** harvest wheat for hay within 30 days of application of this product.
- **DO NOT** harvest wheat for grain within 55 days of application of this product.

For optimum control of listed weeds, apply to actively growing weeds and **DO NOT** disturbed by mowing for at least 14 days before or 14 days after application.

# **Application Equipment and Techniques**

Uniform and through spray coverage of weeds is required for optimum control. Use properly calibrated application equipment. Select nozzles that provide optimum spray distribution and ensures uniform coverage at the appropriate spray pressure to minimize streaking, skips, overlaps and spray drift during application.

To the extend consistent with applicable law, Aceto Life Sciences, L.L.C. will not be liable for rotational crop injury from spray overlaps.

#### **Ground Broadcast Application**

Apply this product at the rates specified in 5 to 20 gallons of water per acre or in 10-40 gallons of liquid fertilizer solution per acre.

<sup>\*\*</sup> These are suggested tank mix partner application rates. **DO NOT** exceed the maximum application rate specified on tank mix partner label.

#### **Aerial Application**

Apply this product at the rates specified in 5 to 15 gallons of water per acre.

# **Applications in Liquid Fertilizer Carrier**

This herbicide provides most consistent performance when applied with water as the spray carrier and surfactant is added to the spray solution. Liquid nitrogen fertilizer solutions (28-0-0 or 32-0-0) may, however, be used as a spray carrier in place of all or part of the water when the label directions are followed.

Fertilizer solutions must contain less than 50 percent liquid nitrogen and not exceed 30 pounds of actual nitrogen per acre.

Nonionic surfactants must be added at 1 quart per 100 gallons of spray suspension (0.25% v/v) to spray solutions containing liquid fertilizer.

#### **USE RESTRICTIONS:**

**DO NOT** use in fertilizer solutions of pH 5 or less.

#### **USE PRECAUTIONS:**

Fall applications of this herbicide in liquid fertilizer solutions may cause rapid leaf burn, resulting in reduced weed control and reduced forage growth.

#### Tank mixtures with Insecticides

This product may be tank-mixed or used sequentially with insecticides labeled for use in wheat, except malathion.

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

#### **USE RESTRICTIONS:**

**DO NOT** use this product with malathion, as crop injury may result.

**DO NOT** use tank mixtures of this product plus insecticides when the wheat crop has significant insect damage, is under drought stress, or when growth is negatively influenced by other environmental stresses, including nutrient deficiency, poor soil pH, or disease.

**DO NOT** apply this product within 60 days of crop emergence where an organophosphate insecticide has been applied as an in-furrow treatment, as crop injury may result.

#### Winter Wheat

When applied to winter wheat as directed in this section, the following weeds are either controlled or suppressed by this product as indicated for either preemergence application, postemergence application in the fall, or postemergence application in the spring.

# Wheat Weeds Control Table

| Common Name                    | Scientific Name         | Pre | Fall Post | <b>Spring Post</b> |
|--------------------------------|-------------------------|-----|-----------|--------------------|
| Barley, volunteer              | Hardeum vulgare         | С   | С         | S                  |
| Bedstraw, catchweed            | Galium aparine          | S   | С         | С                  |
| Bluegrass, bulbous             | Poa bulbosa             | •   | •         | С                  |
| Bluegrass, roughstalk          | Poa trivialis           | •   | С         | •                  |
| Brome, downy                   | Bromus tectorum         | С   | С         | S                  |
| Brome, Japanese                | Bromus japonicus        | С   | С         | S                  |
| Brome, ripgut                  | Bromus rigidus          | •   | S         | S                  |
| Chamomile, mayweed             | Anthemis cotula         | •   | С         | C                  |
| Cheat                          | Bromus secalinus        | С   | С         | S                  |
| Chess, hairy                   | Bromus commutatus       | С   | С         | S                  |
| Chickweed, common              | Stellaria media         | •   | S         | С                  |
| Fiddleneck, tarweed            | Amsinckia lycopsoides   | •   | S         | S                  |
| Flixweed                       | Descurainia sophia      | S   | S         | S                  |
| Henbit                         | Lamium amplexicaule     | S   | S         | •                  |
| Lady's-thumb                   | Polygonum persicaria    | •   | •         | S                  |
| Mustard, tumble                | Sisymbrium altissimum   | S   | С         | С                  |
| Mustard, wild                  | Sinapis arvensis        | С   | С         | С                  |
| Oat, wild (fall germinating)   | Avena fatua             | •   | S         | S                  |
| Oat, wild (spring germinating) | Avena fatua             | •   | •         | S                  |
| Pennycress, field              | Thlaspi arvense         | S   | S         | S                  |
| Quackgrass                     | Elytrigia repens        | •   | •         | С                  |
| Rescuegrass                    | Bromus catharticus      | •   | S         | S                  |
| Ryegrass, Italian              | Lolium multiflorum      | •   | S         | S**                |
| Shepherd's-purse               | Capsella bursa-pastoris | •   | •         | С                  |
| Tansymustard, pinnate          | Descurainia pinnata     | S   | S         | S                  |
| Wallflower, bushy              | Erysimum repandum       | •   | С         | С                  |

<sup>\*\*</sup> Spring application will provide suppression only in WA, ID, OR.

C = Control S = Suppression • = Not Control or Suppressed

This product can be applied in winter wheat either as a single preemergence application, a single postemergence application, or as a split postemergence application to control or suppress the weeds listed in this section. Best weed control is obtained when soil moisture is adequate to support vigorous wheat and weed growth.

Choose one of the following application scenarios.

# **Preemergence in Winter Wheat**

Use this product preemergence to winter wheat at  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre in a single application. Preemergence applications of this product must be made after drilling wheat but before wheat or weed emergence.

#### **USE RESTRICTIONS:**

**DO NOT** use preemergence application if dry soil conditions will cause delayed wheat and/or weed emergence.

Preemergence applications under dry soil conditions can:

- 4. Increase the risk of wheat injury due to slow and inconsistent winter wheat germination and growth prior to winter dormancy. (If winter wheat does not reach the 3-leaf stage prior to winter dormancy, a negative crop response the following spring can be expected.)
- 5. Result in poor weed control performance
- 6. Make this product vulnerable to wind erosion until fall moisture is received.

Under these conditions wait until crop and weeds have emerged and are showing good vigor, and then follow directions for postemergence application.

**DO NOT** use preemergence applications for no-till systems or when high crop residue levels (plant material) are present on the soil surface.

# Postemergence in Winter Wheat-Single Application

Apply this product at  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre in a single application when the target weeds listed in this section are actively growing. Use a nonionic surfactant at a rate of 2 quarts per 100 gallons of water (0.5% v/v) with this postemergence application.

In the states of KS, OK, TX and MT, the single postemergence application can be made after the wheat is in the 2- leaf stage, but prior to the jointing stage (Feekes' Scale 6). In all other states, postemergence application can be made after the wheat emerges, but prior to the jointing stage (Feekes' Scale 6).

#### Brome (Cheat, Downy Brome, Japanese Brome)

For best control of brome species, apply this product as a single postemergence fall application of  $\frac{2}{3}$  oz. of product (0.031 lb. ai) per acre when brome is in the 2- to 3-leaf stage of growth. Best performance with fall applications of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence suppression of brome species, apply a single application of  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre when brome has recovered from cold weather (majority of foliage is green and not red or purple) and is actively growing. For best control, apply when brome is less than the 5-tiller stage of growth.

#### Mustards and other winter annual broadleaf weeds

For fall postemergence control of mustards and other winter annual broadleaf weeds, apply  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre in a single application. For best control, apply when weeds are less than 2 inches in diameter. Best performance with fall application of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence control of winter annual broad leaf weeds, apply  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre. For best control, make application when weeds are less than 2 inches in diameter. Use tank mixtures with broad-leaf herbicides when winter annual broadleaf weeds are greater than 2 inches in diameter.

# Postemergence in Winter Wheat-Split Application

[Optional Statement: For use only in the following states: Idaho, Montana, Oregon, Washington, and Wyoming]

As an alternative to a single postemergence application, this product may be applied to winter wheat in a split application. Start with an initial application of  $\frac{3}{8}$  oz. of product (0.017 lb. ai) per acre after winter wheat and target weeds have emerged and are beyond the 2-leaf stage, followed by a second application of  $\frac{3}{8}$  oz. of this product (0.017 lb. ai) per acre in the spring, no sooner than two weeks following the initial application but prior to boot stage (Feekes' Scale 9). Add a nonionic surfactant at a rate 2 quarts per 100 gallons of spray water (0.5% v/v) with this postemergence application.

#### **USE RESTRICTIONS:**

**DO NOT** exceed ¾ oz. of this product (0.035 lb. ai) per acre per year for split applications only.

**DO NOT** use more than \(^3\)\(\text{s}\) oz./acre of this product (0.0175 lb. ai) per application.

**DO NOT** apply more than 2 application per year.

**DO NOT** use more than ¾ oz. of this product (0.035 lb. ai) per acre per year.

**DO NOT** make applications sooner than 14 days apart.

#### **Tank Mixtures for Winter Wheat**

For additional broadleaf weed control, this product may be applied as a spring postemergence application to winter wheat in a tank mixture with the following herbicides.

2,4-D amine <sup>1,2,3</sup> (EPA Reg. No. 81927-38),

Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690),

Buctril (bromoxynil) (EPA Reg. No. 264-437),

Buctril 4EC (bromoxynil) (EPA Reg. No. 264-540),

MCPA amine <sup>1,2,3</sup> (EPA Reg. No. 1381-104),

MCPA LV ester<sup>2</sup> (EPA Reg. No. 9779-265),

Sencor DF (metribuzin)<sup>3,4</sup> (EPA Reg. No. 264-738).

Tank mixtures with herbicides formulated as amines may decrease the effectiveness of this product.

Refer to individual tank-mix product label for application rate and restrictions related to soil texture, soil organic matter, and wheat growth stage.

Tank mixtures with metribuzin may be applied only in the spring.

See the MIXING section of this label for additional information on Tank Mixtures.

#### Spring Wheat

When this product is applied to spring wheat as directed in this section, the following weeds are either controlled or suppressed as indicated for either preemergence or postemergence application:

| Weed Species      | Pre | Post |
|-------------------|-----|------|
| Oat, wild         | •   | С    |
| Avena fatua       |     |      |
| Sunflower, common | C   | С    |
| Helianthus annuus |     |      |
| Quackgrass        | •   | S    |
| Elytrigia repens  |     |      |
| Barley, volunteer | S   | S    |
| Hordeum vulgare   |     |      |

C = Control S= Suppression • = Not controlled or suppressed

In spring wheat, apply a single postemergence application of  $\frac{2}{3}$  oz. of this product (0.031 lb. ai) per acre when soil moisture is adequate to support vigorous wheat and weed growth, and prior to jointing stage (Feekes' scale 6). Use a nonionic surfactant at a rate of 2 quarts per 100 gallons of spray water (0.5% v/v) with this postemergence application.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product postemergence to durum wheat.

For wild oat control, apply ½ oz. of this product (0.031 lb. ai) per acre when wild oat is in the 1 to 4 true leaf stage.

#### **Tank Mixtures for Spring Wheat**

For additional broadleaf weed control, this product may be applied to spring wheat in a tank mixture with the following herbicides:

<sup>&</sup>lt;sup>1</sup> Tank mixtures with this herbicide may result in reduced control of brome species.

<sup>&</sup>lt;sup>2</sup> Tank mixtures with this product may be made provided the specific product being used is registered for postemergence application to wheat.

<sup>&</sup>lt;sup>3</sup> Not required for use with split application rate of <sup>3</sup>/<sub>8</sub> oz. of this product (0.0175 lb. ai).

<sup>&</sup>lt;sup>4</sup> Different formulations of the active ingredient may be used, provided that the specific product being used is registered for postemergence application to wheat.

2,4-D amine<sup>1,2</sup> (EPA Reg. No. 81927-38),

Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690),

Buctril (bromoxynil) (EPA Reg. No. 264-437

Buctril 4EC (EPA Reg. No. 264-540),

Cheyenne (fenoxaprop + MCPA) (EPA Reg. No. 264-654),

Curtail (clopyralid + 2,4-D)1 (EPA Reg. No. 62719-48),

Dakota (fenoxaprop + MCPA) (EPA Reg. No. 83100-38-83979),

MCPA amine<sup>1,2</sup> (EPA Reg. No. (1381-104),

MCPA LV ester<sup>2</sup> (EPA Reg. No. 9779-265),

Stinger (clopyralid) (EPA Reg. No. 62719-73,)

Tiller (fenoxaprop + 2,4-D + MCPA) (EPA Reg. No. 264-649).

#### **Crop Rotation Restrictions**

No crop other than wheat may be planted sooner than 3 months after application of this product.

The following tables provide crop rotation intervals (months) for selected crops based on soil pH and cumulative precipitation by geographic region. For soils with pH higher than listed or for cumulative precipitation less than listed, a successful field bioassay must be completed before planting, as described in this section under Field Bioassay. If a shorter rotation interval other than that listed for a crop is desired, a successful field bioassay must be completed before planting.

All crops other than those listed in these tables may be seeded into fields treated with this product only after the completion of a successful field bioassay.

# Field Bioassay

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in fields previously treated with this product. Crop response will determine if the crop(s) planted in the test strips can be adequately grown in these areas.

Table 1- OK, KS, NE, TX

| Crop   | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|--|---------|-----------------------------------|----------------------------|
| Millet   | <7.5    | 18                                | 3                          |
| Corn- IR<br>(imidazolinone<br>resistant)   | <7.5    | 18                                | 3                          |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean)                          | <7.5    | 18                                | 3                          |
| Winter Canola (varieties that exhibit resistance to sulfonylurea herbicides)         | <7.5    | 18                                | 3                          |
| Corn- normal   | <7.5    | 30                                | 12                         |
| Cotton   | <7.5    | 30                                | 12                         |
| Soybean  | <7.5    | 30                                | 12                         |
| Sorghum (grain)  | 6.0-7.5 | 30                                | 22                         |
| Sunflower  | <6.0    | 30                                | 17                         |
| Winter Canola (varieties that do not exhibit sensitivity to sulfonylurea herbicides) | 6.0-7.5 | 30                                | 22                         |

<sup>&</sup>lt;sup>1</sup> Tank mixtures with this herbicide may result in reduced control of grass species.

<sup>&</sup>lt;sup>2</sup>Tank mixtures with this herbicide may be made provided the specific product is registered for this use.

Table 2- WA, OR, ID

| Crop  | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|---|---------|-----------------------------------|----------------------------|
| Millet  | <7.5    | 18                                | 3                          |
| CLEARFIELD Canola   | <7.5    | 18                                | 3                          |
| Corn- IR<br>(imidazolinone<br>resistant)                    | <7.5    | 18                                | 3                          |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <7.5    | 18                                | 3                          |
| Potato  | <7.5    | 18                                | 12                         |
| Barley  | <7.5    | 24                                | 22                         |
| Canola  | <7.5    | 24                                | 22                         |
| Corn- normal  | <7.5    | 24                                | 22                         |
| Lentils   | <7.5    | 24                                | 22                         |
| Peas*- all classes  | >6.5    | 24                                | 22                         |
| (including chickpeas)                                       | <6.5    | 30                                | 17                         |
| Soybean   | <7.5    | 24                                | 22                         |

<sup>\*</sup> Peas must not be planted on clay or eroded hillsides treated with **THIS PRODUCT** without conducting a field bioassay as described in this section.

Table 3- CO, SD, WY

| Стор  | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval<br>(Months) |
|---|---------|-----------------------------------|-------------------------------|
| Millet  | <7.5    | 18                                | 3                             |
| Corn- IR<br>(imidazolinone<br>resistant)                    | <7.5    | 18                                | 3                             |
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <7.5    | 18                                | 3                             |
| Corn- Normal  | <7.5    | 24                                | 22                            |
| Soybean   | <7.5    | 24                                | 22                            |
| Sorghum (grain)   | 6.5-7.5 | 45                                | 34                            |
| Sunflower   | <6.5    | 35                                | 22                            |

# Table 4- MT, ND

| Crop              | Soil pH | Cumulative Precipitation (Inches) | Rotation Interval (Months) |
|-------------------|---------|-----------------------------------|----------------------------|
| CLEARFIELD Canola | < 7.5   | 12                                | 12                         |

**Table 5- All Other Regions** 

| Crop  | Soil pH      | Cumulative Precipitation (Inches) | Rotation Interval<br>(Months) |
|---|--------------|-----------------------------------|-------------------------------|
| Soybean- STS <sup>TM</sup> (sulfonylurea resistant soybean) | <6.5         | 30                                | 3                             |
| Soybean   | <6.5<br><7.5 | 30<br>24                          | 5<br>12                       |

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a dry and secure location.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

[Plastic bottle packaging:]

**CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse or pressure 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 <sup>1</sup>/<sub>4</sub> full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows**: Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once triple rinsed, recycle if available. Some agricultural pesticide containers can be taken to a container collection site or pick up for recycling. To find the nearest site, contact your chemical dealer or manufacturer. If recycling is not available, dispose of in a sanitary landfill or by incineration if allowed by state and local ordinances.

[55 lb. Drums with Liners:]

**CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into the handling or application equipment. Then offer for recycling if available, or dispose of liner in a sanitary landfill, or by incineration, or by burning, if allowed by state and local authorities. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

#### WARRANTY DISCLAIMER AND NOTICE

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS**: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aceto Life Sciences, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ACETO LIFE SCIENCES, LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Aceto Life Sciences, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ACETO LIFE SCIENCES, LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY**: To the extent consistent with applicable law, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT ACETO LIFE SCIENCES, LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

All trademarks are the property of their respective owners.

Made in India [,] [formulated in USA] [&] [packaged in USA]

SULFOSULFURON GROUP 2 HERBICIDE

[Information in brackets [] is optional]

# ACETO SULFOSULFURON 75% WDG HERBICIDE

[Alternate brand names include] [Herald<sup>TM</sup> 75% WDG Herbicide]

ACETO SULFOSULFURON 75% WDG HERBICIDE is a herbicide for selective control of listed annual and perennial grasses and broadleaf weeds in Non-crop, Highly Maintained Turf, Ornamental and Native Grass Use Sites.

Read the entire label before using this product.

Use only according to label instructions.

[See [inside booklet] [back panel] for [First Aid], Precautionary Statements] [and] [Directions for Use]]

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

| ACTIVE INGREDIENT:   | % BY WT. |
|--|----------|
| Sulfosulfuron: <i>N</i> -[(4,6-dimethoxypyrimidin-2-yl)carbamoyl]-2-(ethylsulfonyl)imidazo |          |
| [1,2-a]pyridine-3-sulfonamide  | 75%      |
| OTHER INGREDIENTS:   | 25%      |
| TOTAL  | 100%     |

EPA Reg. No. 2749-XXX Net Contents: 10, 20 ounces EPA Est. No. 55 lb. (25kg)

Manufactured for: Aceto Life Sciences, LLC 4 Tri Harbor Court Port Washington, NY 11050

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

| First Aid  |  |  |  |  |
|--|--|--|--|--|
| • Hold eye open and rinse slowly and gently with water for 15-20 minutes.                                |  |  |  |  |
|  | <ul> <li>Remove contact lenses, if present, after the first 5 minutes, then<br/>continue rinsing eye.</li> </ul> |  |  |  |
|  | <ul> <li>Call poison control center or physician for treatment advice.</li> </ul>                                |  |  |  |
| Have the product container or label with you when calling a poison control center or physician, or going |  |  |  |  |
| for treatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL                                      |  |  |  |  |
| CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.  |  |  |  |  |

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- 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 STATEMENTS:**

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

# **USER SAFETY RECOMMENDATIONS:**

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should 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.

FOR CHEMICAL SPILL, LEAK, FIRE, EXPOSURE OR MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL CHEMTREC® TOLL FREE 1-800-424-9300 or 1-703-527-3887.

#### **ENVIRONMENTAL HAZARDS**

This product is highly toxic to non-target plants. **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** contaminate water when disposing of equipment washwaters or rinsate.

**Ground Water Advisory:** This chemical has properties and characteristics associated with chemicals detected in ground water. 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 impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having 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 Sulfosulfuron from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### PHYSICAL AND CHEMICAL HAZARDS

**DO NOT** mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label or in separately published Aceto Supplemental 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.

#### **Non-Target Organism Advisory**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

#### Windblown Soil Particles Advisory

ACETO SULFOSULFURON 75% WDG HERBICIDE has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying ACETO SULFOSULFURON 75% WDG HERBICIDE if prevailing local conditions may be expected to result in off-site movement.

# 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, forest, nurseries and green houses, 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 the label about personal protective equipment (PPE), 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 this 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, including plants, soil or water, is:

- Coveralls
- Shoes plus socks
- Chemical-resistant gloves, made of waterproof materials.

#### 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.

Keep people and pets off treated areas until spray solution has dried.

#### **Product Information**

ACETO SULFOSULFURON 75% WDG HERBICIDE is a selective systemic post-emergent sulfonylurea herbicide for the control of various listed annual and perennial sedges, grasses and broad leaf weeds in non-crop areas, highly maintained turf and native grasses, sod farms and ornamental nurseries. Sulfosulfuron exhibits systemic post-emergence herbicidal activity on a broad spectrum of annual and perennial sedges, grasses, and broadleaf weeds, but does not injure many warm season and some cool-season grasses. Sulfonylurea herbicides disrupt amino acid biosynthesis in susceptible plants by binding to the acetolactate synthase (ALS) enzyme.

**Non-crop Use Sites**: airports, conservation areas, ditch banks, dry ditches, dry canals, fallow areas, fencerows, industrial sites, natural areas, roadsides, utility rights-of-way, utility sites and substations and wildlife areas, turf including residential, commercial, apartment complexes, athletic fields cemeteries, golf courses airways, golf course rough golf course tees and other golf course areas, hotel properties, nurseries, office complexes, parks, school grounds, sod and turfgrass seed farms, landscape areas, ornamental nurseries.

**Time to Symptoms:** This product is absorbed through the roots and foliage of plants. Soon after application, growth of susceptible weeds is inhibited. Susceptible weed grow stops within 24 hours of treatment even though visual symptoms are slow to develop. Following growth inhibition, affected plants may appear dark green and stunted, affected leaves will turn yellow and/or red, and the growing point of the plant may turn reddish-purple. These visible effects of control may not be observed for 1 to 3 weeks after application. Within 6 weeks after application the growing points die. Warm and moist conditions following application will accelerate herbicidal activity. Cool, dry conditions will delay herbicidal activity. Weeds stressed by drought are less susceptible to this product.

When to Spray: Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.

**USE PRECAUTONS:** Avoid contact of this product with the roots or foliage of susceptible non-target vegetation as injury may occur. This includes areas where this product may be washed or moved into contact with roots of desirable vegetation. Susceptible plants may be injured if seeded or transplanted into treated areas unless otherwise directed in this label.

**Rainfastness:** Heavy rainfall soon after application (less than 2 hours) may wash this product off of the foliage and a repeat application may be required for adequate control.

# **Weed Resistance Management**

For resistance management, SULFOSULFURON 75% WDG Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to SULFOSULFURON 75% WDG Herbicide and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

See specific use directions for maximum single application rate, annual maximum number of applications and amount of active ingredient.

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

- Rotate the use of ACETO SULFOSULFURON 75% WDG Herbicide or other Group 2 herbicides within a
  growing season sequence or among growing seasons with different herbicide groups that control the same
  weeds in a field.
- 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 certified crop 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 and uses historical
  information related to herbicide use and crop rotation, and that considers tillage (or other mechanical
  control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and
  timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other
  management practices.
- Users should scout before and 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 including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest 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 mode of action, if available.

- Users must report lack of performance to the registrant or their representative.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.

#### **Mixing Instructions**

ACETO SULFOSULURON 75% WDG HERICIDE is a water dispersible granule designed to be diluted with water at the rates listed in the specific use directions. Fill the spray tank with approximately ½ of the desired volume with water. With the agitation operating, add the specified amount of the formulation as listed in the targeted use directions. Complete the filling process while maintaining agitation. Remove the hose from the mixing tank immediately after filling to avoid siphoning back into the carrier source. Add nonionic surfactant and other spray additives as the last ingredients in the tank. Allow time to fully disperse.

Since this product forms a suspension in water, it is important to maintain good agitation during mixing and spraying. If the spray suspension is allowed to settle for a short period of time, be sure to agitate the spray suspension for a minimum 10 minutes. Apply spray suspensions within 24 hours after mixing.

# Mixing for Hand-Held Sprayers

Hand-held sprayer applications must be made at a rate of 2 gallons of spray solution per 1000 square feet. Using the measuring scoop provided in the product packaging, follow the instructions below to prepare the proper spray solution.

#### **Measuring Scoop Instructions**

Using the SMALL SCOOP (0.16-gram scoop) provided, refer to the following table for the Number of Scoops of product required to achieve the Desired Application Rate when mixed in 2 gallons of water.

| Desired Application<br>Rate (oz. of | Number of scoops<br>(small scoop) | Mix volume<br>(gallons of | Spray Rate (gallons/1000 ft <sup>2</sup> ) |
|-------------------------------------|-----------------------------------|---------------------------|--|
| 3/4                                 | 3                                 | 2.0                       | 2  |
| 1.0                                 | 4                                 | 2.0                       | 2  |
| 11/4                                | 5                                 | 2.0                       | 2  |

Using the LARGE SCOOP (0.8-gram scoop) provided, refer to the following table for the appropriate Mix Volume (gallons of water) required to achieve the **Desired Application Rate**.

| <b>Desired Application</b> | Number of scoops | Mix volume  | Spray Rate                      |
|----------------------------|------------------|-------------|---------------------------------|
| Rate (oz. of               | (large scoop)    | (gallons of | (gallons/1000 ft <sup>2</sup> ) |
| 3/4                        | 1                | 3.3         | 2                               |
| 1.0                        | 1                | 2.5         | 2                               |
| 11/4                       | 1                | 2.0         | 2                               |
| 2.0                        | 2                | 2.5         | 2                               |

Ensure that product is measured as a level scoop and is not rounded.

# **Spray Additives**

Spray additives including nonionic surfactant (NIS) are used with this product to improve performance. The typical nonionic surfactant contains a minimum of 80% NIS and is accepted by the EPA for use on food crops. The use rate is 1 to 2 quarts NIS concentrate per 100 gallons of spray mixture (025 to 0.5% v/v). NIS is the only spray additives required to improve efficacy.

#### **USE RESTRICTIONS:**

**DO NOT** use nonionic surfactants (NIS) or other additives that lower the pH of the spray suspension below pH 5.

#### **USE PRECAUTIONS:**

Use of surfactants that contain d 'Limonene, methylated seed oil, or COC (crop oil concentrate) may cause temporary turf discoloration.

Colorants or marking dyes may be added to spray solutions of this product; however, they can reduce product performance. Use colorants and dyes according to the manufacturer's specifications.

# **Use Rate Equivalency**

Since ACETO SULFOULFURON 75% WDG HERBICIDE contains 75% w/w active ingredient per lb. of product, the following table expresses the use rate equivalency of oz. of this product in term of lb. sulfosulfuron on a per acre basis.

| oz. of Product | lb. Sulfosulfuron |
|----------------|-------------------|
| per acre       | per acre          |
| 1/4            | 0.011             |
| 1/3            | 0.0175            |
| 1/2            | 0.023             |
| 2/3            | 0.031             |
| 3/4            | 0.035             |
| 1.0            | 0.046             |
| 11/4           | 0.058             |
| 11/3           | 0.061             |
| 1½             | 0.07              |
| 2.0            | 0.093             |
| 21/2           | 0.117             |
| 22/3           | 0.124             |

# **Application Methods**

This product may be applied using ground spray application equipment. Apply spray suspensions of this product using properly maintained and calibrated equipment capable of delivering desired volumes. Use equipment that is capable of continuous and vigorous agitation. Use an agitation system capable of creating a rippling or rolling action on the liquid surface when the tank is full.

Uniform, thorough spray coverage is important to achieve consistent weed control. Calibrate application equipment according to manufacturer's specifications. Use nozzle type arrangements that provide optimum spray distribution and maximum coverage while avoid contact to sensitive plant foliage.

Thoroughly clean application equipment immediately after use and prior to spraying other use sites. See Spray Equipment Cleanout section of this label for complete details.

#### **USE RESTRICTIONS:**

**DO NOT** apply this product through any type of irrigation system.

**DO NOT** apply by air.

**DO NOT** allow this herbicide suspension to mist, drift, or splash onto desirable vegetation or soil areas where sensitive plants will be planted, as minute quantities of this product can cause severe damage or destruction to susceptible plants on which treatment was not intended.

#### MANDATORY SPRAY DRIFT

#### **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

#### **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- DO NOT apply when wind speeds exceed 10 miles per hour 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.

#### **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 rate.
- 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**

• Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. 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 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 dissipates 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.

# **Boom-less Ground applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

#### **Handheld Technology Applications:**

• Take precautions to minimize spray drift.

#### **Spray Equipment Cleanout**

The mix tank and spray equipment cleanout are an important stewardship activity to avoid injury to desirable plants. It is important to clean all mixing and spraying equipment immediately after use and before using pesticide products including SULFOSULFURON 75% WDG HERBICIDE.

To clean the spraying equipment, follow the procedure outlined below:

- Completely drain the mix tank and/or sprayer, and then wash thoroughly the tank, sprayer, boom and nozzles with clean water. Drain the system again.
- Fill the mixing or spray tank half full with clean water and add domestic ammonium, normally a 3% v/v solution, at a dilution rate of 1% v/v ammonium or 1 gallon per 100 gallons of rinsate.
- Completely fill the tank(s) with additional clean water. Agitate and recirculate and flush out the boom and hoses. Let the system run for 10 15 minutes. Drain the system completely.
- Remove nozzles and screens and dislodge any visible solid material. Then soak them in a 1% v/v ammonium solution. Inspect the nozzles and screen and remove any visual residues.
- Repeat the above procedure for a second time.
- Flush the mix tank and/or sprayer, boom and hoses with clean water. Drain the system again and inspect for any visible residues. If present, repeat the cleaning cycle again.
- If the rinsate cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

# **Tank Mixtures**

To improve this product's effectiveness, apply in combination with other pesticide products that are registered for the same crop and application techniques.

Tank mixtures of this product with other herbicide products may be used to provide a broader spectrum of weed control and an alternate mode of herbicidal action. Tank-mix this product with other herbicides or materials that are listed in the specific use site sections of this label. Refer to each individual product label or supplemental labeling for all products in the tank mixture, and observe all instructions, precautions and limitations on the label, including application rates and restrictions related to soil texture and soil organic matter. Use the mixture according to the most restrictive precautionary statements for each product in the tank mixture.

A list of potential herbicide tank mixture partners is provided in the use direction section under each use site. This list is an example of products used but is not an all inclusive list. For current information on the best tank mixture partner in your area, consult with the local dealer, distributor or State Agricultural Extension service.

Mixing this product with herbicides or other materials that are not listed on this label may result in reduced performance.

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

If this product is to be tank mixed with other herbicides, conduct a compatibility test prior to mixing. Use a small container and mix all components in a small amount, usually 0.5 to 1 quart of spray. Combine all products in the same ratio and order of addition as in the proposed spray mixture. Observe the mixture for indication of incompatibility which usual occurs in 10 to 30 minutes after mixing. If incompatibility is observed, try changing the order of addition of the components. The guideline on tank mixture partners is driven by formulation type. Start with wettable powders (WP's) including water soluble bags (WSB's), water dispersible granules (WDG's), suspension concentrated (SC's) or flowable (F's), all with very good agitation. Next follow with water miscible concentrates and emulsifiable concentrates (EC's) before adding drift control additives, nonionic surfactants (NIS's). After vigorous agitation, there must be a homogeneous suspension. Let the final tank mixture stand and observe for any rapid settling or floating of components. If any indications of physical incompatibility develop, **DO NOT** use this mixture for spraying.

#### WARM-SEASON TURFGRASSES

This product has been shown to be safe for use on the established warm-season turfgrasses listed in this section.

Warm-season turf grasses include Bermudagrass (common or hybrid), Bahiagrass, Buffalograss, Centipedegrass, Kikuyugrass, St. Augustinegrass, Seashore paspalum and Zoysiagrass

Use of this product may result in temporary chlorosis, and may affect the growth pattern or delay green-up of the desirable turf. St. Augustine grass and seashore paspalum may be more sensitive to this product than other grasses depending on environmental conditions, cultivar differences and other influential factors. For St. Augustine grass and seashore paspalum, test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

#### **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Sedge Control:**

**DO NOT** use more than 1½ oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

| Common Name           | Scientific Name       | Common Name      | Scientific Name    |
|-----------------------|-----------------------|------------------|--------------------|
| Kyllinga, false green | Kyllinga gracilima    | Nutsedge, yellow | Cyperus esculentus |
| Kyllinga, fragrant    | Kyllinga sesquifiorus | Sedge, globe     | Cyperus croceus    |
| Kyllinga, green       | Kyllinga brevifolia   | Sedges, annual   | Cyperus spp.       |
| Nutsedge, purple      | Cyperus rotundus      |                  |                    |

# Tall Fescue (Festuca arundinacea) Control

Best control of tall fescue is obtained when this product is applied at 1½ oz. (0.058 lb. ai) per acre followed by a second application of 1½ oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 oz. (0.093 lb. ai) per acre.

#### **USE RESTRICTIONS in Tall Fescue Control:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

# Dallisgrass (Paspalum dilatatum) Suppression in Bermudagrass

The following application includes the use of MSMA. MSMA can cause injury to common and hybrid bermudagrass turf. Test the following tank-mix requirements on a small area prior to wide-scale use to determine if this application is suitable for your bermudagrass management objectives.

For suppression of dallisgrass in bermudagrass turf, apply this product, when dallisgrass is actively growing, at a rate of 1¼ oz. of product (0.058 lb. ai) per acre in a tank mixture with 2 pounds of MSMA per acre and 0.25 % by volume nonionic surfactant (1 quart per 100 gallons of spray solution). Reapply this same tank mixture 2 to 4 days after initial application.

As an alternative program, apply MSMA at 2 pounds active ingredient per acre with 0.25 % by volume nonionic surfactant as an initial treatment, wait two days and apply 2.0 oz. of this product (0.093 lb. ai) per acre. Wait an additional two days and apply MSMA again at 2 pounds active ingredient per acre with 0.25 % by volume nonionic surfactant.

#### Virginia Buttonweed (Diodia virginiana) Suppression

For suppression of buttonweed apply this product at 1½ oz. (0.058 lb. ai) per acre. This application will provide suppression or partial control of buttonweed for 4 to 6 weeks.

For enhanced buttonweed control, tank-mix this product with a broad-leaf herbicide labeled for buttonweed control in the desired warm-season turfgrass. 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.

#### Annual Bluegrass (Poa annua) Control in Non-Overseeded Turf

For selective control of annual bluegrass (Poa annua), apply this product at  $1\frac{1}{4}$  to 2.0 oz. (0.058 - 0.093 lb. ai) per acre. Use the higher rate of this product for control in areas of established, dense weed infestation.

Best results are obtained when weeds are in the early stage of growth and prior to tillering.

IN DORMANT BERMUDAGRASS ONLY, tank mixtures of this product with Roundup PRO® (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO® (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) herbicides may be used to increase the spectrum of vegetation controlled. Read and follow the label directions, precautionary statements and all other label information on Roundup PRO (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) herbicides. Refer to the Roundup PRO (EPA Reg. No. 524-529, glyphosate-isopropylammonium) or Roundup QuikPRO (EPA Reg. No. 524-535, diquat dibromide + glyphosate, ammonium salt) product labels for approved application rates. Always apply tank mixtures according to the most restrictive precautionary statements of the products being used.

#### Annual Bluegrass (Poa annua) Control Prior to Overseeding Turf with Perennial Ryegrass

Apply this product at 2.0 oz. (0.093 lb. ai) per acre to control Poa annua prior to overseeding warm-season turf with perennial ryegrass. Begin applications after Poa annua germination and 7 to 10 days prior to overseeding.

#### Transition of Overseeded Perennial Ryegrass (Lolium perenne)

Best results are obtained by applying this product at 1¼ oz. (0.058 lb. ai) per acre followed by a second application of 1¼ oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application when daily temperatures are expected to exceed 80° F during the treatment period. If a single application is preferred, apply this product at oz. (0.093 lb. ai) per acre.

#### **USE RESTRICTIONS** in Transition of Overseeded Perennial Ryegrass:

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

#### Rescuegrass (Bromus catharticus) Control

For selective control of rescuegrass apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre followed by a second application of  $\frac{3}{4}$  oz. of this product (0.035 lb. ai) per acre at 4 to 10 weeks after the initial treatment. For best results, apply the initial treatment of this product in the fall or early winter when rescuegrass has germinated and is visible in the dormant turfgrass. Applications must be made when rescuegrass is actively growing and at the 2 to 4 leaf stage, but prior to tillering. If a single application is preferred, apply this product at  $\frac{1}{2}$  oz. (0.07 lb. ai) per acre.

#### **USE RESTRICTIONS in Rescuegrass Control:**

**DO NOT** use more than 1½ oz./acre of this product (0.07 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than  $1\frac{1}{2}$  oz. of this product (0.07 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

Where atrazine can be used in warm-season turfgrass apply this product at 1.0 oz. (.046 lb. ai) per acre plus atrazine at 0.5 pounds active ingredients per acre. This treatment will provide both postemergence and residual control of rescuegrass.

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1¼ to 2.0 oz. (0.058 - 0.093 lb. ai) per acre. Use the higher rate of this product for control in areas of established, dense weed infestation. If using an initial rate of application of 1¼ oz. of this product (0.058 lb. ai) per acre, a second application of 1¼ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS for Additional Weed Control in Warm Season Turfgrass:**

**DO NOT** use more than 2.0 oz./acre of this product (0.093 lb. ai) per application.

**DO NOT** apply more than 2 applications per year using lower application rates.

**DO NOT** use more than  $2\frac{1}{2}$  oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

# Warm Season Additional Weeds Controlled Table

| Common Name                       | Scientific Name          | Common Name                                  | Scientific Name          |
|-----------------------------------|--------------------------|--|--------------------------|
| Barley, little                    | Hardeum pusillum         | Dichondra, Caroline                          | Dichondra carolinensis   |
| Bedstraw, catchweed               | Galium aparine           | Garlic, wild                                 | Allium vineale           |
| Beggarweed Florida <sup>1</sup> * | Desmodium torluosum      | Geranium, Carolina <sup>1</sup>              | Geranium, carolinianum   |
| Bentgrass creeping <sup>1</sup>   | Agrostis stolonifera     | Henbit                                       | Lamium amplexicaule      |
| Bluegrass, bulbous                | Poa bulbosa              | Ivy, ground <sup>1</sup>                     | Glechoma hederacea       |
| Bluegrass, roughstalk             | Poa trivialis            | Johnsongrass                                 | Sorghum halepense        |
| Burweed, lawn                     | Salivialis               | Mustard, wild                                | Sisymbrium altissimum    |
| Buttercup                         | Ranunculus arvensis      | Pennycress, field                            | Thlaspi arvense          |
| Chamber bitter*                   | Phyllanthus urinaria     | Pennywort, lawn <sup>1</sup><br>(dollarweed) | Hydrocotyle bowlesioides |
| Chess, hairy                      | Bromus commutatus        | Quackgrass <sup>1</sup>                      | Elytrigia repens         |
| Chickweed, common                 | Stellaria media          | Ryegrass, perennial                          | Lolium perenne           |
| Clover, white                     | Trifloium repens         | Shepherd's-purse                             | Capsella bursa-pastoris  |
| Crowfootgrass                     | Dactyloctenium aegyptium | Violet, wild <sup>1</sup> *                  | Viola nephrophylla       |
| Dandelion                         | Taraxacum officinale     | Woodsorrell, yellow*                         | Oxalis stricta           |

<sup>&</sup>lt;sup>1</sup> Suppression or partial control only.

#### **COOL-SEASON TURFGRASSES [\*]**

[\*] [ NOT FOR USE IN CALIFORNIA]

[Specifications in this section are not intended for use in residential turf.]

This product is for use on creeping bentgrass, Kentucky bluegrass and Kentucky bluegrass mixtures with perennial ryegrass and/or fine fescues.

On cool-season turfgrass, apply this product only when turfgrass is actively growing and mowing is required. Applications made in the fall after temperatures have decreased and regular mowing is no longer required may have an increased potential to cause turf injury and may delay spring green-up.

Use of this product may result in temporary chlorosis and discoloration, and may temporarily affect the growth pattern of the desirable turf. These symptoms appear 7 to 10 days after application and are typically gone within 21 to 28 days. Turf response is more pronounced under extreme environmental conditions. Perennial ryegrass, fine fescues and creeping bentgrass are more sensitive to this product. If undesirable turf response occurs, skip or delay additional applications to allow turf to recover to a desirable quality. Over-application may result in severe turf injury, thinning or loss of turfgrass stands. Test this product on a small area prior to wide-scale use to determine if this product is suitable for your turf management and cultural practices.

<sup>[\*] [</sup>Not for Use in California].

#### **Weed Control in Established Creeping Bentgrass**

For use in established creeping bentgrass on golf course fairways, roughs, approaches and tees.

#### Roughstalk Bluegrass (Poa trivialis) Control

For suppression, apply ¼ oz. of this product (0.011 lb. ai) per acre. For control, up to two additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 14 to 21-day intervals may be made. Make all applications between June 1 and September 15.

For severe Poa trivialis infestations, apply a single application of <sup>3</sup>/<sub>4</sub> oz. (0.035 lb. ai) per acre of this product in late summer, 21 to 28 days prior to overseeding creeping bentgrass in a renovation approach. This treatment will result in temporary chlorosis and discoloration, and will temporarily affect the growth pattern of the desirable turf.

As Poa trivialis is controlled, bare patches may occur in the turf. Creeping bentgrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

#### **USE RESTRICTIONS in Bluegrass Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 3 applications per year when using lower rates.

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz. of this product (0.035 lb. ai) per acre per year.

**DO NOT m**ake applications sooner than 14 days apart.

#### Weed Control in Kentucky Bluegrass

Weed control specifications in this section are for use ONLY on established pure stands of Kentucky bluegrass.

#### **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at <sup>3</sup>/<sub>4</sub> oz. (0.035 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of <sup>3</sup>/<sub>4</sub> oz. of this product (0.035 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Sedge Control:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1½ oz. of this product (0.07 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart.

| Common Name      | Scientific Name     | Common Name    | Scientific Name |
|------------------|---------------------|----------------|-----------------|
| Kyllinga, green  | Kyllinga brevifolia | Sedge, globe   | Cyperus croceus |
| Nutsedge, purple | Cyperus rotundus    | Sedges, annual | Cyperus spp.    |
| Nutsedge, yellow | Cyperus esculentus  |                |                 |

#### Roughstalk Bluegrass (Poa trivialis) Control

Apply this product at  $\frac{1}{2}$  oz. (0.023 lb. ai) per acre followed by a second application of  $\frac{1}{2}$  oz. of this product (0.023 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre.

#### **USE RESTRCTIONS IN Roughstalk Bluegrass Control:**

**DO NOT** use more than ¾ oz./acre of this product (0.035 lb. ai) per application.

**DO NOT** apply more than 2 applications per year when using lower rates.

**DO NOT** use more than 1.0 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart.

As Poa trivialis is controlled, bare patches may occur in the turf. Kentucky bluegrass can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

#### **Tall Fescue Control**

Apply this product at  $\frac{3}{4}$  oz. (0.035 lb. ai) per acre followed by a second application of  $\frac{3}{4}$  oz. of this product (0.035 lb. ai) per acre at 21 to 28 days after the initial application.

#### **USE RESTRICTIONS in Fescue Control:**

**DO NOT** use more than ¾ oz./acre of this product (0.035 lb. ai) per acre per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT use** more than 1½ oz. of this product (0.07 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at ¾ oz. (0.035 lb. ai) per acre. A sequential application of ¾ oz. of this product (0.035 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS for Additional Weeds Controlled:**

**DO NOT** use more than <sup>3</sup>/<sub>4</sub> oz./acre of this product (0.035 lb. ai) per acre per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than  $1\frac{1}{2}$  oz. of this product (0.0.7 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

#### **Cool Season Additional Weeds Controlled Table**

| Common Name         | Scientific Name      | Common Name               | Scientific Name         |
|---------------------|----------------------|---------------------------|-------------------------|
| Barley, little      | Hardeum pusillum     | Garlic, wild <sup>1</sup> | Allium vineale          |
| Bedstraw, catchweed | Galium aparine       | Henbit <sup>1</sup>       | Lamium amplexicaule     |
| Bluegrass, annual   | Poa annual           | Ivy, ground <sup>1</sup>  | Glechoma hederacea      |
| Bluegrass, bulbous  | Poa bulbosa          | Johnsongrass              | Sorghum halepense       |
| Burweed, lawn       | Salivialis           | Mustard, tumble           | Sisymbrium altissimum   |
| Buttercup           | Ranunculus arvensis  | Mustard, wild             | Sinapis arvensis        |
| Chamber bitter      | Phyllanthus urinaria | Pennycress, field         | Thlaspi arvense         |
| Chamomile, mayweed  | Anthemis cotula      | Quackgrass <sup>1</sup>   | Elytrigia repens        |
| Chickweed, common   | Stellaria media      | Shepherd's-purse          | Capsella bursa-pastoris |
| Clover, white       | Trifloium repens     | Violet, wild              | Viola nephrophylla      |
| Dandelion           | Taraxacum officinale | Woodsorrell, yellow*      | Oxalis stricta          |

<sup>1</sup> Suppression or partial control only.

#### Weed Control in Mixed Stands of Kentucky Bluegrass

This product is specified for use only on established stands of Kentucky bluegrass that include perennial ryegrass and/or fine fescues.

Avoid application of this product on stands with a high percentage of perennial ryegrass or fine fescue.

Perennial ryegrass and fine fescues are more sensitive to this product, therefore, as the percentage of these grasses increase in the mix, occurrence of undesirable turf response will also increase. If undesirable turf response occurs, skip or delay additional applications to allow turf to recover to a desirable quality.

Over-application may result in severe turf injury, thinning or loss of turfgrass stands.

# **Sedge Suppression**

For the selective suppression of the weeds listed below apply this product at ½ oz. (0.023 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of ½ oz. of this product (0.023 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Sedge Suppression:**

**DO NOT** use more than ½ oz./acre of this product (0.0.23 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

[Alternatively, for suppression of the weeds listed below, apply ¼ oz. of this product (0.011 lb. ai) per acre. For additional control, up to three additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 28- day intervals may be made, if needed.]

| Common Name      | Scientific Name    | Common Name    | Scientific Name |
|------------------|--------------------|----------------|-----------------|
| Nutsedge, purple | Cyperus rotundus   | Sedge, globe   | Cyperus croceus |
| Nutsedge, yellow | Cyperus esculentus | Sedges, annual | Cyperus spp.    |

#### Roughstalk Bluegrass (Poa trivialis) Control

For suppression, apply ¼ oz. of this product (0.011 lb. ai) per acre. For control, up to two additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 14 to 21-day intervals may be made. Make all applications between June 1 and September 15.

#### **USE RESTRICTIONS in Roughstalk Bluegrass Control:**

**DO NOT** use more than ¼ oz./acre of this product (0.011 lb. ai) per application.

**DO NOT** apply more than 3 applications per year.

**DO NOT** use more than ¾ oz. of this product (0.035 lb. ai) per acre per year.

**DO NOT** make applications sooner than 14 days apart

For severe Poa trivialis infestations, apply a single application of  $\frac{1}{2}$  oz. (0.023 lb. ai) per acre of this product in late summer, 21 to 28 days prior to overseeding turfgrass in a renovation approach.

As Poa trivialis is controlled, bare patches may occur in the turf. Kentucky bluegrass, perennial ryegrass or fine fescues can be sodded or slit-seeded into the treated area beginning 14 days after the last application of this product in order to minimize regrowth of Poa trivialis and to maintain overall turf quality.

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at ½ oz. (0.023 lb. ai) per acre. A sequential application of ½ oz. of this product (0.023 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Additional Weeds Controlled:**

**DO NOT** use more than ½ oz./acre of this product (0.023 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

[Alternatively, for suppression of the weeds listed in this section, apply ¼ oz. of this product (0.011 lb. ai) per acre. For additional control, up to three additional applications of ¼ oz. of this product (0.011 lb. ai) per acre at 28-day intervals may be made, if needed.

#### **USE RESTRICTIONS** in Additional Weeds (Suppression and Control):

**DO NOT** use more than ½ oz./acre of this product (0.011 lb. ai) per application.

**DO NOT** apply more than 4 applications per year.

**DO NOT** use more than 1 oz. of this product (0.046 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

# **Cool Season Additional Weeds Suppression and Controlled Table**

| Common Name                      | Scientific Name      | Common Name                      | Scientific Name         |
|----------------------------------|----------------------|----------------------------------|-------------------------|
| Bedstraw, catchweed <sup>1</sup> | Galium aparine       | Henbit <sup>1</sup>              | Lamium amplexicaule     |
| Bluegrass, annual <sup>1</sup>   | Poa annual           | Ivy, ground <sup>1</sup>         | Glechoma hederacea      |
| Bluegrass, bulbous <sup>1</sup>  | Poa bulbosa          | Johnsongrass <sup>1</sup>        | Sorghum halepense       |
| Chamber bitter <sup>1</sup>      | Phyllanthus urinaria | Mustard, tumble                  | Sisymbrium altissimum   |
| Chamomile, mayweed <sup>1</sup>  | Anthemis cotula      | Mustard, wild                    | Sinapis arvensis        |
| Chickweed, common                | Stellaria media      | Pennycress, field                | Thlaspi arvense         |
| Clover, white <sup>1</sup>       | Trifloium repens     | Quackgrass <sup>1</sup>          | Elytrigia repens        |
| Dandelion <sup>1</sup>           | Taraxacum officinale | Shepherd's-purse                 | Capsella bursa-pastoris |
| Fescue, tall <sup>1</sup>        | Festuca arundinacea  | Woodsorrell, yellow <sup>1</sup> | Oxalis stricta          |
| Garlic, wild <sup>1</sup>        | Allium vineale       |                                  |                         |

<sup>1</sup> Suppression or partial control only.

#### **ORNAMENTALS**

This product is for use in woody ornamentals, perennial groundcovers and warm-season ornamental grasses.

For selective control or suppression of weeds listed in this section, apply this product at 1¼ oz. (0.058 lb. ai) per acre. A second application of 1¼ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed. Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.

[This product is for use in established woody ornamentals, perennial groundcovers and warm-season ornamental grasses growing in landscaped areas or field production nurseries. For selective control or suppression of weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre. A second application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed. Best results are obtained when target weeds are actively growing and not disturbed by mowing for at least 2 days before and 2 days after application.]

[This product may be applied at rates as a post-directed spray around any established warm-season ornamental grass or established woody ornamental species in landscaped areas. Avoid contact of this product with leaves of desirable plants as foliar injury, discoloration or loss of the plant may result.]

# **USE RESTRICTIONS in Ornamental Weed Control:**

**DO NOT** apply this product to container plants or production beds of potted plants.

**DO NOT** use more than 1½ oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

DO NOT make applications sooner than 28 days apart

# **Ornamental Additional Weeds Controlled Table**

| Common Name                     | Scientific Name          | Common Name                               | Scientific Name          |
|---------------------------------|--------------------------|---|--------------------------|
| Barley, little                  | Hardeum pusillum         | Ivy, ground <sup>1</sup>                  | Glechoma hederacea       |
| Bedstraw, catchweed             | Galium aparine           | Johnsongrass                              | Sorghum halepense        |
|                                 |                          | Kyllinga, false green                     | Kyllinga gracilima       |
| Bluegrass, annual               | Poa annual               | Kyllinga, fragrant                        | Kyllinga sesquiflorus    |
| Bluegrass, bulbous              | Poa bulbosa              | Kyllinga, green                           | Kyllinga brevi           |
| Bluegrass, roughstalk           | Poa trivialis            | Mustard, wild                             | Sinapis arvensis         |
| Burweed, lawn                   | Salivialis               | Nutsedge, purple                          | Cyperus rotundus         |
| Buttercup                       | Ranunculus arvensis      | Nutsedge, yellow                          | Cyperus esculentus       |
| Chickweed, common               | Stellaria media          | Pennycress, field                         | Thlaspi arvense          |
| Clover, white                   | Trifloium repens         | Pennywort, lawn <sup>1</sup> (dollarweed) | Hydrocotyle bowlesioides |
| Crowfootgrass                   | Dactyloctenium aegyptium | Quackgrass <sup>1</sup>                   | Elytrigia repens         |
| Dandelion                       | Taraxacum officinale     | Ryegrass, perennial                       | Lolium perenne           |
| Fescue, tall                    | Festuca arundinacea      | Sedge, globe                              | Cyperus croceus          |
| Garlic, wild                    | Allium vineale           | Sedges, annual                            | Cyperus spp.             |
| Geranium, Carolina <sup>1</sup> | Geranium, carolinianum   | Shepherd's-purse                          | Capsella bursa-pastoris  |
| Henbit <sup>1</sup>             | Lamium amplexicaule      |   |                          |

<sup>1</sup> Suppression or partial control only.

# **Directed-spray Applications**

This product may be applied as a post-directed spray around any established warm-season ornamental grass or established woody ornamental species in landscaped areas or field production nurseries. Avoid contact of this product with leaves of desirable plants as foliar injury, discoloration or loss of the plant may result.

# **Over-the-top Applications**

This product may be applied as an over-the-top application on the ornamental and groundcover species listed below:

# Over-the-Top Ornamental and Ground Cover Species

| Common Name                | Scientific Name                | Common Name                 | Scientific Name                |
|----------------------------|--------------------------------|-----------------------------|--------------------------------|
| American Arborvitae        | Thuja occidentalis             | Lilac                       | Syringa vulgaris               |
| Azalea, Dwarf              | Rhododendron<br>atlanticum     | Mockorange, Japanese        | Pittosporum tobira             |
| Bougainvillea2             | Bougainvillea glabra           | Mondo Grass                 | Ophiopogon japonicus           |
| Boxwood, Green<br>Velvet   | Buxus 'Green Velvet'           | Monkey Grass, Big<br>Blue   | Liriope muscari 'Big<br>Blue'  |
| Euonymus,<br>Wintercreeper | Euonymus fortunei              | Monkey Grass,<br>Variegated | Liriope muscari<br>'Variegata' |
| Gardenia                   | Gardenia jasminoides           | Ninebark                    | Physocarpus opulifolius        |
| Holly, Blue                | Ilex x meserveae               | Oleander                    | Nerium oleander                |
| Holly, Chinese             | Ilex cornuta                   | Periwinkle, Greater         | Vinca major                    |
| Jasmine, Asiatic           | Trachelospermum<br>asiaticum   | Photinia, Fraser            | Photinia x fraseri             |
| Jasmine, Star              | Trachelospermum<br>jasminoides | Pine, Mugo                  | Pinus mugo                     |
| Juniper, Chinese           | Juniperus chinensis            | Rhododendron                | Rhododendron spp.              |
| Juniper, Creeping          | Juniperus horizontalis         | Rosemary                    | Rosmarinus officinalis         |
| Juniper, Shore             | Juniperus conferta             | Spirea, Goldmound           | Spirea x 'Goldmound'           |

<sup>2</sup> Single application only.

# **Preplant Applications**

This product may be applied prior to planting the ornamental species listed below. Wait 14 days after the last application of this product before planting.

# **Preplant Ornamental Species**

| Common Name                | Scientific Name                | Common Name                         | Scientific Name          |
|----------------------------|--------------------------------|-------------------------------------|--------------------------|
| Boxwood, Green<br>Velvet   | Buxus 'Green Velvet'           | Juniper, Creeping                   | Juniperus horizontalis   |
| Boxwood, Green<br>Mountain | Buxus 'Green<br>Mountain'      | Lilac, Dwarf Korean                 | Syringa meyeri 'Palibin' |
| Burning Bush, Dwarf        | Euonymus alatus<br>'Compacta'  | Pine, Mugo                          | Pinus mugo               |
| Euonymus,<br>Wintercreeper | Euonymus fortunei              | Privet, Golden                      | Ligustrum X vicaryi      |
| Forsythia                  | Forsythia x intermedia         | Redbud                              | Cercis canadensis        |
| Holly, Blue                | Ilex x meserveae               | Rhododendron                        | Rhododendron spp.        |
| Hydrangea, Panicled        | Hydrangea paniculata           | Serviceberry                        | Amelanchier alnifolia    |
| Ivy, English               | Hedera helix                   | Viburnum, American<br>Cranberrybush | Viburnum trilobum        |
| Jasmine, Winter            | Jasminium nudiflorum           | Viburnum, Prague                    | Viburnum x pragense      |
| Jasmine, Star              | Trachelospermum<br>jasminoides | Weigela                             | Weigela florida          |
| Juniper, Chinese           | Juniperus chinensis            |                                     |                          |

#### NATIVE GRASSES

This product has been shown to be safe for use on the warm-season native grasses listed in this section.

| Common Name     | Scientific Name            | Common Name  | Scientific Name       |
|-----------------|----------------------------|--------------|-----------------------|
| Big bluestem    | Andropogon gerardii        | Buffalograss | Bouteloua dactyloides |
| Little bluestem | Schizachyrium<br>scoparium | Indiangrass  | Sorghastrum nutans    |
| Bushy bluestem  | Andropogon glomeratus      | Lovegrass    | Eragrostis curvula    |
| Blue grama      | Bouteloua gracilis         | Switchgrass  | Panicum virgatum      |

Use of this product may result in temporary chlorosis or temporarily affect the growth pattern of these native grasses. If discoloration or excessive thinning of the native grasses occurs, skip or delay additional applications to allow the native grasses to recover to a desirable quality.

Test this product on a small area prior to wide-scale use to determine if this product is suitable for your management and cultural practices.

#### **Sedge Control**

For the selective control of the weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre after weeds have reached the 3- to 8-leaf stage of growth. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

# **USE RESTRICITIONS for Sedge in Ornamental Weed Control:**

**DO NOT** use more than 1½ oz. /acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than  $2\frac{1}{2}$  oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

| Common Name           | Scientific Name       | Common Name      | Scientific Name    |
|-----------------------|-----------------------|------------------|--------------------|
| Kyllinga, false green | Kyllinga gracilima    | Nutsedge, yellow | Cyperus esculentus |
| Kyllinga, fragrant    | Kyllinga sesquifiorus | Sedge, globe     | Cyperus croceus    |
| Kyllinga, green       | Kyllinga brevifolia   | Sedges, annual   | Cyperus spp.       |
| Nutsedge, purple      | Cyperus rotundus      |                  |                    |

#### Tall Fescue (Festuca arundinacea) Control

Best control of tall fescue is obtained when this product is applied at 1½ oz. (0.058 lb. ai) per acre followed by a second application of 1½ oz. of this product (0.058 lb. ai) per acre at 21 to 28 days after the initial application. If a single application is preferred, apply this product at 2.0 oz. (0.093 lb. ai) per acre.

#### **USE RESTRCTIONS in Tall Fescue Control:**

**DO NOT** use more than 1<sup>1</sup>/<sub>4</sub> oz./acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 21 days apart

#### **Additional Weeds Controlled**

For selective control or suppression of annual or perennial weeds listed in this section, apply this product at 1½ oz. (0.058 lb. ai) per acre. A sequential application of 1½ oz. of this product (0.058 lb. ai) per acre may be made 28 or more days after the initial treatment, if needed.

#### **USE RESTRICTIONS in Additional Weeds Controlled:**

**DO NOT** use more than 1¼ oz. /acre of this product (0.058 lb. ai) per application.

**DO NOT** apply more than 2 applications per year.

**DO NOT** use more than 2½ oz. of this product (0.117 lb. ai) per acre per year.

**DO NOT** make applications sooner than 28 days apart

#### **Ornamentals Additional Weeds Controlled Table**

| Common Name                       | Scientific Name          | Common Name                     | Scientific Name         |
|-----------------------------------|--------------------------|---------------------------------|-------------------------|
| Barley, little                    | Hardeum pusillum         | Dandelion                       | Taraxacum officinale    |
| Bedstraw, catchweed               | Galium aparine           | Dichondra, Carolina*            | Dichondra carolinensis  |
| Beggarweed Florida <sup>1</sup> * | Desmodium torluosum      | Garlic, wild                    | Allium vineale          |
| Bentgrass creeping <sup>1</sup>   | Agrostis stolonifera     | Geranium, Carolina <sup>1</sup> | Geranium, carolinianum  |
| Bluegrass, annual <sup>1</sup>    | Poa annual               | Henbit <sup>1</sup>             | Lamium amplexicaule     |
| Bluegrass, bulbous                | Poa bulbosa              | Ivy, ground                     | Glechoma hederacea      |
| Bluegrass, roughstalk             | Poa trivialis            | Johnsongrass                    | Sorghum halepense       |
| Burweed, lawn                     | Salivialis               | Mustard, wild                   | Sinapis arvensis        |
| Buttercup                         | Ranunculus arvensis      | Pennycress, field               | Thlaspi arvense         |
| Buttonweed, Virginia <sup>1</sup> | Diodia virginiana        | Quackgrass <sup>1</sup>         | Elytrigia repens        |
| Chamber bitter*                   | Phyllanthus urinaria     | Ryegrass, perennial             | Lolium perenne          |
| Chickweed, common                 | Stellaria media          | Shepherd's-purse                | Capsella bursa-pastoris |
| Clover, white                     | Trifloium repens         | Violet, wild <sup>1</sup> *     | Viola nephrophylla      |
| Crowfootgrass                     | Dactyloctenium aegyptium | Woodsorrell, yellow*            | Oxalis stricta          |
| Dallisgrass <sup>1</sup>          | Paspalum dilatatum       |                                 |                         |

<sup>&</sup>lt;sup>1</sup> Suppression or partial control only.

#### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a dry and secure location.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

[Plastic bottle packaging:]

CONTAINER HANDLING: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once triple rinsed, recycle if available. Some agricultural pesticide containers can be taken to a container collection site or pick up for recycling. To find the nearest site, contact your chemical dealer or manufacturer. If recycling is not available, dispose of in a sanitary landfill or by incineration if allowed by state and local ordinances.

#### [55 lb. Drums with Liners:]

**CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into the handling or application equipment. Then offer for recycling if available, or dispose of liner in a sanitary landfill, or by incineration, or by burning, if allowed by state and local authorities. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

<sup>[\*] [</sup>Not for Use in California].

#### WARRANTY DISCLAIMER AND NOTICE

#### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS**: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Aceto Life Sciences, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

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