



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460**

**OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION**

December 28, 2022

Scott A. Pace  
Director of Registration Division  
Drexel Chemical Company  
P.O. Box 13327  
Memphis, TN 38113-0327

Subject: Label Amendment – Updating label to indicate intention for product to be applied by certified/professional applicators in residential areas  
Product Name: Drexel Duplicator Max  
EPA Registration Number: 19713-724  
Application Date: August 9, 2022  
Decision Number: 587009

Dear Scott A. Pace:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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 FIFRA 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) lists 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.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Emily Schmid by phone at 202-566-2893, or via email at [schmid.emily@epa.gov](mailto:schmid.emily@epa.gov).

Sincerely,



Emily Schmid, Product Manager 25  
Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

**ACCEPTED**

12/28/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-724

GLYPHOSATE    GROUP 9    HERBICIDE



# Duplicator MAX

Non-selective, broad spectrum weed control for many agricultural systems, farmsteads, forestry, industrial, utility rights-of-way, turf and ornamental sites. Selective broad-spectrum weed control in Roundup Ready® and other Glyphosate tolerant crops.

**ACTIVE INGREDIENT:**

Glyphosate in the form of its diammonium salt\* ..... 52.95%

**OTHER INGREDIENTS:** ..... 47.05%

**TOTAL:** ..... 100.00%

\* This product contains 5.8 pounds per U.S. gallon of glyphosate in the form of its diammonium salt equivalent to 4.8 pounds per U.S. gallon of glyphosate acid.

## KEEP OUT OF REACH OF CHILDREN CAUTION

(See FIRST AID Below)

(See Side (Back) Panel for FIRST AID); (See Page \_\_\_ for FIRST AID)  
(See Container Labeling for (FIRST AID and) Complete Directions for Use)  
(See (Attached) Booklet (Container Labeling) for Complete Directions for Use)

EPA Reg. No. 19713-724

EPA Est. No. 19713-XX-XXX

Net Content: (    Gal.) (    L) (    Qt.) (    Fl.Oz.)

FIRST AID	
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have a person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.	

**Domestic Animals:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

724SP-0322\*

## **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans and Domestic Animals**

**CAUTION:** Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with the skin, eyes, or clothing. Remove and wash contaminated clothing before reuse. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, shoes plus socks and appropriate chemical resistant gloves. Wear appropriate protective eyewear.

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

**Mixers, loaders, applicators and other handlers must wear:** Long-sleeved shirt, long pants, shoes plus socks, and chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton.

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. **Important:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for applicators and other handlers and have such PPE immediately available for use in an emergency such as a spill or equipment breakdown

## **USER SAFETY RECOMMENDATIONS**

**Users should:** 1) Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, 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 washwater or rinsate.

## **NON-TARGET ORGANISMS 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 site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

## **PHYSICAL AND CHEMICAL HAZARDS**

Spray solutions of this product must be mixed, stored and applied using stainless steel, fiberglass, plastic or plastic-lined steel containers. **DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.** This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which can form a highly combustible gas mixture. This gas mixture could flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source causing serious personal injury.

## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a 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 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 pesticidereregulation.

## **AGRICULTURAL USE REQUIREMENTS**

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

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.**

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves, shoes plus socks and protective eyewear.

### 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, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

Do not enter treated areas until sprays have dried.

## PRODUCT INFORMATION

READ ENTIRE LABEL BEFORE USING THIS PRODUCT.

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.

**Product Description:** This product is a post-emergence systemic herbicide with no soil residual activity. It is generally non-selective and gives broad spectrum control of many annual and perennial weeds, woody brush, trees, and vines. It is formulated as a water soluble liquid and may be applied using most standard industrial or field sprayers after dilution and thorough mixing with water or other carriers according to label directions.

**Mode of Action:** The active ingredient in this product inhibits an enzyme found only in plants and microorganisms that is essential to the formation of specific aminoacids.

**Soil Activity:** This product has NO soil activity. This product binds tightly to soil particles and does not provide residual weed control. Weeds must be emerged at the time of application to be controlled by foliar application of this product. Weed seeds in the soil will not be affected by this product and will continue to germinate. Unattached plant rhizomes or rootstocks beneath the soil surface will not be affected by this product.

**Degradation:** Degradation of this product is primarily a biological process carried out by soil microbes.

**Time to Symptoms:** This product moves through the plant from the point of foliage contact to and into the root system. Visible effects are gradual wilting and yellowing of the plant that advances to complete browning of above ground growth and deterioration of underground plant parts. Effects are visible on most annual weeds within 2 to 4 days but on most perennial weeds, effects might not be visible for 7 or more days after application. Extremely cool or cloudy weather following application could slow activity of this product and delay development of visual symptoms.

**Stage of Weeds:** Annual weeds are easiest to control when they are small. Enhanced control of most perennial weeds is obtained when this product is applied at late growth stages approaching maturity. Refer to the "WEEDS CONTROLLED" section for more information on controlling specific weeds.

**Cultural Considerations:** Reduced weed control could result when this product is applied to annual or perennial weeds that have been mowed grazed or cut and have not been allowed to regrow to the specified stage prior to application.

Always use the higher specified application rate when weed growth is heavy or dense or when weeds are growing in an undisturbed (non-cultivated area).

Reduced weed control could result when this product is applied to weeds that show signs of disease or insect damage, are heavily covered with dust or are surviving under poor growing conditions.

**Rainfastness:** Rainfall within 4 hours of application could wash this product off the foliage, thus, a second application might be needed for adequate control.

**Spray Coverage:** For enhanced results, spray coverage must be uniform and complete. Do not spray foliage to the point of runoff.

**Maximum Application Rates:** The maximum application rates stated throughout this label are given in units of volume (fl. oz. or qt.) of this product per acre. However, the maximum allowed application rates apply to this product combined with the use of any and all other herbicides containing the active ingredient glyphosate whether applied separately or in a tank-mixture on a basis of total pounds of glyphosate (acid equivalent) per acre. If more than one glyphosate containing product is applied to the same site within the same year, ensure that the total use of glyphosate (lb. acid equivalent) does not exceed the maximum allowed. See the "INGREDIENTS" section of this label for necessary product information.

Except otherwise specified in a crop section of this label, the combined total application of this product on a site must not exceed 160 fluid ounces (5 qt.) equivalent to 6 pounds of glyphosate acid per acre per year. For applications on

non- crop sites or on tree vine or shrub crop production sites, the combined total application of this product must not exceed 216 fluid ounces (6.75 qt.) equivalent to 8 pounds of glyphosate acid per acre per year.

## **WEED RESISTANCE MANAGEMENT**

<b>GLYPHOSATE</b>	<b>GROUP</b>	<b>9</b>	<b>HERBICIDE</b>
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For resistance management, this product is a Group 9 mode of action herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 9 mode of action 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.

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

- Rotate the use of this product or other Group 9 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.
- 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.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management directions for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Drexel Chemical Company representatives at (901) 774-4370.

Manage weed seed at and after harvest to prevent buildup of the weed seed bank.

To determine if resistance in any particular weed biotype has been confirmed in your area, visit the internet at [www.weedscience.org](http://www.weedscience.org).

## **MIXING**

Spray solutions of this product may be mixed, stored, and applied using clean stainless steel fiberglass, plastic or plastic lined steel containers.

**DO NOT MIX STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.**

Eliminate any risk of siphoning the contents of the tank back into the carrier source while mixing. Use approved anti-back siphoning devices where required by State or local regulations.

A 50 mesh nozzle screen or line strainer on the spray equipment is sufficient.

Clean sprayer parts promptly after using this product by thoroughly flushing with water.

### **Mixing with Water**

This product mixes readily with water. Mix spray solutions of this product as follows:

Fill the mixing or spray tank with the required amount of water. Add the specified amount of this product near the end of the filling process and mix well. During mixing, foaming of the spray solution may occur. To prevent or minimize foaming, mix gently, terminate by-pass and return lines at the bottom of the tank, and if needed, use an appropriate antifoam or defoaming agent.

PERFORMANCE OF THIS PRODUCT CAN BE SIGNIFICANTLY REDUCED IF WATER CONTAINING SOIL SEDIMENT IS USED AS CARRIER. DO NOT MIX THIS PRODUCT WITH WATER FROM PONDS OR DITCHES THAT IS VISIBLY MUDDY OR MURKY.

### **Tank-Mixtures**

This product does not provide residual weed control. This product may be tank-mixed with other herbicides to provide residual weed control, broader weed control spectrum or an alternate mode of action. 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.

Some tank-mix products have the potential to cause crop injury under certain conditions at certain growth stages and/or under other circumstances. Read the label of all products to be used in the tank-mixture prior to use to determine the potential for crop injury.

Tank-mixtures with other pesticides, micronutrients or foliar fertilizers could result in reduced weed control or crop injury. Manufacturer has not tested all tank-mix products for compatibility, antagonism or reduction in product performance. To the extent consistent with applicable law, Buyer and all users are responsible for any and all loss or damage in connection with the use or handling of tank-mixtures of this product with other pesticides or materials in a way not instructed on this label.

When a tank-mix with a generic active ingredient such as Atrazine, 2,4-D, Dicamba, Diuron, Pendimethalin or any other product or material is listed on this label, 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.

For enhanced results apply tank-mixtures with this product at a minimum spray volume rate of 10 gallons per acre, unless otherwise specified.

### **Tank-Mixing Procedure**

If compatibility of the tank-mixture product(s) is not known, predetermine the compatibility in the carrier by mixing small proportional quantities in advance.

Mix only the quantity of spray solution that will be applied that day. Application of tank-mix solutions that were allowed to stand overnight could result in reduced weed control.

Prepare the tank-mixtures of this product as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port of the tank.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If ammonium sulfate is used, add it slowly through the screen into the tank. If dry ammonium sulfate is being used, ensure that it is completely dissolved in the tank before adding other products.
4. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue gentle agitation.
5. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue gentle agitation.
6. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted mixture slowly through the screen into the tank. Continue gentle agitation.
7. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
8. [Optional label statement: If a nonionic surfactant is used, add it to the tank before completing the filling process.]
9. Add individual formulations to the spray tank as follows: wettable powder, flowables, emulsifiable concentrate, drift reduction additive and water soluble liquid (this product) (optional text: ,surfactant).

Maintain gentle agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, agitate thorough to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near the bottom of the tank to minimize foaming.

A 50 mesh nozzle screen or line strainer on the spray equipment is sufficient.

### **Mixing Spray Solution Concentrations**

All reference throughout this label to concentration of this product in a spray solution is on a percentage of volume basis.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:



SPRAY SOLUTION						
Desired Volume	Amount of This Product					
	0.3%	0.6%	0.9%	1.3%	3.1%	6.2%
1 gal.	0.4 fl. oz.	0.8 fl. oz.	1.2 fl. oz.	1.7 fl. oz.	4 fl. oz.	8 fl. oz.
25 gal.	10 fl. oz.	0.6 qt.	0.9 qt.	1.3 qt.	3.1 qt.	6.2 qt.
100 gal.	1.2 qt.	2.4 qt.	3.6 qt.	1.3 gal.	3.1 gal.	6.2 gal.
2 tablespoons = 1 fluid ounce (fl. oz.)						

For use in backpack and pump-up sprayers, consider mixing the specified amount of this product with water in larger container and then filling the sprayer from the larger container.

**[Optional Section: Surfactants**

Although not always required, surfactant may be added to spray solutions of this product. However, additional surfactant can increase the performance of this product at water carrier volumes above 30 gallons per acre or at application rates below 15 fluid ounces of product per acre.

Nonionic surfactants that are labeled for use with herbicides may be used. Do not reduce rates of this product when adding surfactant. Use a surfactant concentration of 0.25 to 0.5% (1 to 2 qt./100 gal. of spray solution) when adding surfactant that contains at least 70% active ingredient or 1% surfactant concentration (4 qt./100 gal. of spray solution) when adding surfactant that contains less than 70% active ingredient. Read and carefully observe all precautionary statements and other information on the surfactant label.

**[Optional label text:** DO NOT add buffering agents or pH adjusting agents to the spray solution when this product is the only pesticide product being applied.]

DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PRE-HARVEST APPLICATION TO COTTON OR ANY POST-EMERGENCE (IN-CROP) APPLICATION TO LISTED GLYPHOSATE TOLERANT COTTON VARIETIES.]

**Ammonium Sulfate**

Unless otherwise directed, the addition of 1 to 2 % dry ammonium sulfate by weight or 8.5 to 17 pounds per 100 gallons of water may increase the performance of this product particularly under hard water conditions, drought conditions or when tank-mixed with certain residual herbicides on annual and perennial weeds. An equivalent rate of ammonium sulfate in liquid formulation may also be used. Ensure that dry ammonium sulfate is completely dissolved in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

**Note:** When using ammonium sulfate, apply this product at rates specified in this label. Lower rates will result in reduced performance.

**Colorants or Dyes**

Colorants or marking dyes may be added to spray solutions of this product, however, they may reduce performance of this product. Use colorants or dyes according to the manufacturer's directions.

**Drift Reduction Additives**

Drift reduction additives may be used with all equipment types, except wiper applicators, sponge bars and Controlled Droplet Applicator (CDA) equipment. When a drift reduction additive is used, read and carefully observe the precautionary statements and all other information appearing on the additive label. The use of drift reduction additives can affect spray coverage which could result in reduced performance of this product.

**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 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 pressures recommended for the nozzle to produce the target spray volume and droplet size.
- **Nozzle Type** – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Boom Height - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **Shielded Sprayers**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with 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.

### **SPRAY DRIFT MANAGEMENT**

AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, [Optional text: GREEN] STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, [Optional text, if applicable: EXCEPT AS DIRECTED FOR USE ON ROUNDUP READY AND OTHER LISTED GLYPHOSATE TOLERANT CROPS,] AS SEVERE PLANT INJURY OR DESTRUCTION COULD RESULT.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation, as small quantities of this product can cause severe damage or destruction to the crop, plants or other vegetation on which application was not intended.

AVOID DRIFT. USE EXTREME CARE TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHEN APPLYING THIS PRODUCT.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determines the potential for spray drift. The applicator and grower are responsible for considering all these factors when making decisions regarding the application of this product.

The likelihood of injury occurring as the result of spray drift while applying this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or generation of fine particles (mist) that are likely to drift.

TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFERS MUST BE MAINTAINED.

AVOID APPLYING THIS PRODUCT AT EXCESSIVE SPEED OR SPRAYER PRESSURE.

### **AERIAL APPLICATION EQUIPMENT**

Unless otherwise prohibited, all applications of this product described on this label may be made using aerial application equipment where appropriate provided that the applicator complies with the precautions and restrictions specified on this label and on separate supplemental labeling published for this product.

DO NOT APPLY THIS PRODUCT USING AERIAL APPLICATION EQUIPMENT EXCEPT UNDER CONDITIONS SPECIFIED ON THIS LABEL OR ON SEPARATELY PUBLISHED SUPPLEMENTAL LABELING FOR THIS PRODUCT.

FOR SPECIFIC USE INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS IN CALIFORNIA AND ARKANSAS, REFER TO THE SECTIONS "AERIAL APPLICATION IN CALIFORNIA INCLUDING FRESNO COUNTRY" AND "AERIAL APPLICATION IN ARKANSAS", RESPECTIVELY.

Apply this product using the specified rate in 3 to 15 gallons of water per acre unless otherwise directed on this label or on separate supplemental labeling for this product. Unless otherwise directed, the maximum single application rate of this product is 40 fluid ounces per acre when using aerial application equipment.

For "FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTALS\*": Apply the specified rates of this product in 3 to 25 gallons per acre by air unless otherwise directed. Use a larger spray volume within this range where weeds, brush, trees, and vines are dense or form multiple canopy layers. Avoid direct application to any body of water.

### **\*Intended To Be Applied By Certified/Professional Applicators**

Refer to the individual use sections of this label for application rates, spray volumes and additional directions for use.

Drift control additives may be used.

Ensure uniform application — To avoid streaked, uneven or overlapped application, use appropriate marking devices.

**Aircraft Maintenance:** Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR IS MOST SUSCEPTIBLE. The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

### **AERIAL SPRAY DRIFT MANAGEMENT**

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed three-fourths the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45°. Observe more stringent regulations in states where applicable.

### **Importance of Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The enhanced drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see the "Wind", "Temperature and Humidity", and "Temperature Inversions" sections that follow).

### **Controlling Droplet Size**

- Volume: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- Pressure: Use the lower spray pressures listed for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles: Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation: Orienting nozzles so that the spray is released backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.

- **Nozzle Type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom Length:** For some use patterns, reducing the effective boom length to less than three-fourths of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height:** Do not make applications at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

### **Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance increase, with increasing drift potential (higher wind, smaller droplets, etc.).

### **Wind**

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Avoid application below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect drift.

### **Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### **Temperature Inversions**

Do not make applications during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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.

### **Sensitive Areas**

Apply this product when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Avoid direct application to any body of water.

## **AERIAL APPLICATION IN CALIFORNIA INCLUDING FRESNO COUNTY**

Do not apply this product using aerial application equipment in residential areas.

**AVOID DRIFT. DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION THAT FAVORS DRIFT. DRIFT CAN CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH APPLICATION WAS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, USE PROPER AERIAL APPLICATION EQUIPMENT FITTED WITH APPROPRIATE NOZZLES AND MAINTAIN ADEQUATE BUFFERS.**

Follow the directions below when making aerial application near non-target crops or desirable annual or perennial vegetation after bud break and before total leaf drop.

1. Do not apply within 100 feet of all desirable vegetation or non-target crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or non-target crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or non-target crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

When tank-mixing this product with 2,4-D, only 2,4-D Amine formulations may be used for aerial application in California. Tank-mixtures with 2,4-D Amine formulations may be applied by air in California for fallow fields and in reduced tillage systems and for Alfalfa and pasture renovation applications only.

This product when tank-mixed with Dicamba may not be applied by air in California.

## **ADDITIONAL LIMITATIONS FOR AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA ONLY (Only from February 15 through March 31)**

### **Applicable Area**

- North: Fresno County line
- South: Fresno County line
- East: State Highway 99
- West: Fresno County line

### **Use Information**

Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

### **Written Directions**

Written directions MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. These written directions MUST state the proximity of the surrounding crops, and that conditions of each manufacturer's applicable product label(s) and this label have been satisfied.

### **Aerial Applicator Training and Equipment**

Aerial application of this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight, and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

### **Applications at Night**

Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

For additional information on the proper aerial application of this product in Fresno County, call (901) 774-4370.

### **AERIAL APPLICATION IN ARKANSAS**

Avoid drift. Do not apply into still air where there is temperature inversion layer low enough for fine spray particles to become suspended and moved outside the target area when the inversion layer moves. Do not apply when winds are gusty or under any other condition that favors drift. Drift is likely to cause damage to any vegetation contacted. To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

Use the specified rate of this product in 3 to 15 gallons of water per acre.

Use sufficient carrier volume and appropriate equipment set-up to form droplets large enough to avoid drift potential. Coarse droplets in the 300 to 500 (VMD) micron range have lower drift potential.

Applications typically are to be made with the nozzle release point at 8 to 15 feet above the top of the target plants unless a greater height is required for aircraft safety.

The distance of the outermost nozzles on the boom must not exceed 75% of the length of the wingspan or rotor. In many cases, reducing this distance to 65% of the length of the wingspan or rotor will improve drift control without affecting the swath width.

Nozzles must always discharge backward parallel with the air stream and never discharge downwards more than 45 degrees on fixed wing aircraft or forward of the prevailing airflow on rotary winged aircraft. Avoid the use of nozzles with wide-angle discharge.

Do not apply this product when winds are in excess of 10 miles per hour.

Do not apply when there is a low-level inversion where fine spray particles could be suspended in still air and move outside the target area when the inversion layer moves. These conditions may occur when wind speeds are less than 2 miles per hour.

Use the following directions when an aerial application is made near non-target crops or other desirable vegetation:

1. Do not apply within 100 feet of non-target crops or any desirable vegetation.
2. If wind up to 5 miles per hour is blowing toward non-target crops or desirable vegetation, do not apply this product within 500 feet upwind of the desirable vegetation or crop.

3. If wind is blowing between 5 to 10 miles per hour toward non-target crops or desirable vegetation, a buffer zones greater than 500 feet might be needed to protect the crop or desirable vegetation.

### GROUND APPLICATION EQUIPMENT

Apply this product at the appropriate rate in 3 to 40 gallons of water [*Alternative Volume: 3 to 60 gallons*] per acre when making a broadcast application using ground application equipment unless otherwise directed on this label or on separate supplemental labeling or Fact Sheets published for this product. As the weed density increases, increase the spray volume towards the upper end of this range to ensure complete coverage. Use nozzles that will avoid generating a fine mist. For enhanced results with ground application equipment use flat fan nozzles. Check spray pattern for uniform distribution of spraydroplets.

### HANDHELD SPRAYERS

When using a handheld sprayer, apply spray solutions of this product uniformly and completely to the foliage of target weeds using a coarse droplet spectrum and a spray-to-wet technique; do not spray to the point of runoff. For the appropriate concentration of this product in the spray solution and timing of application to control certain weeds, woody brush, trees and vines, refer to the *"WEEDS CONTROLLED"* section of this label as well as the section on *"WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"* found at the end of this label.

Spot treatment application of this product for weed control in a cropping system using a handheld sprayer may be made only when specifically directed on this label or on separate supplemental labeling for this product. The crop sprayed with this product will be killed along with the weeds. Take care not to spray or allow spray to drift outside the target area to avoid unwanted crop destruction.

When making a low volume directed spray application in *"FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"* to control annual and perennial weeds, woody brush, trees, and vines using a handheld sprayer, ensure that at least 50% to 75% of the foliage or the top one-half of each unwanted plant is sprayed. If a straight stream nozzle is used, start the application at the top of the targeted plant and spray from top to bottom in a lateral zig-zag motion. To ensure uniform and complete coverage, spray both sides of large or tall woody brush, trees, and vines or when foliage is thick and dense or where there are multiple sprouts. For enhanced results on woody brush, trees, and vines, apply to actively growing vegetation after full leaf expansion and flowering prior to Fall color and leaf drop.

The following table summarizes various methods of foliar application using a backpack sprayer with a spray-to-wet or low volume directed spray technique and high volume sprayer application using handheld application equipment for control or partial control of herbaceous weeds, woody brush, trees, and vines listed in *"WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"* found under *"FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"* section of this label.

Method of Application	Concentration of Spray Solution (% by Volume)	Spray Volume
Handgun or Backpack Sprayer	1.3	Spray-to-wet
Low Volume Directed Spray (Backpack, Handgun, Mistblower)	3.1 to 6.2	15 to 25 gal./A
Modified High Volume Spray	1.3 to 2.8	40 to 60 gal./A

Low volume directed spray application with a backpack sprayer works best when applying to weeds and brush less than 10 feet tall. For taller weeds and brush, a high volume handgun can be modified by reducing the nozzle size and spray pressure to produce a modified high volume directed spray application.

### SELECTIVE APPLICATION EQUIPMENT

Selective application equipment allows this product to be applied to weeds growing near the crop or other desirable vegetation without killing the desirable vegetation. Selective application equipment must be capable of preventing all contact of the herbicide solution with the crop or other desirable vegetation and operated without spray mist escape, leakage or dripping of the herbicide solution.

AVOID CONTACT OF THIS HERBICIDE WITH DESIRABLE VEGETATION. Contact of this product with desirable vegetation could result in unwanted plant damage or destruction.

In *"FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"*, this product may be diluted with water and applied using a recirculating sprayer, shielded sprayer, hooded sprayer, wiper applicator or sponge bar to weeds growing on any terrestrial non-food or non-feed crop sites listed under *"WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES"* at the end of this label where feasible. This product may also be used with sprayers equipped with optical weed sensor technology. Other

selective equipment that may be used in “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” to deliver or apply this product are a single and hollow stem injectors, tree injectors, wiper applicators for cut stem and cut stump applications and spray or squirt bottles for cut stem, cut stump and frill applications to control large stemmed weeds, brush, trees and vines listed under “*WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” at the end of this label

### **Shielded and Hooded Sprayers**

A shielded sprayer directs the herbicide solution to the target weeds while protecting the crop or other desirable vegetation from coming into contact with the herbicide spray with an impervious material or shield. Use nozzles that provide uniform coverage within the application area. Keep shields properly adjusted to protect desirable vegetation.

A hooded sprayer is a type of shielded sprayer where the spray pattern is fully enclosed, including the top, sides, front and back, thereby shielding the crop or other desirable vegetation from the spray solution.

This product may be diluted in water and applied using a shielded or hooded sprayer to weeds listed on this label growing on any non-crop site described on this label and in between rows of plants (row middles) in any cropping system listed on this label.

Properly adjust the hood to protect desirable vegetation. Ensure that the hood is capable of completely enclosing the spray pattern. If necessary, when applying around crops grown on raised beds, extend the front and rear flaps of the hooded sprayer downward to reach the ground in deep furrows.

A hooded sprayer must be configured and operated in a manner that minimizes bouncing and avoids raising the hood up off the ground surface at any time. If the hood is raised, spray particles can escape and come into contact with the crop, causing damage to or destruction of the crop or other desirable vegetation. Avoid operating this equipment on rough or sloping terrain where the spray hood is likely to rise up off the ground surface.

Use hoods designed to minimize excessive dripping or run-off down the insides of the hoods. A single, low pressure/low drift flat-fan nozzle with an 80 to 95 degree spray angle positioned at the top center of the hood is recommended. Spray volume should be 20 to 30 gallons per acre.

The following procedures will reduce the potential for crop injury when using a hooded sprayer:

- Operate the spray hoods on the ground or skimming across the ground.
- Leave at least an 8 inch untreated strip over the drill row. For example, if the crop row width is 38 inches, the maximum width of the spray hood should be 30 inches.
- Operate at a ground speed of no greater than 5 miles per hour to minimize bouncing of the hooded sprayer.
- Apply when wind speed is 10 miles per hour or less.
- Use low-drift nozzles that provide uniform coverage within the treated area.

Injury to crop and other desirable vegetation can occur when application is made to foliage of weeds that come into direct contact with leaves of the crop or desirable vegetation. Do not apply this product when the leaves of desirable vegetation are growing in direct contact with weeds to be treated. Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation can result in discoloration, stunting or destruction.

### **Wiper Applicators**

A wiper applicator is a device that physically wipes this product or solutions of this product directly onto the target weed or cut stump. Any handheld device that is capable of physically wiping this product or solutions of this product directly onto the target weed or cut stump, such as a paint brush, may be used.

A mechanical wiper applicator, such as a rope wick or sponge bar that can be driven through a field over the top of a crop or other desirable vegetation to control weeds that are taller than the desirable vegetation, must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation.

Wiper applicators may be used over the top of food or feed crops ONLY if specifically permitted for use over that crop by this label or by separately published supplemental labeling for this product.

When using a mechanical wiper applicator, adjust the height of the applicator to ensure adequate contact with weeds and so that the wiper contact point is a minimum of 2 inches above the desirable vegetation. Enhanced results can be obtained when more of the weed is exposed to the herbicide solution and weeds are a minimum of 6 inches above the desirable vegetation. Weeds that do not come in contact with the herbicide solution will not be affected. Poor contact can occur when weeds are growing in dense clumps, when operating in an area of severe weed infestation, or when weed height varies dramatically. In these situations, more than one application of this product might be necessary.

Operate wiper applicators at a ground speed of no greater than 5 miles per hour. Performance in areas of heavy weed infestation can be improved by reducing speed, which will provide more time for re-saturation of the wiper with the



herbicide solution and more contact time of the wiper with the weed. Enhanced results with a wiper applicator can be obtained when two applications are made travelling in opposite directions in the field.

Keep wiper surfaces clean.

Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation can result in discoloration, stunting or destruction. Avoid leakage or dripping onto desirable vegetation. Be aware that on sloping ground the herbicide solution can migrate to one side, causing dripping on the lower end and drying of the wiper on the upper end of the applicator.

Do not apply this product using a wiper applicator when weeds are wet.

Do not add surfactant to the herbicide solution when using a wiper applicator

**For Rope or Sponge Wick Applicators**—Solutions ranging from 33 to 75% of this product in water may be used.

In “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*”, solutions ranging from 20 to 70% of this product by volume in water may be used.

**For Panel Applicators**—Solutions ranging from 33 to 100% of this product in water may be used in panel wiper applicators.

In “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*”, solutions ranging from 20 to 100% (undiluted) of this product by volume in water may be used.

**Recirculating Sprayer – For use in “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*”**

A recirculating sprayer directs the spray solution onto weeds growing above desirable vegetation while spray solution that is not intercepted by weeds is collected and returned to the spray tank for re-application. A recirculating sprayer may be used to apply spray solutions of this product to weeds listed under “*WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” at the end of this label in any terrestrial non-crop site described on this label.

**Single and Hollow Stem Injectors – For use in “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*”**

Control of certain weeds listed in “*WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS OF-WAY, TURF, AND ORNAMENTAL SITES*” at the end of this label can be obtained by injecting this concentrated product or solutions of this product directly in or onto the target weed. Ensure that the handheld injector being used for this application is capable of accurately delivering the volume specified on the label. When making stem injections, the combined total use of this product must not exceed 6.75 quarts per acre per year. At 5 milliliters (ml) of concentrated (undiluted) product per stem, 6.75 quarts will treat approximately 1,300 stems per acre per year. The number of stems that can be treated per acre will vary depending on the injection volume and the concentration of this product in the application solution.

## **INJECTION SYSTEM**

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the concentrate of other products when using injection systems, unless otherwise directed.

## **CONTROLLED DROPLET APPLICATOR (CDA)**

The amount of this product applied per acre using CDA must not be less than the amount specified in this label when applied by conventional broadcast application equipment.

CDA produces a spray pattern that is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

## **WEEDS CONTROLLED**

This product controls many annual and perennial grasses and broadleaf weeds listed in the following sections.

**Note:** For specific use directions for controlling weeds in “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*”, refer to “*WEEDS CONTROLLED - FORESTRY,*



*INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” section at the end of this label.

**ANNUAL WEEDS**

When water carrier volumes are between 16 and 40 gallons per acre for ground application and between 6 and 15 gallons per acre for aerial application, the following use rates will control the annual weeds listed in the “*ANNUAL WEEDS RATE TABLE*” that follows:

- 20 fluid ounces per acre - grasses and broadleaf annual weeds less than 6 inches in height or circumference and vines less than 3 inches in length
- 30 fluid ounces per acre - grasses and broadleaf annual weeds 6 to 12 inches in height or circumference and vines 3 to 6 inches in length
- 40 fluid ounces per acre - grasses and broadleaf annual weeds greater than 12 inches in height or circumference and vines greater than 6 inches in length

WHEN WATER CARRIER VOLUMES ARE BETWEEN 3 AND 15 GALLONS PER ACRE FOR GROUND APPLICATION AND BETWEEN 3 AND 5 GALLONS PER ACRE FOR AERIAL APPLICATION, USE THE RATES SPECIFIED FOR INDIVIDUAL WEEDS IN THE “*ANNUAL WEEDS RATE TABLE*” THAT FOLLOWS .

Apply to actively growing annual weeds. New leaf development indicates active growth.

Annual weeds are often easiest to control when they are small. Older mature (hardened) and otherwise tough to control annual weed species could require higher rates than specified in this table to be controlled even if they meet the listed size requirements. This product may be applied at rates of up to 40 fluid ounces per acre for tough to control annual weeds and where dense weed populations exist. Follow all precautions and restrictions including maximum application rates and crop stage timings specified in the directions for use on specific crops including Roundup Ready and other Glyphosate tolerant crops and use sites listed on this label.

Maximum size refers to the maximum plant height length of runners for vines or circumference of rosette plants in inches.

Do not tank-mix this product with soil residual herbicides when using these rates unless otherwise directed.

To control annual weeds using a handheld controlled droplet applicator (CDA), apply a 20% solution of this product (25 to 26 fl. oz. of this product per gal. of spray solution) at a flow rate of 2 fluid ounces per minute and a walking speed of 1.5 miles per hour (1 qt./A). When using a vehicle mounted CDA, apply the required amount of this product as indicated in the following “*ANNUAL WEEDS RATE TABLE*” in 2 to 15 gallons of water per acre.

For weeds that have been mowed grazed or cut, allow regrowth to occur prior to application of this product.

**ANNUAL WEEDS RATE TABLE**

Annual Weeds	Broadcast Application Rate (Fl. Oz./A)				
	10	15	20	25	30
	Maximum Height/Length (inches)				
Ammannia (Purple)	3	6	12	-	18
Anoda (Spurred)	-	2	3	5	8
Barley	18	18+	-	-	-
Barnyardgrass	-	3	6	7	9
Bassia (Fivehook)	-	-	6	-	-
Beggarweed (Florida)	-	5	8	-	-
Bittercress	12	20	-	-	-
Bluegrass (Annual)	10	-	-	-	-
Bluegrass (Bulbous)	6	-	-	-	-
Brome (Downy) <sup>1,2</sup>	6	12	-	-	-
Brome (Japanese)	6	12	24	-	-
Browntop (Panicum)	6	8	12	-	24
Buckwheat (Wild) <sup>3</sup>	-	1	2	-	-
Burcucumber	-	6	12	-	18
Buttercup	12	20	-	-	-
Carolina (Geranium)	-	-	4	-	9
Carpetweed	-	6	12	-	-
Cheat <sup>2</sup>	6	20	-	-	-
Chervil	20	-	-	-	-

Chickweed	-	12	18	-	-
Cocklebur	12	18	24	-	36
Copperleaf (Hophornbeam)	-	2	4	-	6
Copperleaf (Virginia)	-	2	4	-	6
Coreopsis (Plains)	-	6	12	-	18
Corn (Volunteer)	6	12	20	-	-
Corn speedwell	12	-	-	-	-
Crabgrass	3	6	12	-	-
Crowfootgrass	-	-	6	-	12
Cutleaf evening primrose	-	-	3	-	6
Devilsclaw (Unicorn plant)	-	3	6	-	-
Dwarf dandelion	12	-	-	-	-
Eastern manna grass	8	12	-	-	-
Eclipta	-	4	8	12	-
Fall panicum	4	-	6	-	12
Falsedandelion	-	20	-	-	-
Falseflax (Smallseed)	12	-	-	-	-
Fiddleneck	-	6	12	-	-
Field pennycress	6	12	-	-	-
Filaree	-	-	6	-	12
Fleabane (Annual)	6	20	-	-	-
Fleabane (Hairy) ( <i>Conyza bonariensis</i> )*	-	-	6	-	10
Fleabane (Rough)	3	6	12	-	-
Florida pusley	-	-	4	-	6
Foxtail (Bristly, Giant, Yellow)	6	12	20	-	-
Foxtail (Carolina)	10	-	-	-	-
Foxtail (Green)	12	-	-	-	-
Goatgrass (Jointed)	6	12	-	-	-
Goosegrass*	-	3	6	-	12
Grain sorghum (Milo)	6	12	20	-	-
Groundcherry	-	3	6	-	9
Groundsel (Common)	-	6	10	-	-
Hemp (Sesbania)	-	2	4	6	8
Henbit	-	-	6	-	12
Horseweed/Marestail ( <i>Conyza canadensis</i> )*	-	6	12	-	18
Itchgrass	6	8	12	-	18
Jimsonweed	-	-	12	-	18
Johnsongrass (Seedling)*	6	12	18	-	24
Junglerice*	-	3	6	7	9
Knotweed	-	-	6	-	12
Kochia <sup>4*</sup>	-	3 to 6	12	-	-
Lambsquarters	-	6	12	-	20
Little barley	6	12	-	-	-
London rocket	6	-	24	-	-
Mayweed	-	2	6	12	18
Morningglory (Annual) ( <i>Ipomoea</i> spp.)	-	-	3	-	6
Mustard (Blue, Tansy, Tumble, Wild)	6	12	18	-	-
Nightshade (Black, Hairy)	-	4	6	-	12
Oats	3	6	18	-	-
Pigweeds, Palmer*	-	12	18	24	-
Pigweed species*	-	12	18	24	-
Prickly lettuce	-	6	12	-	-
Purslane	-	-	3	-	6
Ragweed (Common, Giant)*	-	6	12	-	18
Red Rice	-	-	4	-	-
Rye (Volunteer/Cereal) <sup>2</sup>	6	18	18+	-	-
Ryegrass species*	-	-	6	-	12
Sandbur (Field, Longspine)	6	12	-	-	-
Shattercane	6	12	20	-	-
Shepherdspurse	6	12	-	-	-
Sicklepod	-	2	4	-	8
Signalgrass (Broadleaf)	-	3	6	7	9
Smartweed (Lady's thumb)	-	-	6	-	9
Smartweed (Pennsylvania)	-	-	6	-	9

Sowthistle (Annual)	-	-	6	-	12
Spanishneedles	-	-	6	-	12
Speedwell (Purslane)	12	-	-	-	-
Sprangletop	6	12	20	-	-
Spurge (Prostrate, Spotted)	-	6	12	-	-
Spurry (Umbrella)	6	-	-	-	-
Stinkweed	-	12	-	-	-
Sunflower	12	18	-	-	-
Swinecress	-	5	12	-	-
Teaweed/Prickly sida	-	2	4	-	6
Texas panicum	6	8	12	-	24
Thistle (Russian)*,5	-	6	12	-	-
Velvetleaf	-	-	6	-	12
Virginia (Pepperweed)	-	18	-	-	-
Waterhemp*	-	-	6	-	12
Wheat <sup>2</sup>	6	12	18	-	-
Wheat (Overwintered)	-	6	12	-	18
Wild oats	3	6	18	-	-
Wild proso millet	-	6	12	-	18
Witchgrass	-	12	-	-	-
Wooly cupgrass	-	6	12	-	-
Yellow rocket	-	12	20	-	-

<sup>1</sup> To control Downy brome in no-till systems, use 15 fl. oz. of this product per acre.  
<sup>2</sup> Performance of this product is enhanced if application is made before this weed reaches the boot stage of growth.  
<sup>3</sup> To control Wild buckwheat in the cotyledon to 2 leaf stage, use 15 fl. oz. of this product per acre. Use 20 fluid ounces of this product per acre to control 2 to 4 leaf Wild buckwheat. For enhanced control of Wild buckwheat over 2 inches in size, use sequential treatments of 20 fl. oz. followed by 20 fl. oz. of this product per acre.  
<sup>4</sup> Do not apply this product when Kochia is in the button stage.  
<sup>5</sup> Control of Russian thistle may vary based on environmental conditions and spray coverage. If possible, a tank-mixture with 2,4-D as described below may improve control.  
\*A glyphosate-resistant biotype has been confirmed. For additional information, refer to the "WEED RESISTANCE MANAGEMENT" section of this label. You may also visit the website, [www.weedscience.org](http://www.weedscience.org).

### Annual Weeds — Tank-Mixtures with 2,4-D, Dicamba or Picloram

Enhanced control of certain hard-to-control weeds can be achieved by tank-mixing this product with Dicamba, 2,4-D, or Picloram. An appropriate rate of these other herbicides combined with the rate of this product specified in the "ANNUAL WEEDS RATE TABLE" will control the following weeds up to the maximum height or length as indicated below:

Weeds (6 Inches Maximum Height or Length)	Weeds (12 Inches Maximum Height or Length)
Horseweed/Marestail ( <i>Conyza canadensis</i> ) Kochia* Morningglory Prickly lettuce Wild buckwheat**	Cocklebur Lambsquarters Pigweeds Thistle, Russian***
*Controlled with Dicamba tank-mixture only. **Controlled with Picloram tank-mixture only. ***Controlled with 2,4-D tank-mixture only.	

At application rates given under "ANNUAL WEEDS", this product will control the following weeds up to a maximum height or length as indicated below. For enhanced control of these weeds, apply this product in a tank-mix with 2,4-D.

Weeds (6 Inches Maximum Height or Length)	
Ragweed (Common) Ragweed (Giant)	Smartweed (Pennsylvania) Velvetleaf

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 Weeds — Handheld or Backpack Sprayers

To control weeds listed in the "ANNUAL WEEDS RATE TABLE" section of this label, apply a 0.3% solution of this product to weeds less than 6 inches in height or runner length. Apply prior to seed head formation in grass or bud formation in broadleaf weeds. To control annual weeds over 6 inches tall or unless otherwise specified, use a 0.6% solution.

For enhanced results on harder-to-control perennials, such as Bermudagrass, Canada thistle, Dock, Field bindweed, Hemp dogbane, and Milkweed, apply 1.3% solution of this product.

When using application methods that result in less than complete coverage, apply 3.1% solution to control annual and perennial weeds and a 3.1 to 6.2% solution to control woody brush, trees, and vines.

### Annual Weeds — Tank-Mixtures for Fallow and Reduced Tillage Systems

For use only in Colorado, Kansas, Nebraska, Oklahoma, Oregon, South Dakota, and Washington. In Oregon and Washington, do not exceed 1 pound of Atrazine per acre.

15 to 18 fluid ounces of this product plus Atrazine per acre will provide enhanced control the following weeds:

Barnyardgrass* Downy brome Field sandbur Green foxtail Kochia**	Lambsquarters Pigweed Prickly lettuce Stinkgrass Tansy mustard	Russian thistle Volunteer Wheat Witchgrass
*Requires 18 fl. oz. of this product per acre for enhanced control of Barnyardgrass. **Add appropriate rate of Dicamba to the tank-mix for control of Kochia.		

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.

### PERENNIAL WEEDS

Apply this product to actively growing perennial weeds. New leaf development indicates active growth. Enhanced results can be obtained when soil moisture is adequate for active weed growth.

If weeds have been recently mowed or tilled, do not apply this product until plants have resumed active growth and have reached the specified stage of growth or sufficient growth has been achieved to allow for good interception of the spray solution. For enhanced control, do not mow, cut, till, burn or disturb vegetation in the application area for a minimum of 7 days after application.

For control of perennial weeds using a handheld controlled droplet applicator (CDA), apply a 20 to 30% solution of this product (25 to 38 fl. oz./gal. of applicator solution) at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mile per hour (2 to 3 qt./A). When using a vehicle-mounted CDA, apply the appropriate amount of this product as indicated in the following "PERENNIAL WEEDS RATE TABLE" in 2 to 15 gallons of water per acre.

This product has no soil activity and does not control emergence of perennial weeds from seed and dormant underground roots, rhizomes or tubers present in the soil at the time of application. More than one application of this product might be necessary to control weeds regenerating from underground parts or seed, but must be made prior to crop emergence, except where in-crop application is allowed.

Apply this product in the Fall before a killing frost.

Unless otherwise directed, allow a minimum of 7 days after application before soil tillage.

### PERENNIAL WEEDS RATE TABLE

Perennial Weeds	Broadcast Rate (Qt./A)	Volume of Water (Gal./A)	Handheld Sprayer Concentration (% Solution)
Alfalfa	1 to 1.25	3 to 10	1.3
	Apply after the last hay cutting in the Fall and when Alfalfa has regrown to a height of 6 to 8 inches or more. Follow applications with deep tillage after at least 7 days after treatment but before soil freeze up.		
Alligatorweed	2.5	3 to 20	0.9
	For partial control, apply when most of the Alligatorweed are in bloom. Repeat applications will be required to achieve control.		
Anise (Fennel)	-	-	0.9 to 1.3
	Apply when most Anise have reached the early bud stage of growth.		

Bahigrass	1.9 to 3.1	3 to 20	1.3
	Apply when most Bahigrass have reached the early heading stage of growth.		
Bentgrass	0.9	10 to 20	1.3
	For suppression in grass seed production areas using ground application equipment only. Ensure entire crown area has resumed growth prior to Fall applications. Make sure that Bentgrass has at least 3 inches of growth before application. Avoid tillage prior to treatment. For enhanced results, till 7 to 10 days after application.		
Bermudagrass	1.9 to 3.1	3 to 20	1.3
	Apply 3.1 qt. of this product per acre for control. Treat when Bermudagrass is actively growing and seed heads are present. Retreatment may be necessary to achieve control. For partial control, apply 60 fl. oz./A.		
Bermudagrass, Water (Knotgrass)	0.6 to 1	5 to 10	1.3
	Apply 30 fl. oz. of this product in 5 to 10 gallons of water per acre. Apply when Water bermudagrass is 12 to 18 inches in length. Allow at least 7 days after application before tilling, flushing or flooding the field. Fall applications only: Apply 20 fl. oz. of this product in 5 to 10 gallons of water per acre prior to frost and when Water bermudagrass is 12 to 18 inches in length. Till fallow fields prior to application. This product is not registered in California for use on Water bermudagrass.		
Bindweed (Field)	0.3 to 3.1	3 to 20	1.3
	Do not apply field Bindweed is under drought stress as good soil moisture is necessary for active growth. For control, apply 2.5 to 3.1 qt. of this product per acre west of the Mississippi River and 1.9 to 2.5 qt. east of the Mississippi River. Apply when the weeds are at or beyond full bloom. For enhanced results, apply in late Summer or Fall before a killing frost. Also for control, apply 40 fl. oz. of this product plus appropriate rate of Dicamba in 10 to 20 gallons of water per acre. Do not apply this tank-mixture by air. For suppression on irrigated agricultural land, apply 20 to 40 fl. oz. of this product plus appropriate rate of 2,4-D in 10 to 20 gal. of water per acre with ground equipment only. Apply following harvest or on fallow ground in the Fall when the Bindweed is actively growing and the majority of runners are 12 inches or more in length. Irrigate at least once to promote active Bindweed growth. For suppression, apply 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre using ground application equipment or in 3 to 5 gal. of water per acre for aerial applications. Apply by air in fallow and reduced tillage systems only. Delay applications until maximum emergence has occurred and when vines are 6 to 18 inches in length. <b>In California only:</b> Apply 20 fl. oz. to 3.1 qt. of this product per acre. Actual rate needed for suppression or control will vary within this range depending on local conditions. For suppression on irrigated land where annual tillage is performed, apply 20 fl. oz. of this product in 3 to 10 gal. of water per acre. Apply to Bindweed that has reached a length of 12 inches or more. Allow maximum weed emergence and runner growth. Allow at least 3 days after application before tillage.		
Bluegrass (Kentucky)	0.6 to 1.25	3 to 40	1.3
	Apply 40 fl. oz. of this product in 10 to 40 gal. of water when weeds have reached boot to early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 20 to 30 fl. oz. of this product in 3 to 10 gal. of water per acre. Apply to actively growing Bluegrass when most have reached 4 to 12 inches in height.		
Blueweed (Texas)	1.9 to 3.1	3 to 40	1.3
	Apply 2.5 to 3.1 qt. of this product per acre west of the Mississippi River or 1.9 to 2.5 qt. per acre east of the Mississippi River. Apply when weeds are at or beyond full bloom. For enhanced results, apply in late Summer or Fall before a killing frost.		
Brackenfern	1.9 to 2.5	3 to 40	0.9

	Apply to fully expanded fronds that are at least 18 inches long.		
Bromegrass (Smooth)	0.6 to 1.25	3 to 40	1.3
	Apply 40 fl. oz. of this product in 10 to 40 gal. of water when weeds have reached boot to early seedhead stage of development. For partial control in pasture or hay crop renovation, apply 20 to 30 fl. oz. of this product in 3 to 10 gal. of water per acre. Apply to actively growing Bromegrass when most have reached 4 to 12 inches in height.		
Bursage (Woolyleaf)	-	3 to 20	1.3
	Apply 40 fl. oz. of this product per acre plus appropriate rate of Dicamba when plants are producing new active growth that has been initiated by moisture for at least 2 weeks and are at or beyond flowering. For partial control, apply 20 fl. oz. of this product per acre plus appropriate rate of Dicamba that will provide partial control.		
Canarygrass (Reed)	1.25 to 1.9	3 to 40	1.3
	Apply when most of the Canarygrass have reached the early heading stage of growth.		
Cattail	1.9 to 3.1	3 to 40	1.3
	Apply when most Cattail have reached the early heading stage of growth.		
Clover (Red, White)	1.9 to 3.1	3 to 20	1.3
	Apply when most Clover have reached the early bud stage. For control, apply 10 to 20 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gallons of water per acre.		
Cogongrass	1.9 to 3.1	10 to 40	1.3
	Apply when Cogongrass is at least 18 inches tall in late Summer or Fall. Due to uneven stages of growth and the dense nature of vegetation that could prevent good spray coverage, repeat treatments may be necessary to achieve control.		
Dallisgrass	1.9 to 3.1	3 to 20	1.3
	Apply when most Dallisgrass have reached the early heading stage of growth.		
Dandelion	1.9 to 3.1	3 to 40	1.3
	Apply when most Dandelion have reached the early bud stage of growth. For control, apply 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre.		
Dock (Curly)	1.9 to 3.1	3 to 40	1.3
	Apply when most Dock have reached the early bud stage of growth. For control, apply 10 to 20 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre.		
Dogbane (Hemp)	2.5	3 to 40	1.3
	Apply when most Dogbane have reached the late bud to flower stage of growth. After crop harvest or mowing, allow weeds to regrow to a mature stage prior to treatment. For enhanced results, apply in late Summer or Fall. For suppression, apply 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre for ground applications or 3 to 5 gal. of water per acre for aerial applications. Delay applications until maximum emergence of Dogbane has occurred.		
Fescue (Tall)	0.6 to 1.9	3 to 40	1.3
	Apply 60 fl. oz. of this product per acre when most Fescue have reached boot to early seedhead stage of growth. <b>Fall applications only:</b> Apply 20 fl. oz. of this product in 3 to 10 gal. of water per acre when plants have 6 to 12 inches of new growth. A sequential application of 10 fl. oz. of this product per acre will improve long term control and will control seedlings germinating after Fall treatments or the following Spring.		
Fescue (except Tall)	1.9 to 3.1	3 to 20	1.3
	Apply when most Fescue have reached the early heading stage of growth.		

Guineagrass	1.25 to 1.9	3 to 40	0.9
	Apply when most Guineagrass have reached the 7 leaf stage of growth. Ensure thorough coverage when using handheld equipment. In Texas and ridge of Florida, use 40 fl. oz./A for control. In the Flatwoods region of Florida, 60 fl. oz./A is needed for control.		
Horsenettle	1.9 to 3.1	3 to 20	1.3
	Apply when most Horsenettle have reached the early bud stage of growth.		
Horseradish	2.5	3 to 40	1.3
	Apply when most Horseradish have reached the late bud to flower stage of growth. For enhanced results, apply in late Summer or Fall.		
Iceplant	1.25	-	1.3 to 1.9
	Apply when most Iceplant have reached the early bud stage of growth. Thorough coverage is necessary for enhanced control.		
Jerusalem artichoke	1.9 to 3.1	3 to 20	1.3
	Apply when most Jerusalem artichoke have reached the early bud stage.		
Johnsongrass	0.3 to 1.9	3 to 40	0.9
	In annual cropping systems, apply 20 to 40 fl. oz. of this product in 3 to 10 gal. of water per acre. Use 40 fl. oz. of this product when applying in 10 to 40 gal. of water per acre. In noncrop or areas where annual tillage (no-till) is not practiced, apply 40 to 60 fl. oz. of this product in 10 to 40 gal. of water per acre.		
	For enhanced results, apply when most Johnsongrass have reached the boot to head stage of growth or in the Fall prior to frost. Allow at least 7 days after application before tillage. Do not tank-mix with residual herbicides when using 20 fl. oz. of this product per acre.		
	For burndown of Johnsongrass, apply 10 fl. oz. of this product in 3 to 10 gal. of water per acre before Johnsongrass have reached a height of 12 inches. Allow at least 3 days after treatment before tillage.		
Kikuyugrass	1.25 to 1.9	3 to 40	1.3
	Apply when most Kikuyugrass is at least 8 inches in height (3 or 4 leaf stage of growth). Allow at least 3 days after application before tillage.		
Knapweed	2.5	3 to 40	1.3
	Apply when most Knapweed have reached the late bud to flower stage of growth. For enhanced results, apply in late Summer or Fall.		
Lantana	-	-	0.9
	Apply at or beyond the bloom stage of growth.		
Lespedeza	1.9 to 3.1	3 to 20	1.3
	Apply when most Lespedeza have reached the early bud stage.		
Milkweed (Common)	1.9	3 to 40	1.3
	Apply when most Milkweed have reached the late bud to flower stage of growth.		
Muhyl (Wirestem)	0.6 to 1.25	3 to 40	1.3
	Use 20 fl. oz. of this product in 3 to 10 gal. of water per acre or 40 fl. oz. of this product when applying in 10 to 40 gal. of water per acre or when applying in pasture, sod or non-crop areas when Wirestem muhly is 8 inches or more in height. Do not till the soil between harvest and Fall applications or in the Fall or Spring prior to Spring applications. Allow at least 3 days after application before tillage.		
Mullein (Common)	1.9 to 3.1	3 to 20	1.3
	Apply when most Mullein are in the early bud stage.		
Napiergrass	1.9 to 3.1	3 to 20	1.3
	Apply when most Napiergrass are in the early heading stage of growth.		



Nightshade (Silverleaf)	1.25	3 to 10	1.3
	For enhanced results, apply when at least 60% of Nightshade has berries. Make Fall applications before a killing frost.		
Nutsedge (Purple, Yellow)	0.3 to 1.9	3 to 40	0.9 to 1.3
	<p>Apply 60 fl. oz. of this product per acre to control Nutsedge plants and immature nutlets or apply a 0.9 to 1.3% solution when Nutsedge are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and need repeat treatments after germination for long term control.</p> <p><b>Sequential applications:</b> 20 to 40 fl. oz. of this product in 3 to 10 gal. of water per acre when majority of the Nutsedge plants are in the 3 to 5 leaf stage (less than 6 inches tall) will also provide control. Repeat this application as necessary when newly emerging plants reach the 3 to 5 leaf stage. Subsequent applications will be necessary for long term control.</p> <p>For partial control of existing plants, apply 10 to 40 fl. oz. of this product in 3 to 40 gal. of water per acre when plants have 3 to 5 leaves and most are less than 6 inches tall. Repeat this application as needed to control subsequent emerging Nutsedge or regrowth of existing plants.</p>		
Orchardgrass	0.6 to 1.25	3 to 40	1.3
	<p>Apply 40 fl. oz. of this product in 10 to 40 gal. of water per acre when most Orchardgrass have reached boot to early seed head stage of development. For partial control in pasture or hay crop renovation, apply 20 to 30 fl. oz. of this product in 3 to 10 gal. of water per acre. Apply to actively growing Orchardgrass when most have reached 4 to 12 inches in height.</p> <p><b>Orchardgrass sods going to no-till Corn:</b> Apply 20 to 30 fl. oz. of this product in 3 to 10 gal. of water per acre. Apply to Orchardgrass that is at least 12 inches tall for Spring applications and 6 inches tall for Fall applications. Allow at least 3 days after application before planting. A sequential application of Atrazine will be necessary for optimum results.</p>		
Pampasgrass	-	-	0.9 to 1.3
	Apply when Pampasgrass is at or beyond the boot stage of growth. Thorough coverage is necessary for enhanced control.		
Paragrass	1.9 to 3.1	3 to 20	1.3
	Apply when most Paragrass are in the early heading stage of growth.		
Phragmites	1.9 to 3.1	10 to 40	0.9 to 1.3
	For partial control and for enhanced results, treat during late Summer or Fall when Phragmites are actively growing and in full bloom. Application before or after this stage may lead to reduced control. Due to the dense nature of the vegetation, which may prevent good spray coverage or uneven stages of growth, repeat treatments may be necessary to achieve control. Visual symptoms of control will be slow to develop.		
Poison hemlock	-	-	0.9 to 1.3
	Apply as a spray-to-wet treatment using a handheld sprayer. Optimum results are obtained when Poison hemlock are treated at the bud to full-bloom stage of growth.		
Pokeweed (Common)	1	3 to 40	1.3
	Apply to actively growing Pokeweed up to 24 inches tall.		
Quackgrass	0.6 to 1.9	3 to 40	1.3
	<p>In annual cropping systems or in pastures and sod fields to be cultivated with deep tillage, apply 20 fl. oz. of this product in 3 to 10 gal. of water per acre or 40 fl. oz. in 10 to 40 gal. of water per acre when Quackgrass is 6 to 8 inches tall. Do not tank-mix with residual herbicides when using the 20 fl. oz. rate. Do not till between harvest and Fall applications or in Fall or Spring prior to Spring application. Allow at least 3 days after application before tillage. In pastures or sods, use a moldboard plow for enhanced results.</p> <p>In pastures, sods or non-crop areas where deep tillage will not follow application, apply 40 to 60 fl. oz. of this product in 10 to 40 gal. of water per acre when Quackgrass is more than 8 inches tall.</p>		
Redvine	0.5 to 1.25	5 to 10	1.3

	For suppression, make two applications of 15 fl. oz. of this product per acre 7 to 14 days apart or a single application of 40 fl. oz. in 5 to 10 gal. of water per acre. Apply in late September or early October to Redvine that are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Make applications at least 1 week before a killing frost.		
Reed (Giant)	-	-	1.3
	Enhanced results are obtained when applications are made in late Summer or Fall.		
Ryegrass (Perennial)	0.6 to 1.9	3 to 40	0.9
	In annual cropping systems, apply 20 to 40 fl. oz. of this product in 3 to 10 gal. of water per acre or 40 fl. oz. of this product when applying in 10 to 40 gal. of water per acre. In non-crop sites or fields where annual tillage is not practiced (no till), apply 40 to 60 fl. oz. of this product in 10 to 40 gal. of water per acre. For enhanced results, apply when most Ryegrass have reached the boot to head stage of growth or in the Fall prior to frost. Do not tank-mix with residual herbicides when using 20 fl. oz. of this product per acre.		
Smartweed (Swamp)	1.9 to 3.1	3 to 40	1.3
	Apply when most Smartweed have reached the early bud stage of growth. For control, apply 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre in the late Summer or Fall.		
Sowthistle (Perennial)	1.25 to 1.9	3 to 40	1.3
	Apply when most Sowthistle are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late Summer or Fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Make Fall applications before a killing frost. Allow at least 3 days after application before tillage.		
Spurge (Leafy)	-	-	1.3
	For suppression, apply 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre in the late Summer or Fall. If mowing has occurred, delay application until most of the target weeds are 12 inches tall.		
Starthistle (Yellow)	1.25	10 to 40	1.3
	Enhanced results are obtained when applications are made during rosette, bolting and early flower stages.		
Sweet potato (Wild)	-	-	1.3
	For partial control, apply to Wild sweet potato at or beyond the bloom stage of growth. Repeat applications may be required.		
Thistle (Artichoke)	-	-	1.3
	For partial control, apply to Thistle at or beyond the bloom stage of growth. Repeat applications may be required.		
Thistle (Canada)	1.25 to 1.9	3 to 40	1.3
	Apply when most Canada thistles are at or beyond the bud stage of growth. After harvest, mowing or tillage in the late Summer or Fall, allow at least 4 weeks for initiation of active growth and rosette development prior to the application of this product. Make Fall applications before a killing frost. For suppression in the Spring, apply 20 fl. oz. of this product alone or 10 fl. oz. of this product plus appropriate rate of 2,4-D in 3 to 10 gal. of water per acre when rosette is at least 6 inches in diameter. Applications can be made as long as leaves are still green and plants are actively growing. Allow at least 3 days after application before tillage.		
Timothy	1.25 to 1.9	3 to 40	1.3
	Apply when most Timothy are in the early heading stage of growth.		
Torpedograss	2.5 to 3.1	3 to 40	1.3
	For partial control, apply when most Torpedograss are at or beyond the seed head stage of growth. Repeat applications will be needed to achieve control. Make Fall applications before the frost.		
Trumpet creeper	1.25	5 to 10	1.3
	For partial control, apply in late September or October when Trumpet creeper are at least 18 inches tall and have been growing 45 to 60 days since the last tillage operation. Apply at least 1 week before a killing frost.		
Vaseygrass	1.9 to 3.1	3 to 20	1.3

	Apply when most Vaseygrass are in the early heading stage of growth.		
Velvetgrass	1.9 to 3.1	3 to 20	1.3
	Apply when most Velvetgrass are in the early heading stage of growth.		
Wheatgrass (Western)	1.25 to 1.9	3 to 40	1.3
	Apply when most Wheatgrass are in the early heading stage of growth.		

### WOODY BRUSH, TREES, AND VINES

Apply this product during full leaf expansion, unless otherwise directed. Use the higher application rate or spray solution concentration within the specified range for larger plants or dense vegetative growth. On vines, use the higher application rate or spray solution concentration for plants that have reached the woody stage of growth. Enhanced results are obtained when application is made in late Summer or Fall after fruit formation.

In arid areas, enhanced results are obtained when applications are made in the Spring to early Summer when brush species are at high moisture content and are flowering.

Unless otherwise directed, make broadcast applications in 3 to 40 gallons of water per acre. Ensure thorough coverage when using handheld sprayers. Herbicidal symptoms might not appear prior to frost or senescence following application in the Fall.

Allow at least 7 days after application before tillage, mowing or removal of vegetation in the application area. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable when applying this product provided no major leaf drop has occurred. Reduced performance may result if Fall treatments are made following a frost.

### WOODY BRUSH, TREES, AND VINES RATE TABLE

Woody Brush, Tree & Vine Species	Broadcast Rate (Qt./A)	Handheld Sprayer Concentration (% Solution)
Alder	1.9 to 2.5	0.9
Ash*	1.25 to 3.1	0.9 to 1.3
Aspen (Quaking)	1.25 to 1.9	0.9
Bearmat (Bearclover)*	1.25 to 3.1	0.9 to 1.3
Beech*	1.25 to 3.1	0.9 to 1.3
Birch	1.25 to 1.9	0.9
Blackberry	1.9 to 2.5	0.9
	Apply after target plants have reached full leaf maturity. For enhanced results, apply in late Summer or Fall. Apply a 0.6% solution of this product after berries have set or dropped in late Fall. After leaf drop and until a killing frost or as long as stems are green, apply 1.9 to 2.5 qt. of this product in 10 to 40 gal. of water per acre.	
Blackgum	1.25 to 3.1	0.9 to 1.3
Bracken	1.25 to 3.1	0.9 to 1.3
Broom (French, Scotch)	-	0.9 to 1.3
Buckwheat (California)*	-	0.9 to 1.3
	Thorough coverage of foliage is necessary for enhanced results.	
Cascara*	1.25 to 3.1	0.9 to 1.3
Catsclaw*	-	0.9
Ceanothus*	1.25 to 3.1	0.9 to 1.3
Chamise	-	0.9
	Thorough coverage of foliage is necessary for enhanced results.	
Cherry (Bitter, Black, Pin)	1.25 to 1.9	0.9
Coyote brush	-	0.9 to 1.3
	Apply when at least 50% of the new leaves are developed.	
Dogwood*	1.25 to 3.1	0.9 to 1.3
Elderberry	1.25 to 1.9	0.9
Elm*	1.25 to 3.1	0.9 to 1.3
Eucalyptus	-	1.3

	For control of Eucalyptus resprouts, apply when resprouts are 6 to 12 feet tall. Ensure complete coverage. Application to drought-stressed Eucalyptus plants will result in less than optimum results.	
Florida holly (Brazilian peppertree)*	1.25 to 3.1	0.9 to 1.3
Gorse*	1.25 to 3.1	0.9 to 1.3
Hasardia*	-	0.9 to 1.3
	Thorough coverage of foliage is necessary for enhanced results.	
Hawthorn	1.25 to 1.9	0.9
Hazel	1.25 to 1.9	0.9
Hickory*	1.25 to 3.1	0.9 to 1.3
Honeysuckle	1.9 to 2.5	0.9
Hornbeam (American)*	1.25 to 3.1	0.9 to 1.3
Kudzu	2.5 to 3.1	1.3
	Repeat applications may be needed to achieve control.	
Locust (Black)*	1.25 to 2.5	0.9 to 1.3
Madrone (Resprouts)*	-	1.3
	Apply to resprouts that are 3 to 6 feet tall. Enhanced results are obtained with Spring or early Summer treatments.	
Manzanita*	1.25 to 3.1	0.9 to 1.3
Maple (red)	1.25 to 2.5	0.9
	Apply 0.9% solution when at least 50% of the new leaves are fully developed. For partial control, apply 40 to 80 fl. oz. of this product per acre.	
Maple (Sugar)	-	0.9
	Apply when at least 50% of the new leaves are fully developed.	
Monkey flower*	-	0.9 to 1.3
	Thorough coverage of foliage is necessary for enhanced results.	
Oak (Black, White)*	1.25 to 2.5	0.9 to 1.3
Oak (Northern)	-	0.9
	Apply when at least 50% of the new pin leaves are fully developed.	
Oak (Post)	1.9 to 2.5	0.9
Oak (Southern, Red)	1.25 to 1.9	0.9
Persimmon*	1.25 to 3.1	0.9 to 1.3
Pine	1.25 to 3.1	0.9 to 1.3
Poison ivy/Poison oak	2.5 to 3.1	1.3
	Repeat applications may be needed to achieve control. Make Fall applications before leaves lose green color.	
Poplar (Yellow)*	1.25 to 3.1	0.9 to 1.3
Redbud (Eastern)	1.25 to 3.1	0.9 to 1.3
Rose (Multiflora)	1.25	0.9
	Apply prior to leaf deterioration caused by leaf eating insects.	
Russian olive*	1.25 to 3.1	0.9 to 1.3
Sage (Black)	-	0.9
	Thorough coverage is necessary for enhanced results.	
Sage (White)*	1.25 to 3.1	0.9 to 1.3
Sage brush (California)	-	0.9
	Thorough coverage is necessary for enhanced results.	
Salmonberry	1.25 to 1.9	0.9
Saltcedar	1.25 to 3.1	0.9 to 1.3
Sassafras*	1.25 to 3.1	0.9 to 1.3
Sourwood*	1.25 to 3.1	0.9 to 1.3
Sumac (Poison, Smooth, Winged)*	1.25 to 2.5	0.9 to 1.3
Sweetgum	1.25 to 1.9	0.9

Swordfern*	1.25 to 3.1	0.9 to 1.3
Tallowtree (Chinese)	-	0.9
	Thorough coverage is necessary for enhanced results.	
Tan oak (Resprouts)*	-	1.3
	Apply to resprouts that are less than 6 feet tall. Enhanced results are obtained following application in the Fall.	
Thimbleberry	1.25 to 1.9	0.9
Tobacco (Tree)*	-	0.9 to 1.3
Trumpet creeper	1.25 to 1.9	0.9
Vine maple*	1.25 to 3.1	0.9 to 1.3
Virginia creeper	1.25 to 3.1	0.9 to 1.3
Waxmyrtle (Southern)*	1.25 to 3.1	0.9 to 1.3
Willow	1.9 to 2.5	0.9
*Partial control		

## ANNUAL AND PERENNIAL CROPS

**NOTE: THIS SECTION GIVES DIRECTIONS FOR USE THAT APPLY TO ALL LISTED CROPS THAT FOLLOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS (PHI) AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.**

For applications to Roundup Ready and other listed Glyphosate Tolerant crops, refer to the "*ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS*" section of this label or separately published supplemental labeling for this product for use directions.

**TYPES OF APPLICATIONS:** Chemical Fallow, Pre-plant Fallow Beds, Pre-plant, At-Planting, Pre-emergence, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row Middles, Wiper Applications in Row-Middles, and Post-Harvest.

**USE INSTRUCTIONS:** This product may be applied during fallow intervals preceding planting, prior to planting or transplanting, at-planting or pre-emergence to annual and perennial crops listed on this label, except where specifically limited. For any crop not listed in this label, make applications at least 30 days prior to planting. Unless otherwise specified, weed control applications may be made according to the rates listed in the "*WEEDS CONTROLLED*" section.

Application of this product may be repeated as needed up to a maximum of 160 fluid ounces (5 qt.) per acre per year. Refer to specific use sections of this label for additional information on minimum intervals required before re-application of this product.

Hooded sprayers and wiper applicators capable of preventing all contact of the herbicide solution with the crop may be used in mulched or unmulched row middles after crop establishment. Wiper applicators may be used over-the-top of crops to control tall weeds only when specifically directed in the individual crop sections that follow. Crop injury is possible with these methods of application. Refer to the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label for information regarding the potential for crop injury using selective application equipment.

Spot treatment application of this product for weed control in a cropping system may be made only when specifically directed in the individual crop sections that follow.

Unless otherwise prohibited, all applications of this product described in the sections that follow may be made using aerial application equipment where appropriate, provided that the applicator complies with the precautions and restrictions specified on this label and on all supplemental labeling published for this product. Refer to the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label for information on aerial application and procedures for avoiding spray drift that could cause injury to any vegetation not intended for application. Use of appropriate buffers will help prevent injury to adjacent vegetation.

**TANK-MIXTURES:** This product may be tank-mixed with other herbicides to provide residual weed control, broader weed control spectrum or an alternate mode of action. Some tank-mix products have the potential to cause crop injury. Read the label of all products in the tank-mixture prior to use to determine the potential for crop injury. 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.

Mixing other products with this herbicide in the spray tank can cause incompatibility antagonism or a reduction in the efficacy of this product. If compatibility is not known, predetermine the compatibility of tank-mix products together in the carrier by mixing small proportional quantities in advance. Manufacturer has not tested all product formulations for compatibility or performance in a tank-mix. To the extent consistent with applicable law Buyer and all users are responsible for any and all loss or damage in

connection with the use or handling of mixtures of this product with herbicides or other materials that are not specifically identified on this label or on separate supplemental labeling or Fact Sheets for this product. See the “*TANK-MIXING*” section of this label for more information on tank-mixtures.

**USE PRECAUTIONS:** Avoid contact of this herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch) or fruit of crops, as severe crop injury or destruction could result. Transplant seedlings that come in contact with weeds that are still wet with a spray solution of this product could result in significant crop injury. When making pre-emergence applications, make applications before crop emergence to avoid severe crop injury. Broadcast application of this product at emergence will result in injury or death of emerged seedlings. Apply before seed germination in *coarse sandy soils* to further minimize the risk of crop injury. In crops where spot treatment is allowed, the crop sprayed with this product will be killed along with the weeds. Take care not to spray or allow spray to drift outside the target area to avoid unwanted crop destruction. See the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label for additional information.

Pre-harvest application on crops grown for seed could result in a reduction in germination or vigor.

**USE RESTRICTIONS:** Observe the maximum application rates stated throughout this label. Maximum application rates apply to the use of this product combined with the use of any and all other herbicides containing glyphosate as the active ingredient, whether applied separately or as mixtures. Calculate the application rates (glyphosate acid equivalent) and ensure that the total use of this and other glyphosate containing products does not exceed the stated maximum rate. See the “*PRODUCT INFORMATION*” section of this label for more information on maximum application rates.

Unless otherwise directed on this label, application using selective equipment, including wiper applicators and hooded sprayers, must be made at least 14 days prior to harvest. In crops where spot treatment is allowed, do not apply this product to more than 10% of the total field to be harvested, unless otherwise directed. Post-harvest and fallow applications must be made at least 30 days prior to the planting of any crop not listed on this label.

**Pre-Harvest Interval (PHI):** Do not harvest or feed vegetation from an area for 8 weeks following broadcast post-emergence application, unless otherwise directed.

When applying this product as a tank-mixture with one or more products, refer to each individual tank-mix product label. 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.

## **CEREAL AND GRAIN CROPS**

**[Barley, Buckwheat, Millet (Pearl, Proso), Oats, Quinoa, Rice, Rye, Teff, Teosinte, Triticale, Wheat (All types), Wild Rice]**

**TYPES OF APPLICATIONS:** Those listed above in “*ANNUAL AND PERENNIAL CROPS*” plus the following: Red Rice Control Prior to Planting Rice, Spot Treatment (except Rice), Control of Barnyardgrass in Rice Using Renovation Treatment (CA only), Wiper Applications (Feed Barley and Wheat Only), Pre-harvest (Feed Barley and Wheat Only).

### **Pre-plant, At-planting Applications, Pre-emergence**

This product may be applied before, during or after planting of cereal crops prior to emergence of the crop.

### **Control of Red Rice Prior to Planting Rice**

Flush fields prior to application to obtain uniform germination and stand of Red rice. Apply 30 fluid ounces of this product in 5 to 10 gallons of water per acre when majority of the Red rice plants are in the 2 leaf stage and no more than 4 inches tall. Red rice plants with less than 2 true leaves may be only partially controlled.

**USE PRECAUTIONS:** Avoid spraying during low humidity conditions, as reduced control may result.

**USE RESTRICTIONS:** Do not flood treated fields for 8 days following application. Do not treat Rice fields or levees when fields contain floodwater.

### **Spot Treatment (Except Rice)**

This product may be applied as a spot treatment in cereal crops. Apply this product before heading in small grains.

**USE RESTRICTIONS:** Do not treat more than 10% of the total field area to be harvested.

### **Control of Barnyardgrass in Rice Using Renovation Treatment (CA Only)**

In California, this product may be applied as a renovation treatment in Rice crops to control Barnyardgrass (*Echinochloa crus-galli*) infestations using ground broadcast application equipment or a handheld sprayer. Renovation is defined as a herbicide application that will result in crop and weed destruction in an entire field or contiguous area within a field.



USE RESTRICTIONS: Rice straw and stubble from the application area plus an additional 25 foot buffer zone on all sides may not be used for animal bedding, grazing or any other feed purposes. Do not apply using aerial application equipment.

### **Wiper Applications (Feed Barley and Wheat Only)**

Over-the top wiper applications may be made on feed Barley and Wheat to control tall weeds. To control Common rye or Cereal rye, apply after the weeds have headed and achieved maximum growth. See additional instructions on the use of wiper applicators in "SELECTIVE EQUIPMENT" under "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 35 days between application and harvest. Do not use roller applicators.

### **Pre-harvest (Feed Barley and Wheat Only)**

This product provides weed control when applied prior to harvest of Feed barley or Wheat. For Feed barley, apply after the hard-dough stage and when the grain contains 20% moisture or less. For Wheat, apply after the hard-dough stage of grain (30% or less grain moisture). Stubble may be grazed immediately after harvest.

This product may be applied using either aerial or ground spray equipment. For ground applications, apply this product in 10 to 20 gallons of water per acre. For aerial applications, apply this product in 3 to 10 gallons of water per acre.

USE RESTRICTIONS: Do not apply more than 20 fluid ounces of this product per acre. Pre-Harvest Interval (PHI): Allow 7 days between application and harvest or grazing.

### **Post-harvest Applications**

This product may be applied to control weeds after harvest of cereal crops. Higher rates may be required for control of large weeds which were growing in the crop at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used.

USE RESTRICTIONS: For any crop not listed on this label, applications must be made at least 30 days prior to planting the next crop. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between treatment and harvest or feeding of treated vegetation.

### **Nonselective Control of Annual Weeds in Small Grain Cropping Systems (South Dakota Only)**

Refer to the "WEEDS CONTROLLED" section of this label for rates and weeds controlled. Apply in 3 to 5 gallons of water per acre by ground and 2 to 3 gallons of water per acre for aerial applications.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this herbicide can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 mph or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) that are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE. **Note:** To prevent injury to adjacent desirable vegetation, appropriate buffer zones must be maintained.

Adjust boom height on ground equipment to prevent streaked, overlapped or uneven applications. Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. In aerial applications, do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. Ensure uniform application. Use appropriate marking devices when applying herbicides by air. Avoid spraying when weeds are subject to moisture stress, when dust is on foliage, or when straw canopy covers the weeds.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residue of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF PART. LANDING GEAR IS MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.



**USE RESTRICTIONS:****Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)****Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)****Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)****CORN****[Field, Pop, Seed, Silage, Sweet]**

TYPES OF APPLICATIONS: Those listed in "ANNUAL AND PERENNIAL CROPS" plus the following: Pre-harvest, Spot Treatment.

For Roundup Ready Corn and other Glyphosate tolerant Corn, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

**Pre-plant, At-planting Applications, Pre-emergence**

This product may be applied alone or in a tank-mixture before, during or after planting Corn but prior to emergence of the crop.

**Tank-Mixtures**

This product can be tank-mixed with other herbicides (examples are listed below). Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

Atrazine	Dimethenamid	Mesotrione	Thifensulfuron
Alachlor	Dimethenamid-P	Metolachlor	Topramezone
Acetochlor	Flufenacet	Metribuzin	Tembotrione
Bicyclopyrone	Flumetsulam	Nicosulfuron	Thiencarbazone-methyl
Bromoxynil	Flumiclorac pentyl ester	Pendimethalin	Thiencarbazone/ Isoxaflutole
Carfentrazone-ethyl	Fluthiacet-methyl	Prosulfuron	
Clopyralid	Glufosinate	Pyroxasulfone	
2,4-D	Imazethapyr	Rimsulfuron	
Dicamba	Isoxaflutole	Saflufenacil	
Diflufenzopyr	Linuron	Simazine	

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.

For difficult-to-control annual weeds such as Barnyardgrass, Crabgrass, Fall panicum, Shattercane and broadleaf Signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 20 fluid ounces of this product per acre in these tank-mixtures. For other listed annual weeds, apply 15 to 20 fluid ounces of this product per acre when weeds are less than 6 inches tall, and 20 to 30 fluid ounces when weeds are over 6 inches tall.

When using nitrogen solutions as the carrier, higher application rates might be needed for acceptable weed control.

USE RESTRICTIONS: Applications of 2,4-D or Dicamba must be made at least 7 days prior to planting Corn.

In Southern states, do not mix this product in nitrogen solutions for application to hard-to-control grasses such as Barnyardgrass, Fall panicum, annual Ryegrass, broadleaf Signalgrass, and any perennial weeds. The area includes Illinois and Indiana south of Route 50 and the following states: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

**Hooded Sprayers**

This product may be applied through hooded sprayers for weed control between the rows of Corn. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instruction for the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

USE RESTRICTIONS: Corn must be at least 12 inches tall, measured without extending leaves. Do not apply more than 20 fluid ounces of this product per acre for each hooded sprayer application and no more than 60 fluid ounces per acre per year total.

## Spot Treatment

For spot treatments, apply this product prior to silking of Corn.

USE RESTRICTIONS: Do not treat more than 10% of the total field area to be harvested.

## Pre-harvest Applications

Up to 60 fluid ounces of this product per acre may be applied using ground application equipment or up to 40 fluid ounces per acre using aerial application equipment when kernel-fill is complete and Corn is physiologically mature (black layer formed) and grain moisture is 35% or less.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 7 days between application and harvest.

## Post-harvest Applications

This product may be applied after harvest of Corn. Higher rates may be required to control large weeds growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

USE RESTRICTIONS: Allow a minimum of 7 days between treatment and harvest or feeding of vegetation within the treated area. Application of this product must be made at least 30 days prior to planting of any crop not listed on this label.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs. AE/Ac)**

## COTTON

TYPES OF APPLICATIONS: Those listed in "ANNUAL AND PERENNIAL CROPS" plus the following: Selective Equipment, Spot Treatment, Pre-harvest.

For Cotton with Roundup Ready Technology and other Glyphosate tolerant Cotton, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

### Pre-plant, At-planting Applications, Pre-emergence

This product may be applied before, during or after planting Cotton but prior to crop emergence.

TANK-MIXTURES: This product can be tank-mixed 2,4-D or Dicamba and applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence. Apply these tank-mixtures in 10 to 20 gallons of water per acre.

Acetochlor	Fluometuron	Pendimethalin
Clomazone	Fomesafen	Prometryn
Diuron	Metolachlor	Pyriithiobac
Flumioxazin	Norflurazon	Saflufenacil

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.

### Hooded Sprayer, Selective Equipment

This product may be applied using hooded sprayers, shielded applicators or over-the top of Cotton using wiper applicators to control tall weeds. See the "SELECTIVE EQUIPMENT" section under "APPLICATION EQUIPMENT AND TECHNIQUES" of this label for additional information on proper use of these types of equipment.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 7 days between application and harvest.

## Spot Treatment

For spot treatments, apply this product prior to boll opening of Cotton.

USE RESTRICTIONS: Do not treat more than 10% of the total field area to be harvested.

## Pre-harvest Applications

This product provides weed control and Cotton regrowth inhibition when applied prior to harvest of Cotton. For weed control, apply at the rates given in the "ANNUAL WEEDS" and "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section of this label.

For Cotton regrowth inhibition, apply 15 to 40 fluid ounces of this product per acre. Apply only after sufficient bolls have developed to produce the desired yield of Cotton. Applications made prior to this time could affect maximum yield potential.

TANK-MIXTURES: This product may be tank-mixed with Tribufos, Thidiazuron + Diuron or Ethephon to enhance Cotton leaf drop. 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.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest of Cotton. DO NOT add additional surfactant or additives containing surfactant to this product for pre-harvest application to Cotton.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

## FALLOW AND REDUCED TILLAGE SYSTEMS

### Fallow Systems

This product may be applied during the fallow period prior to planting or emergence of any crop listed on this label. Apply at least 30 days prior to planting of any crop not listed on this label.

TYPES OF APPLICATIONS: Chemical Fallow, Pre-plant Fallow Beds, Aid-to-Tillage.

#### Chemical Fallow:

This product may be used as a substitute for tillage to control annual weeds in fallow fields. Broadcast or spot treatments will also control or suppress many perennial weeds in fallow fields. Tank-mix this product with 2,4-D or Dicamba for broader weed control spectrum. Aerial application of up to 40 fluid ounces of this product per acre may be made onto fallow fields where there is sufficient buffer to prevent injury due to drift onto adjacent crops.

USE PRECAUTIONS: Some crop injury may occur if Dicamba is applied within 45 days of planting.

#### Pre-plant Applications on Fallow Beds:

This product will control weeds listed in the "WEEDS CONTROLLED" section prior to planting.

TANK-MIXTURES: 8 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds:

<b>Weeds (3 Inches Maximum Height or Length)</b>	<b>Weeds (6 Inches Maximum Height or Length)</b>
Cheeseweed (common) Chickweed Groundsel	London rocket Shepherdspurse

10 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds:

<b>Weeds (6 Inches Maximum Height or Length)</b>	<b>Weeds (12 Inches Maximum Height or Length)</b>
Cheeseweed (common) Groundsel Horseweed/Marestail ( <i>Conyza canadensis</i> )	Chickweed London rocket Shepherdspurse

It is the pesticide user's responsibility to ensure that tank-mix product is 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.

## Aid-To-Tillage

This product may be used in conjunction with tillage practices in fallow systems or prior to planting of crops listed on this label (pre-plant) to control Cheat, Downy brome, Foxtail, Tansy mustard, and Volunteer Wheat. Apply 8 fluid ounces of this product in 3 to 10 gallons of water per acre before weeds are 6 inches in height. Application must be followed by conventional tillage practices no later than 15 days after treatment and before regrowth occurs. Allow at least 1 day after application before tillage.

USE PRECAUTIONS: Tank-mixtures with residual herbicides may result in reduced performance.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

## GRAIN SORGHUM (MILO)

TYPES OF APPLICATIONS: Those listed in "ANNUAL AND PERENNIAL CROPS" plus the following: Spot Treatment, Wiper Applications, Pre-harvest.

### Pre-plant, At-planting Applications, Pre-emergence

This product may be applied alone or in tank-mixture before, during or after planting Grain sorghum prior to emergence of the crop.

### Tank-Mixtures

Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre. Ensure that the product used is labeled for application prior to planting or emergence of Grain Sorghum.

Acetochlor Atrazine	Alachlor Metolachlor	Saflufenacil
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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.

For hard-to-control annual weeds such as Barnyardgrass, Broadleaf signalgrass, Crabgrass, Fall panicum, and Shattercane up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply at 20 fluid ounces of this product per acre in a tank-mixture with one or more of the listed products above.

For control of other annual weeds listed on this label, apply 15 to 20 fluid ounces of this product per acre when weeds are less than 6 inches tall and 20 to 30 fluid ounces per acre when weeds are over 6 inches tall. When using a nitrogen solution as the carrier, application rate might need to be increased to achieve adequate weed control.

### Spot Treatment, Over-the-top Wiper Applications

This product may be applied as a spot treatment in Grain sorghum before heading. This product may also be applied over-the-top of Grain Sorghum with wiper applicators to control or suppress tall weeds. See the "SELECTIVE EQUIPMENT" section under "APPLICATION EQUIPMENT AND TECHNIQUES" of this label for additional instructions on the use of wiper applicators.

USE RESTRICTIONS: For spot treatment, do not treat more than 10% of the total field area to be harvested. When applied with wiper applicators, allow at least 40 days between application and harvest. Do not use roller applicators. Do not feed or graze treated grain or Sorghum fodder. Do not ensile vegetation collected from within the treated area.

### Hooded Sprayers

This product may be applied using a hooded sprayer for weed control in between rows of Grain sorghum. Apply before Grain sorghum sends tillers between the drill rows. If tillers are sprayed with this herbicide, the main plant could be damaged or destroyed. Contact of this product in any manner with any vegetation to which application is not intended could cause damage. Only hooded sprayers that completely enclose the spray pattern may be used. See additional instructions on the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

USE RESTRICTIONS: Grain sorghum must be at least 12 inches tall measured without extending leaves. Do not graze or feed Grain sorghum forage or fodder following application of this product using a hooded sprayer. Do not apply more

than 20 fluid ounces of this product per acre per hooded spray application and no more than 60 fluid ounces per acre per year total.

### **Pre-harvest Applications**

Apply up to 40 fluid ounces of this product per acre after Grain sorghum has reached 30% moisture or less. As with other herbicides that cause sudden plant death, avoid pre-harvest application of this product to Grain sorghum (Milo) infected with Charcoal rot as lodging can occur.

USE RESTRICTIONS: Allow a minimum of 7 days between application and harvest of Grain sorghum. Pre-harvest application of this product on Grain sorghum (Milo) is not registered for use in California.

### **Post-harvest Applications**

This product may be applied for weed control after harvest of Grain sorghum. Higher application rates might be required to control large weeds that were growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

This product may be applied to Grain sorghum stubble following harvest to control or suppress regrowth. Apply 20 fluid ounces of this product per acre for control or 15 fluid ounces per acre for suppression.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest or feeding of vegetation within the application area. Application must be made at least 30 days prior to planting of any crop not listed on this label.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### **HERBS AND SPICES**

[Allspice; Angelica; Star anise; Annatto (seed); Balm; Basil; Borage; Burnet; Camomile; Capers buds; Caraway; Black caraway; Cardamom; Cassia bark; Cassia buds; Catnip; Celery seed; Chervil (dried); Chive; Chinese chive; Cinnamon; Clary; Clove buds; Coriander leaf (Cilantro or Chinese parsley); Coriander seed (Cilantro); Costmary; Culantro (leaf); Culantro (seed); Cumin; Curry (leaf); Dill (dillweed); Dill (seed); Epazote; Fennel seed (common and Florence); Fenugreek; Grains of paradise; Horehound; Hyssop; Juniper berry; Lavender; Lemongrass; Lovage (leaf and seed); Mace; Marigold; Marjoram (including Oregano); Oregano (Mexican); Mioga flower; Mustard (seed); Nasturtium; Nutmeg; Parsley (dried); Pennyroyal; Pepper (black and white); Pepper leaves; Peppermint; Perilla; Poppy (seed); Rosemary; Rue; Saffron; Sage; Savory (summer and winter); Spearmint; Stevia leaves; Sweet bay; Tansy; Tarragon; Thyme; Vanilla; White ginger flower; Wintergreen; Woodruff; Wormwood]

TYPES OF APPLICATIONS: Those listed in "ANNUAL AND PERENNIAL CROPS" plus the following: Wiper Applications and Spot Treatments on Peppermint and Spearmint Only.

USE PRECAUTIONS: This product could cause crop injury when applying this product prior to transplanting or direct-seeding crops into plastic mulch. Remove residual product from the plastic prior to planting with a single one-half inch application of water, either by natural rainfall or by irrigation. Make sure that the washwater flushes off the plastic mulch and does not enter the transplant holes. Application made at crop emergence will result in injury or death of emerged seedlings.

### **Spot Treatments, Wiper Applications (Peppermint and Spearmint Only)**

This product may be applied as a spot treatment in Peppermint and Spearmint or over-the-top of Peppermint and Spearmint using a wiper applicator to control tall weeds. Application may be repeated in the same area at 30 day intervals. See additional instructions on the use of wiper applicators in the "SELECTIVE EQUIPMENT" section under "APPLICATION EQUIPMENT AND TECHNIQUES" of this label.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest. For spot treatment application, do not apply this product to more than 10% of the total field area to be harvested.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**OILSEED CROPS**

**[Buffalo gourd (seed), Canola, Flax, Jojoba, Lesquerella, Meadowfoam, Mustard, Rape, Safflower, Sesame, Sunflower]**

TYPES OF APPLICATIONS: Those listed in "ANNUAL AND PERENNIAL CROPS" plus the following: Pre-harvest (except Buffalo gourd).

For Canola with Roundup Ready Technology and TruFlex™ Canola with Roundup Ready Technology, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

Refer to the following table for maximum application rates of this product for use in Safflower, Sunflower and all other oilseed crops listed in this section, if a pre-harvest application is to be made. If a pre-harvest application is NOT to be made, the maximum application rate of this product for all pre-emergence, selective equipment and post-harvest applications in any oilseed crop listed in this section is limited only to a maximum of 160 fluid ounces (5 qt.) per acre per year. If a pre-harvest application is intended to be made to any crop listed in this section, except Buffalo gourd, the maximum combined total of all pre-emergence and selective equipment applications is limited as indicated in the following table. See the "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

<b>Maximum Application Rates (Fl. Oz./A) if a Pre-harvest Application is Made</b>	
<b>Safflower</b>	
Combined total for all pre-emergence and selective equipment applications	60
Pre-harvest application	60
<b>Sunflower</b>	
Combined total for all pre-emergence and selective equipment applications	20
Pre-harvest application	20
<b>All Other Oilseed Crops Listed (Except Buffalo gourd)</b>	
Combined total for all pre-emergence and selective equipment applications	40
Pre-harvest application	30

USE RESTRICTIONS: Do not exceed a total application rate of 160 fluid ounces (5 qt.) of this product per acre per year. Pre-harvest application is not permitted on Buffalo gourd.

**Pre-plant, At-planting, Pre-emergence**

This product may be applied before, during or after planting oilseed crops listed above prior to emergence of the listed oilseed crops. Observe the maximum application rates for listed at the beginning of this section.

TANK-MIXTURES: For Sunflower, tank-mixture with Pendimethalin may be applied before, during or after planting into conventionally tilled soil, a cover crop, established sod or in previous crop residue.

**Selective Equipment**

Wiper applicators or shielded sprayers may be used between the rows once the crop is established. Observe the maximum application rates listed at the beginning of this section. See additional instructions on the use of wiper applicators and hooded sprayers in the "SELECTIVE EQUIPMENT" section under "APPLICATION EQUIPMENT AND TECHNIQUES" of this label.

**Pre-harvest Applications (Except Buffalo Gourd)**

This product provides weed control and serves as a harvest aid when applied to a physiologically mature oilseed crops listed on this section. For Safflower, apply up to 60 fluid ounces of this product per acre when seed has lost its opaque character approximately 20 to 30 days after the end of flowering of the secondary branches. For Sunflower, apply up to 20 fluid ounces of this product per acre when the backsides of Sunflower heads are yellow and bracts are turning brown and seed moisture content is less than 35%. For all other oilseed crops listed on this section (except Buffalo gourd), up to 30 fluid ounces of this product per acre may be applied up to harvest.



USE RESTRICTIONS: DO NOT MAKE A PRE-HARVEST APPLICATION if you have exceeded the maximum application rates for the combined total of all pre-emergence and selective equipment applications listed in the table at the beginning of this section. If applicable, make only one pre-harvest application of this product and allow a minimum of 7 days between application and harvest or feeding to livestock. Pre-Harvest Interval (PHI): Application must be made at least 30 days prior to the planting of any crop not listed on this label. Pre-harvest application is not allowed on Buffalo gourd or on Canola Roundup Ready or TruFlex Canola with Roundup Ready Technology or other listed Glyphosate tolerant crops.

### **Post-harvest Applications**

This product may be applied for weed control after harvest of oilseed crops. Higher application rates might be required for control of large weeds that were growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

USE RESTRICTIONS: Do not exceed a total application rate of 160 fluid ounces (5 qt.) of this product per acre per year. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application of this product and harvest or feeding of vegetation within the application area. Application must be made at least 30 days prior to the planting of any crop not listed on this label.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### **PASTURE GRASSES, FORAGE LEGUMES, AND RANGELAND**

Refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section of this label for application rates of this product for specific weeds. When applied as directed, this product will control the listed annual and perennial grasses and broadleaf weeds. Application rates specified on this label for the control of hard-to-control weeds or those specified on separate supplemental labeling supersede rates listed in the "WEEDS CONTROLLED" section.

### **Alfalfa, Clover and Other Forage Legumes**

**[Alfalfa, Clover, Kenaf, Kudzu, Lespedeza, Leucaena, Lupin, Sainfoin, Trefoil, Velvetbean, Vetch (all types)]**

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Spot Treatment, Wiper Applicator, Pre-harvest (except Kenaf and Leucaena), Stand Removal.

For directions for use with Alfalfa with Roundup Ready Technology, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

#### **Pre-plant, At-planting, Pre-emergence**

This product may be applied before, during or after planting crops listed in this section but prior to crop emergence

USE RESTRICTIONS: Remove domestic livestock before application.

#### **Spot Treatment, Wiper Applicator**

This product may be applied as a spot treatment or over-the-top of crops listed in this section using a wiper applicator. See additional instructions on the use of wiper applicators in the "SELECTIVE EQUIPMENT" section under "APPLICATION EQUIPMENT AND TECHNIQUES" of this label. Application may be repeated in the same area at 30 day intervals.

USE RESTRICTIONS: For spot treatment and use with a wiper applicator, apply in areas where the movement of domestic livestock can be controlled. Remove domestic livestock before application and wait a minimum of 3 days after application before grazing livestock or harvesting. Do not apply this product to more than 10% of the total field area at any one time.

### Weed Control in Dormant Alfalfa

This product will control or suppress many weeds including Cheatgrass, Downy brome, and Quackgrass in dormant Alfalfa. Apply 5 to 8 fluid ounces of this product per acre in the Spring when Alfalfa is dormant after Spring temperatures have warmed enough to encourage weed growth but prior to initiation of trifoliolate leaf expansion of the Alfalfa crop. Application made after expansion of the first trifoliolate leaf will cause growth reduction and reduced crop yield.

**USE PRECAUTIONS:** Improper application of this product to Alfalfa can cause crop injury. Do not use this product on dormant Alfalfa if a slight yield reduction in the first cutting cannot be tolerated. Slight discoloration of the Alfalfa crop could occur but will regreen and resume growth under moist soil conditions as effects of this product wear off.

**USE RESTRICTIONS:** Do not add ammonium sulfate to spray solutions of this product for application to dormant Alfalfa. Do not make more than one application per year. Allow at least 36 hours after application before grazing livestock or harvesting.

### Pre-harvest (Except Kenaf and Leucaena), Stand Removal

This product may be applied as a broadcast application prior to harvest (except in Kenaf and Leucaena) in declining stands or in any stand where severe crop injury or destruction is acceptable or to remove established stands of any forage legumes listed in this section. Application may be made at any time of the year to control annual and perennial weeds including Quackgrass. For control of Quackgrass, apply in the Spring, late Summer or Fall when Quackgrass is actively growing. Follow application with deep tillage for complete control of Quackgrass. If the crop is to be harvested or grazed by livestock, apply up to 40 fluid ounces of this product per acre in Alfalfa and up to 30 fluid ounces per acre in all other legumes listed in this section. For complete removal of established stands of Clover, it might be necessary to use a higher application rate as listed in the "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section of this label.

**USE PRECAUTIONS:** This application can destroy an Alfalfa stand and severely injure or destroy other legume crops listed such as Clover. Pre-harvest application on Alfalfa grown for seed could result in a reduction in germination or vigor.

**USE RESTRICTIONS:** Make only one application to an existing crop stand per year. Remove domestic livestock before application. Foliage within the application area can be harvested and fed to livestock according to the application rates and intervals defined in the following table. If applying at a rate greater than those listed here, do not harvest foliage for livestock feed or allow livestock to graze within the application area.

Crop	Maximum Single Pre-harvest Application Rate (Fl. Oz./A)	Minimum Interval Between Application and Harvest or Livestock Grazing
Alfalfa	40	36 hrs.
All other listed legumes	30	3 days

Crops listed on this label may be planted in the application area at any time. All other crops may be planted 30 days after application.

#### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz./Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz./Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz./Ac (6 Lbs AE/Ac)**

### **Conservation Reserve Program (CRP)**

**TYPES OF APPLICATION:** Post-emergence Weed Control in Dormant CRP Grasses, Wiper Applicator, Renovation (rotating out of CRP), Site Preparation

#### **Post-emergence Weed Control in Dormant CRP Grasses, Wiper Applicator**

Apply this product to suppress competitive growth and seed production of undesirable vegetation on CRP land. Application may be made using a wiper applicator to control tall weeds or as a broadcast application or spot treatment to dormant CRP grasses. For selective weed control using broadcast application equipment, apply 4 to 8 fluid ounces of this product per acre in early Spring before desirable CRP grasses such as Crested and Tall wheatgrass, break dormancy and initiate green growth. Late Fall application may be made after desirable perennial grasses have reached dormancy.

**USE PRECAUTIONS:** Some stunting of CRP perennial grasses will occur if broadcast application is made when plants are not dormant.

USE RESTRICTIONS: Do not apply more than 60.8 fluid ounces (1.9 qt.) of this product per acre per year onto CRP land. No waiting period is required between application and grazing or harvesting for feed.

### **Renovation (Rotating Out of CRP), Site Preparation**

This product may be used to prepare CRP land for crop production. Refer to Federal, State or local use guides for CRP renovation information.

USE RESTRICTIONS: Crops listed on this label may be planted into the area at any time. All other crops may be planted 30 days after application.

#### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### **Grass Seed and Sod Production**

**[Any grass (Gramineae family) except Corn, Sorghum, Sugarcane, and those listed in the “Cereal and Grain Crops” section of this label]**

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Renovation, Removal of Established Stands, Site Preparation, Shielded Sprayer, Wiper Applicator, Spot Treatment, Creating Rows in Annual Ryegrass.

#### **Pre-plant, At-Planting, Pre-emergence, Renovation, Removal of Established Stand, Site Preparation**

This product controls most existing vegetation for purposes of renovating Turf or forage grass seed production areas or for establishing Turfgrass grown for sod. It may be used to destroy undesirable grass vegetation when production fields are converted to alternate species or crops. Do not disturb soil or underground plant parts before application. Delay tillage or renovation techniques including vertical mowing, coring, and slicing for at least 7 days after application to allow herbicide translocation into underground plant parts.

Apply before, during or after planting or for renovation purposes. Where existing vegetation is growing under mowed Turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the herbicide spray. For maximum control of existing vegetation, delay planting to determine if any regrowth of underground plant parts will occur. Where repeat applications are necessary, sufficient regrowth must be attained prior to application. For warm season grasses such as Bermudagrass, Summer or Fall application provides enhanced control. Broadcast application of this product may be used to control sod remnants or other unwanted vegetation after sod is harvested. Application rates of up to 99.2 fluid ounces (3.1 qt.) per acre may be used to totally remove an established stand of tough to kill grass species.

USE RESTRICTIONS: If application rate is 60.8 fluid ounces (1.9 qt.) per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 60.8 fluid ounces (1.9 qt.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed on this label may be planted into the area at any time. All other crops may be planted 30 days after application.

#### **Shielded Sprayer**

Apply 20 to 60 fluid ounces of this product in 10 to 20 gallons of water per acre using shielded sprayer to control weeds between grass seed rows. Uniform planting in straight rows will aid shielded sprayer application. Enhanced results are obtained when the grass seed crop is small enough to easily pass by the protective shields. See additional instructions on the use of shielded sprayers in the “SELECTIVE EQUIPMENT” section under “APPLICATION EQUIPMENT AND TECHNIQUES” of this label.

Contact of this product in any manner to any vegetation to which application is not intended could cause damage.

#### **Wiper Applicator**

This product may be applied over-the-top of desirable grasses using a wiper applicator to control tall weeds. See additional instructions on the use of wiper applicators in the “SELECTIVE EQUIPMENT” section under “APPLICATION EQUIPMENT AND TECHNIQUES” of this label.

Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation could result in discoloration stunting or destruction.

### **Spot Treatment**

Apply 0.9% solution of this product using a handheld sprayer to control weeds within established vegetation prior to heading of grasses grown for seed or to control sod remnants or other unwanted vegetation after sod is harvested.

This product will kill the desirable grasses along with the weeds. Take care not to spray or allow spray to drift outside the target area to avoid unwanted crop destruction.

### **Creating Rows in Annual Ryegrass**

Use low pressure nozzles or drop nozzles designed to target the application over a narrow band. Set nozzle height to allow the establishment of the desired row spacing. Apply 10 to 20 fluid ounces of this product per acre. Enhanced results can be obtained when application is made before Ryegrass reaches 6 inches in height. Use the higher application rate within this range when Ryegrass is greater than 6 inches in height.

Take care not to spray or allow spray to drift outside target area to avoid unwanted crop destruction.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### **Pastures**

**[Bahia grass, Bermudagrass, Bluegrass, Brome, Fescue, Guineagrass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy, Wheatgrass and any Grass (Gramineae family) except Corn, Sorghum, Sugarcane, and those listed in the “Cereal and Grain Crops” section of this label]**

TYPES OF APPLICATION: Pre-plant, Pre-emergence, Pasture Renovation, Spot Treatment, Wiper Applicator, Post-emergence Weed Control (Broadcast application).

### **Pre-plant, Pre-emergence, Pasture Renovation**

This product may be applied for weed control before planting or emergence of forage grasses. This product may also be applied to control perennial pasture species listed on this label prior to replanting.

USE RESTRICTIONS: If application rates total 60.8 fluid ounces (1.9 qt.) of this product per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 60.8 fluid ounces (1.9 qt.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed on this label may be planted into the area at any time. All other crops may be planted 30 days after application.

### **Spot Treatment, Wiper Applicator**

This product may be applied in pastures as a spot treatment or over-the-top of desirable grasses using a wiper applicator to control tall weeds. To achieve maximum performance, remove domestic livestock before application and wait at least 7 days after application before grazing livestock or harvesting for feed. Application may be repeated in the same area at 30 day intervals. See additional instructions on the use of wiper applicators in the “*SELECTIVE EQUIPMENT*” section under “*APPLICATION EQUIPMENT AND TECHNIQUES*” of this label.

USE RESTRICTIONS: For spot treatment or use with a wiper applicator at rates of 60.8 fluid ounces (1.9 qt.) per acre or less, this product may be applied over the entire pasture or any portion of it. At rates above 60.8 fluid ounces (1.9 qt.) per acre, this product may be applied over no more than 10% of the total pasture at any one time. Application may be repeated in the same area at 30 day intervals.

### **Post-emergence Weed Control (Broadcast Application)**

This product may be applied to pastures to suppress competitive growth and seed production of annual weeds and other undesirable vegetation. For selective weed control using broadcast application equipment, apply 8 to 10 fluid ounces of this product per acre in early Spring before desirable perennial grasses break dormancy and initiate green growth. Late Fall application may be made after desirable perennial grasses have reached dormancy.

Some stunting of perennial grasses will occur if broadcast application is made when plants are not dormant. Higher application rates to control hard-to-control weeds may be used, however, higher rates will cause stand reduction.

USE RESTRICTIONS: No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 60.8 fluid ounces (1.9 qt.) of this product per acre per year on pasture grasses except for renovation use as described on this label. If replanting is needed due to severe stand reduction, wait at least 30 days after application before planting any crop not listed on this label.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Rangeland**

TYPES OF APPLICATION: Post-emergence.

This product will control or suppress many annual weeds growing in perennial cool and warm season grass rangeland. Slight discoloration of the desirable grasses could occur but will regreen and resume growing under moist soil conditions as effects of this product wear off.

Preventing seed production is critical to the control of invasive annual grassy weeds on rangeland. Yearly application of this product can be made to eliminate most of the viable weed seeds in the soil after they germinate. Delay grazing of the area after application to allow desirable perennials to grow, flower and reseed the area.

Apply 8 to 10 fluid ounces of this product per acre to control or suppress many weeds including Cereal rye, Cheatgrass, Downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), Jointed goatgrass, and Soft chess (*Bromus mollis*) in rangelands. Apply when most Brome plants are in early flower and before the plants including seed heads turn color. Allowing for secondary weed flushes to occur after Spring rains further depletes the seed reserve in the soil and encourage perennial grass conversion on weedy sites. Apply this product in the Fall to areas where Spring moisture is usually limited and Fall germination allows for good weed growth and weed seed depletion.

To control Medusahead, apply 10 fluid ounces of this product per acre at the 3 leaf stage. Delaying application beyond this stage will result in reduced or unacceptable control. Controlled burning prior to application can be useful in eliminating the thatch layer produced by slow decaying culms. Allow new growth to occur before applying this product after a burn. Yearly application of this product is necessary to eliminate the seedbank and allow desirable perennial grasses to reestablish the area in Medusahead dominated rangeland.

USE RESTRICTIONS: Do not apply more than 60.8 fluid ounces (1.9 qt.) of this product per acre per year. Do not use ammonium sulfate when applying this product on rangeland grasses. No waiting period between application and feeding or livestock grazing is required.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 10 fl. Oz/Ac (0.38 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 10 fl. Oz/Ac (0.38 Lbs AE/Ac)**

**Maximum Annual Application Rate: 60 fl. Oz/Ac (2.25 Lbs AE/Ac)**

**SOYBEANS**

TYPES OF APPLICATIONS: Those listed in the section "ANNUAL AND PERENNIAL CROPS" plus the following: Spot Treatment, Selective Equipment, Pre-harvest,

For Soybeans with Roundup Ready Technology and other Glyphosate tolerant Soybeans, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied alone or in a tank-mixture before, during or after planting Soybeans prior to emergence of the crop.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D, 2,4-DB or Dicamba applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence. Apply these tank-mixtures in 10 to 20 gallons of water per acre.

Acetochlor Carfentrazone-ethyl Chlorimuron-ethyl Clethodim Clomazone Cloransulam-methyl Dimethenamid Dimethenamid-P Fenoxaprop Fluazifop-p-butyl Flufenacet	Flumetsulam Flumiclorac pentyl ester Flumioxazin Fluthiacet-methyl Fomesafen Imazaquin Imazethapyr Lactofen Linuron Metolachlor Metribuzin	Pendimethalin Pyroxasulfone Quizalofop-p-ethyl Saflufenacil Sulfentrazone Thifensulfuron Tribenuron-methyl Trifluralin
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It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

For hard-to-control annual weeds such as Barnyardgrass, Crabgrass, Fall panicum, Shattercane and broadleaf Signalgrass up to 2 inches tall, and Pennsylvania smartweed up to 6 inches tall, apply this product at 20 fluid ounces per acre in these tank-mixtures. For other labeled annual weeds, apply 15 to 20 fluid ounces of this product per acre when weeds are less than 6 inches tall and 20 to 30 fluid ounces when weeds are over 6 inches tall.

### Spot Treatment

For spot treatments, apply this product prior to initial pod set in Soybeans.

USE RESTRICTIONS: Do not treat more than 10% of the total field area to be harvested.

### Selective Equipment

This product may be applied to Soybeans using shielded applicators, hooded sprayers, wiper applicators or sponge bars. See "SELECTIVE EQUIPMENT" under the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

USE RESTRICTIONS: Allow at least 7 days between application and harvest.

### Pre-harvest Applications

This product may be applied to Soybeans prior to harvest after pods have set and lost all green color. Apply at rates given in the "ANNUAL WEEDS" and "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section of this label. Take care to avoid excessive seed shatter loss due to ground application equipment.

USE RESTRICTIONS: Do not apply more than 99.2 fluid ounces (3.1 qt.) of this product per acre for pre-harvest applications using ground equipment. Do not apply more than 40 fluid ounces (1.25 qt.) per acre of this product by air. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest of Soybeans. If the pre-harvest application rate is greater than 20 fluid ounces (0.625 qt.) of this product per acre, do not graze or harvest treated hay or fodder for livestock feed within 25 days of last application. If the application rate is 20 fluid ounces (0.625 qt.) per acre or lower, the grazing restriction is reduced to 14 days after the last application.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 Fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

## SUGARCANE

TYPES OF APPLICATIONS: Those listed in the section "ANNUAL AND PERENNIAL CROPS" plus the following: Spot Treatment.

### Pre-plant, At-Planting, Pre-emergence

This product may be applied in or around Sugarcane fields or in fields prior to the emergence of plant cane.

USE RESTRICTIONS: Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation.

### Spot Treatment

This product may be applied as a spot treatment in Sugarcane.

For control of volunteer or diseased Sugarcane, apply a 1% solution of this product in water using a handheld sprayer and a spray-to-wet technique. Enhanced results can be obtained on volunteer or diseased Sugarcane when application is made when there are at least 7 new leaves. Avoid spray contact with healthy Sugarcane plants since severe damage or destruction may result.

USE RESTRICTIONS: Do not feed or graze treated Sugarcane foliage within the application area.

### **Hooded Sprayers**

This product may be applied using hooded sprayers for weed control between the rows of Sugarcane. See "*SELECTIVE EQUIPMENT*" under the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label for additional information. Do not allow treated weeds to come into contact with the crop.

### **Fallow Treatments**

This product may be used as a replacement for tillage in fields that are lying fallow between Sugarcane crops. This product may also be used to remove the last stubble of ratoon cane at the rate of 80 to 99.2 fluid ounces (2.5 to 3.1 qt.) of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves. Allow at least 7 days after application before tillage. Applications up to 60 fluid ounces per acre may be made by aerial application in fallow sites where there is sufficient buffer to prevent drift onto adjacent crops. Tank-mixtures with 2,4-D and Dicamba may be used. 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.

### **Sugarcane Ripening**

This product may be used as a foliar-applied plant growth regulator to hasten ripening and extend the period of high level of sucrose in both low and high tonnage Sugarcane. Most of the sucrose increase is concentrated in the top nodes of the cane stalk. To maximize sugar recovery where topping is practiced at harvest, top at the base of the fourth leaf. Consult your state Sugarcane authority or Manufacturer's representative regarding the degree of sucrose response that can be anticipated prior to application of this product.

As a result of leaf desiccation, improved trash burn can be expected.

Apply this product at the following rates and timing according to the State in which the Sugarcane is grown. Use the higher application rate within the given range when applying to Sugarcane under adverse ripening conditions or less responsive varieties.

FLORIDA—Apply 4 to 10 fluid ounces of this product per acre 3 to 5 weeks before harvest of LAST RATOON CANE ONLY.

HAWAII—Apply 8 to 18 fluid ounces of this product per acre 4 to 10 weeks before harvest.

LOUISIANA—Apply 4 to 10 fluid ounces of this product per acre 3 to 7 weeks before harvest of RATOON CANE ONLY.

PUERTO RICO—Apply 4 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

TEXAS—Apply 4 to 10 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

Application of this product could initiate development of Shooting eyes. This product might not increase the sucrose content of Sugarcane under conditions of good natural ripening. Within 2 to 3 weeks after application, this product could produce a slight yellowing to a pronounced browning and drying of leaves and a shortening of upper internodes. Spindle death could occur.

Rainfall within 6 hours after application could reduce the effectiveness of this product.

Application to Sugarcane grown for seed could result in a reduction in germination or vigor.

USE RESTRICTIONS: Do not feed or graze Sugarcane forage following application. Do not plant subsequent crops within 30 days after application of this product other than the following: Alfalfa or other forage legumes, Beans (all types), Corn (all types), Cotton, Melons (all types), Pasture grasses, Peanuts, Potatoes (Irish or Sweet), Sorghum (Milo), Soybeans, Squash (all types) or Wheat.

Do not apply for enhanced ripening to any crops other than Sugarcane. Use of this product in any manner not consistent with this label could result in injury to persons, animals or crops or other unintended consequences.



**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 60 fl. Oz/Ac (2.25 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**TREE, VINE, AND SHRUB CROPS**

THIS SECTION GIVES DIRECTIONS THAT APPLY TO ALL LISTED TREE, VINE, AND SHRUB CROPS. SEE THE INDIVIDUAL CROP SECTIONS FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATIONS: Pre-plant (site preparation), Broadcast Spray, Selective Equipment (shielded sprayer, wiper applicator), Directed Spray and Spot Treatment in Middles (between rows of trees, vines or bushes) and Strips (within rows of trees, vines or bushes), Site Weed Control, Perennial Grass Suppression, Cut Stump Application.

Except as directed, applications may be made with boom sprayer, controlled droplet applicator (CDA), shielded sprayers, handheld or backpack sprayers, lance or orchard guns or with wiper applicators in middles (between rows of trees, vines or bushes) and strips (within rows of trees, vines or bushes), for weed control or perennial grass suppression in established tree fruit and nut groves, orchards and vineyards. It may also be used for site preparation prior to planting or transplanting these crops.

Apply 10 fluid ounces to 3.1 quarts of this product per acre as directed in the "ANNUAL WEEDS" and "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section of this label. Use a higher application rate within a given range when weeds are stressed, growing in dense populations or greater than 12 inches tall. Application may be repeated as needed up to a maximum of 216 fluid ounces (6.75 qt.) of this product per acre per year. See the "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

USE PRECAUTIONS: Use extreme care to avoid contact of herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of desirable trees, canes, and vines. Avoid applications when recent pruning wounds or other mechanical injury has occurred. Contact of this product with other than matured brown bark can result in serious crop damage or destruction. Only shielded or directed sprayers may be used in crops with potential for crop contact is high and then only where there is sufficient clearance. For applications in strips (within rows of trees), only selective equipment (directed sprays, hooded sprayers, shielded sprayer or wiper applicators) may be used to minimize the potential for overspray or drift of this product onto crop. For Berry crops, hooded sprayers must be fully enclosed including top, sides, front, and back. Only wiper applicators or shielded sprayers capable of preventing all contact of this product with the crop may be used. See "SELECTIVE EQUIPMENT" under the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

USE RESTRICTIONS: Allow at least 3 days between application and transplanting.

**Middles (Between Rows)**

This product will control or suppress annual and perennial weeds and ground covers growing between rows of shrubs, trees, and vine crops listed on this label. If weeds are under drought stress, irrigate prior to application. Reduced control may result if weeds have been recently mowed at the time of application.

TANK-MIXTURES: A tank-mixture of this product with Oxyfluorfen may be applied for annual weed control in between rows (middles) of a variety of shrubs, trees, and vine crops when weeds are stressed or growing in dense populations.

**10 to 20 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control annual weeds with a maximum height or length of 6 inches including the following:**

Crabgrass Filaree (suppression) Groundsel (Common) Horseweed/Marestail ( <i>Conyza canadensis</i> )	Junglerice Lambsquarters (Common) London rocket Pigweed (Redroot)	Purslane (Common) (suppression) Ryegrass (Common) Shepherdspurse Sowthistle (Annual) Stinging nettle
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**10 to 20 fluid ounces of this product plus appropriate rate of Oxyfluorfen per acre will control the following weeds with maximum height or length of 3 inches:**

Cheeseweed (common)	Hairy fleabane ( <i>Conyza bonariensis</i> )
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This product may also be applied to row middles in tank-mixtures with the following herbicides (examples are listed below):

Bromacil Clethodim 2,4-D Diuron Fluazifop-p-butyl Flumioxazin Glufosinate ammonium	Indaziflam Napropamide Norflurazon Oryzalin Oxyfluorfen Pendimethalin Penoxsulam	Pyraflufen-ethyl Rimsulfuron Saflufenacil Sethoxydim Thiazopyr
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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.

### Strips (Within Rows)

This product may be also be applied within rows of shrubs, trees, and vine crops in tank-mixtures with the products listed above for use in row middles. 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.

RESTRICTIONS: Do not apply these tank-mixtures in Puerto Rico.

### Perennial Grass Suppression

This product will suppress perennial grasses such as Bahiagrass, Bermudagrass, Kentucky bluegrass, Orchardgrass, Quackgrass, and Tall fescue that are grown as ground covers in shrubs, trees, and vine crops.

**For suppression of Fine fescue, Orchardgrass, Quackgrass, and Tall fescue:** Apply 4 fluid ounces of this product in 10 to 20 gallons of water per acre.

**For suppression of Kentucky bluegrass covers:** Apply 4 fluid ounces of this product per acre. Do not add ammonium sulfate. For enhanced results, mow cool season grass covers in the Spring to even their height and apply this product 3 to 4 days after mowing.

**For suppression of vegetative growth and seed head inhibition of Bahiagrass for approximately 45 days:** Apply 4 fluid ounces of this product in 10 to 25 gallons of water per acre 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches prior to seed head emergence. For suppression up to 120 days, apply 2.5 fluid ounces of this product per acre followed by an application of 1.25 to 2.5 fluid ounces per acre about 45 days later. Make no more than 2 applications per year.

**For burndown of Bermudagrass:** Apply 20 to 40 fluid ounces of this product in 3 to 20 gallons of water per acre. Use this treatment only if reduction of the Bermudagrass stand can be tolerated. When burndown is needed prior to harvest, make application at least 21 days before harvest to allow sufficient time for burndown to occur.

**For suppression of Bermudagrass:** Apply 4 to 10 fluid ounces of this product per acre east of the Rocky Mountains and 10 fluid ounces of this product per acre west of the Rocky Mountains. Apply in a total spray volume of 3 to 20 gallons per acre no sooner than 1 to 2 weeks after full green-up. If the Bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when regrowth occurs and Bermudagrass injury and stand reduction can be tolerated. In areas east of the Rocky Mountains, apply 4 to 6 fluid ounces of this product per acre in shaded conditions or where a lesser degree of suppression is desired.

### Cut Stump Application

Application of this product to a freshly cut tree stump may be made during site preparation or site renovation to control regrowth and resprouting of stumps of many tree species, some of which are listed below.

**Citrus Trees** - Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (Tangerine), Orange (all), Pummelo, Tangelo (Ugli), Tangor.

**Fruit Trees** - Apple, Apricot, Cherry (sour, sweet), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (all), Quince.

**Nut Trees** - Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (black, English).

Cut the tree close to the soil surface and immediately apply a 50 to 100% (undiluted) solution of this product to the freshly cut surface using application equipment capable of covering the entire cambium. A delay in application could

result in reduced performance. For enhanced results, cut the tree during period of active growth and full leaf expansion and apply this product.

USE PRECAUTIONS: AVOID MAKING CUT STUMP APPLICATIONS WHEN THE ROOTS OF ADJACENT DESIRABLE TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP AS INJURY COULD OCCUR IN THE ADJACENT TREES. Some sprouts, stems or trees can share a common root system. Adjacent trees having a similar age, height and spacing could be an indicator of a shared root system. Whether grafted or shared, injury is likely to occur to adjacent stems or trees when this product is applied to one or more trees sharing a common root system.

### **Berry and Small Fruit Crops**

[All cultivars, varieties and/or hybrids of Amur River grape; Aronia berry; Bayberry; Bearberry; Bilberry; Blackberry (including Andean blackberry, Arctic blackberry, Bingleberry, Black satin berry, Boysenberry, Brombeere, California blackberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, Common blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Evergreen blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth blackberry, Marionberry, Mora, Mures de ronce, Nectarberry, Northern dewberry, Olallieberry, Oregon evergreen berry, Phenomenal berry, Rangeberry, Ravenberry, Rossberry, Shawnee blackberry, Southern dewberry, Tayberry, Youngberry, Zarzamora); Blueberry (high and low bush); Buffaloberry; Che; Chilean guava; Chokerberry; Cloudberry; Cranberry (including high bush); Currant (black, buffalo, native, red); Elderberry; European barberry; Gooseberry; Grapes; Honeysuckle (edible); Huckleberry; Jostaberry; Juneberry (Saskatoon berry); Kiwifruit (fuzzy, hardy); Ligonberry; Maypop; Mountain pepperberry; Mulberry; Muntries; Partridgeberry; Phalsa; Pincherry; Raspberry (Black, Red, Wild); Riberry; Salal; Schisandra berry; Sea buckthorn; Serviceberry; Strawberry]

TYPES OF APPLICATIONS: Those listed in the section "*TREE, VINE, AND SHRUB CROPS*"

USE PRECAUTIONS: To avoid damage, herbicide sprays must not be allowed to contact desirable vegetation, including green shoots, canes or foliage. In the northeast and Great Lakes regions, apply this product in Grape vineyards prior to the end of the bloom stage in order to avoid crop injury or apply using a shielded sprayer or wiper applicator. USE THIS PRODUCT WITH EXTREME CARE AROUND RASPBERRY AS SERIOUS CROP DAMAGE CAN OCCUR IF ANY PART OF THE VINE COMES INTO CONTACT WITH THIS PRODUCT.

USE RESTRICTIONS: Allow a minimum of 3 days between applications of this product and transplanting. Pre-Harvest Interval (PHI): Allow a minimum of 30 days between application and harvest of Cranberries or the planting of any crop not listed on this label. Pre-Harvest Interval (PHI): Allow a minimum of 14 days between applications and harvest for all other Berry and small fruit crops listed here. Do not apply this product using selective equipment in Kiwifruit.

### **Spot Treatments**

Spot treatment application using a handheld sprayer or other appropriate application equipment listed in the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label may be used to control weeds in Berry and small fruit crops listed in this section.

For control of weeds growing in dry ditches (interior and perimeter) of Cranberry production areas, drop water level to remove standing water in ditches and apply a 1 to 2% solution of this product with a handheld sprayer to adequately wet the vegetation only. Do not spray to the point of runoff. To achieve maximum weed control in dry ditches, apply this product within 1 day after water drawdown to ensure application to actively growing weeds and allow a minimum of 2 days after application before reintroduction of water.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 30 days between spot treatment application and harvest of Cranberries. Do not apply directly to water. Use nozzles that produce medium to large sized droplets to minimize spray drift and avoid crop injury.

### **Post-harvest Treatments**

This product may be applied for weed control after the harvest of Berries and small fruits listed in this section.

In Cranberry bogs, apply this product after Cranberry vines are dormant (after they have turned red) using a handheld sprayer, wiper applicator or any other appropriate application equipment listed in the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label. With a handheld sprayer, apply a 0.3 to 0.6% solution of this product to

adequately wet the vegetation only. Do not spray to the point of runoff. With a handheld boom sprayer, apply 40 to 80 fluid ounces of this product per acre.

**Note:** Even though vines appear dormant, contact of the herbicide solution with desirable vegetation may result in damage or severe plant injury. Cranberry plants that are directly sprayed may be killed.

USE RESTRICTIONS: Make applications only after Cranberries have been harvested. Do not treat more than 10% of the total bog. Allow a minimum of 6 months between post-harvest application and the next harvest of Cranberries. Do not make applications by air. Do not apply directly to water.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Citrus Fruit Crops**

**[All cultivars, varieties and/or hybrids of Calamondin, Chironja, Citron, Citrus, Grapefruit (including Japanese summer), Kumquat, Lemon, Lime (including Australian desert lime, Australian finger lime, Australian round lime, Brown river finger lime, Mount white, New Guinea wild, Russell river, Sweet, and Tahiti), Mandarin (including Mediterranean, Satsuma); Orange (all); Pummelo; Tangelo; Tangerine (Mandarin); Tangor; Uniq Fruit (ugli)]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE INSTRUCTIONS IN FLORIDA AND TEXAS:

For burndown or control of the weeds listed below, apply the labeled rates of this product in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

**For Goatweed Control:** Apply 40 to 60 fluid ounces of this product per acre to control Goatweed. Apply in 20 to 30 gallons of water per acre when plants are actively growing. Use 40 fluid ounces per acre when plants are less than 8 inches tall and 60 fluid ounces per acre when plants are greater than 8 inches tall. If Goatweed is greater than 8 inches tall, the addition of Diuron or Diuron + Bromacil to this product may improve control. 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.

**For Control of Perennial Weeds:**

Weed Species	Level of Perennial Weed Control			
	Rate of This Product Per Acre			
	20 Fl. Oz. (0.625 Qt.)	40 Fl. Oz. (1.25 Qt.)	60.8 Fl. Oz. (1.9 Qt.)	99.2 Fl. Oz. (3.1 Qt.)
Bermudagrass	B	-	PC	C
Guineagrass:				
Florida Flatwoods	-	B	C	C
Florida Ridge & Texas	B	C	C	C
Paragrass	B	C	C	C
Torpedograss	S	-	PC	C

B = Burndown; C = Control; PC = Partial Control; S = Suppression

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 1 day between last application and harvest in Citrus fruit crops. For Citron groves, apply as directed sprays only.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Miscellaneous Tree Food Crops**  
**[Cactus (including Dragon Fruit and Prickly Pear), Palm]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE DIRECTIONS AND RESTRICTIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Nonfood Tree Crops**  
**[Christmas Trees, Eucalyptus, Pine, Poplar, All Other Nonfood Tree Crops]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE PRECAUTIONS: Avoid contact of spray, drift or mist of this product with foliage or green bark of established Christmas trees and other Pine trees. Desirable plants may be protected from the spray solution by using shields or coverings made of impermeable materials.

USE RESTRICTIONS: DO NOT APPLY THIS PRODUCT AS A BROADCAST APPLICATION OVER-THE-TOP OF PLANTATIONS OR TREE CROPS.

**Site Preparation**

This product may be used to control weeds prior to planting nonfood tree crops. Protect non-target plants during site preparation applications.

**Directed Spray, Spot Treatment, Wiper Applicator**

This product may be applied as a post-directed spray or spot treatment or applied using a wiper applicator around established Christmas trees, Eucalyptus, Pine, Poplar, and all other non-food tree crops.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Pome Fruits**  
**[All cultivars, varieties and/or hybrids of Apple, Azarole, Crabapple, Loquat, Mayhaw, Medlar, Pear (including Asian pear), Quince (including Chinese and Japanese Quince); Tejocote]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 1 day between last application and harvest of Pome fruits.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

## **Stone Fruits**

**[Apricot, Cherry (Sweet, Tart), Nectarine, Olive, Peach, Plum/Prune (All types), Plumcot]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE PRECAUTIONS: Avoid application near trees with recent pruning wounds or other mechanical injury. Apply only near trees that have been planted in the orchard for at least 2 years. MAKE SURE THAT NO PART OF A PEACH TREE IS CONTACTED WITH OVERSPRAY OR DRIFT OF THIS PRODUCT.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 17 days between application of this product and harvest of Stone fruits. In Olive groves, apply as a directed spray only. Remove suckers and low hanging limbs at least 10 days prior to application.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

## **Tree Nuts**

**[Almond, Beechnut, Betelnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Coconut, Filbert (Hazelnut), Hickory nut, Macadamia, Pecan, Pine nut, Pistachio, Walnut (Black, English)]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 3 days between last application and harvest of Tree nuts, except Coconut. Allow 14 days between application and harvest of Coconut.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

## **Tropical and Subtropical Trees and Fruit Crops**

**[Ambarella, Atemoya, Avocado, Banana, Barbados cherry (Acerola), Biriba, Blimbe, Breadfruit, Cacao (Cocoa) bean, Canistel, Carambola (Starfruit), Cherimoya, Coffee, Custard apple, Dates, Durian, Feijoa, Figs, Governor's plum, Guava, Ilama, Imbe, Imbu, Jaboticaba, Jackfruit, Longan, Lychee, Mamey apple, Mango, Mangosteen, Marmaladebox (Genip), Mountain papaya, Noni (Indian mulberry), Papaya, Pawpaw, Plantain, Persimmon, Pomegranate, Pulasan, Rambutan, Rose apple, Sapodilla, Sapote (Black, Mamey, White), Spanish lime, Soursop, Star apple, Sugar apple, Surinam cherry, Tamarind, Tea, Ti, Wax jambu]**

TYPES OF APPLICATIONS: Those listed in "TREE, VINE, AND SHRUB CROPS" section plus Bananacide.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of one day between last application and harvest in Banana, Coffee, Guava, Papaya, and Plantain crops. Pre-Harvest Interval (PHI): For all other listed tropical or subtropical fruit trees listed above, allow a minimum of 14 days between last application and harvest. In Coffee and Banana, delay applications for at least 3 months after transplanting to allow the new Coffee or Banana plant to become established.



## **Bananacide (Bananas Only)**

This product may be used to destroy Banana plants infected with the Banana bunchy top virus as well as non-infected Banana plants to establish disease free buffers around plantations.

Remove all fruits from the plants within the area prior to treatment. Inject 1/25 fluid ounce (1 ml) of this product (undiluted) per 2 to 3 inches of pseudostem diameter of the Banana plant to be controlled. Make the injection at least 1 foot above the ground, except for very small plants, which could be injected vertically into the top. Destroy any subsequent regrowth. Mechanically destroy all plants and mats (or units) within a 4 foot radius around a treated mat.

To control Banana bunchy top virus, it is critical that the grower follow a strict control program involving monitoring for diseased plants, spraying to control the Aphid vector, and destruction of all infected mats (or units). An infected plant may not show symptoms of the Banana bunchy top virus for up to 125 days, therefore, it is critical that the entire mat (or unit) containing the diseased plant be destroyed immediately.

USE PRECAUTIONS: Following transplant of new Banana plants into treated areas, allow plants to become established for 3 months before applying this product to control weeds.

USE RESTRICTIONS: Do not apply more than 0.5 fluid ounce (15 ml) of this product per mat (or unit). Do not harvest any fruit or plant material from treated mats (or units) following injection. Do not allow livestock to consume treated plant material.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

## **Vine Crops**

### **[Hops, Passion fruit]**

TYPES OF APPLICATIONS: Those listed in "*TREE, VINE, AND SHRUB CROPS*" section.

Apply this product only when green shoots, canes or foliage are not in the spray zone.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 14 days between last application and harvest of these vine crops.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

## **VEGETABLE CROPS**

**NOTE:** THIS SECTION PROVIDES DIRECTIONS FOR USE APPLICABLE TO ALL LISTED VEGETABLE CROPS WITHIN THIS SECTION GROUPED ALPHABETICALLY BELOW. SEE THE INDIVIDUAL CROP CATEGORIES FOR SPECIFIC INSTRUCTIONS, PRE-HARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATIONS: Chemical Fallow, Pre-plant Fallow Beds, Pre-plant, At-Planting, Pre-emergence, Prior to Transplanting Vegetables, Hooded Sprayers in Row-Middles, Shielded Sprayers in Row-Middles, Wiper Applications in Row-Middles, Directed Applications (Non-Bearing Ginseng only), Wiper Applicators (Carrot, Rutabagas, Sweet Potato Only), Post-Harvest.

USE PRECAUTIONS: This product could cause crop injury when applied prior to transplanting or direct seeding crops into plastic mulch. Remove residual product from the plastic with a single 0.5 inch application of water either by natural rainfall or by irrigation prior to planting. Ensure that the washwater flushes off the plastic mulch and does not enter the transplant holes. Application of this product at crop emergence will result in injury or death to emerged seedlings.

Avoid contact of this herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from the plastic mulch) or fruit of crops as severe crop injury or destruction could result. Transplanted seedlings coming into contact with weeds that are still wet with a spray solution of this product could result in significant crop injury.



To avoid severe crop injury, make pre-emergence applications prior to crop emerges from the soil. Apply before seed germination in *coarse sandy soils* to further minimize the risk of crop injury. In crops with vines, make hooded sprayer, shielded sprayer, and wiper applications in row middles prior to vine development, otherwise, severe crop injury or destruction could result.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Unless otherwise directed on this label, application using selective equipment including wiper applicators and hooded sprayers must be made at least 14 days prior to harvest. Post-harvest and fallow applications must be made at least 30 days prior to planting of any crop not listed on this label. See "SELECTIVE EQUIPMENT" under the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

### **Brassica Vegetables**

[Broccoli; Chinese broccoli (Gai Ion); Broccoli raab (Rapini); Brussels sprouts; Cabbage; Chinese cabbage (Bok choy); Chinese cabbage (Napa); Chinese mustard cabbage (Gai choy); Cauliflower; Cavalo broccolo; Collards; Kale; Kohlrabi; Mizuna; Mustard greens; Mustard spinach; Rape greens]

#### **USE RESTRICTIONS:**

Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)

Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)

Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)

### **Bulb Vegetables**

[All cultivars, varieties and/or hybrids of Chive (including Chinese); Daylily; Elegans hosta; Fritillaria; Garlic (including great-headed, serpent); Kurrat; Leek (including lady's, wild); Onion (including Beltsville bunching, bulb, Chinese, fresh, green, macrostem, pearl, potato, tree, Welsh); Shallot]

#### **USE RESTRICTIONS:**

Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)

Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)

Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)

### **Cucurbit Vegetables and Fruits**

[Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Edible gourd (includes Chinese okra, Cucuzza, Hechima, Hyotan); Melons (all); *Momordica* spp. (includes Balsam apple, Balsam pear, Bittermelon, Chinese cucumber); Muskmelon (includes Cantaloupe, Casaba, Crenshaw melon, Golden pershaw melon, Honeydew melon, Honey ball melon, Mango melon, Persian melon, Pineapple melon, Santa Claus melon, Snake melon); Pumpkin; Summer squash (includes Crookneck squash, Scallop squash, Straightneck squash, Vegetable marrow, Zucchini); Winter squash (includes Acorn squash, Butternut squash, Calabaza, Hubbard squash, Spaghetti squash); Watermelon]

USE RESTRICTIONS: For Cantaloupe, Casaba melon, Crenshaw melon, Cucumber, Gherkin, Gourds, Honey ball melon, Honeydew melon, Mango melon, Melons (all), Muskmelon, Persian melon, Pumpkin, Squash (Summer, Winter), and Watermelon, allow at least 3 days between application and planting.

**USE RESTRICTIONS:**

Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)

Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)

Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)

**Leafy Vegetables**

[Amaranth (Chinese spinach); Arugula (Roquette); Beet greens; Cardoon; Celery; Chinese celery; Celtuce; Chaya; Chervil; Edible-leaved chrysanthemum; Garland chrysanthemum; Corn salad; Cress (Garden and Upland); Dandelion; Dock (Sorrel); Dokudami; Endive (Escarole); Florence fennel; Gow kee; Lettuce (Head and Leaf); Orach; Parsley; Purslane (Garden and Winter); Radicchio (Red chicory); Rhubarb; Spinach; New Zealand spinach; Vine spinach; Swiss chard; Watercress (Upland); Waterspinach]

USE RESTRICTIONS: For Watercress, allow at least 3 days between application and seeding. Do not apply this product during the period between seeding and emergence.

**USE RESTRICTIONS:**

Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)

Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)

Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)

**Fruiting Vegetables**

[All cultivars, varieties and/or hybrids of Eggplant (including African, pea, scarlet); Cocona; Garden huckleberry; Goji berry; Groundcherry (*Physalis* spp.); Martinynia; Naranjilla; Okra; Pepino; Pepper (includes Bell pepper, Chili pepper, Cooking pepper, Pimento, Sweet pepper); Roselle; Sunberry; Tomatillo; Tomato]

USE RESTRICTIONS: Allow at least 3 days between applications and planting. For Tomato and Tomatillo, do not apply this product using a hooded or shielded sprayer in row middles because of the potential for crop injury.

**USE RESTRICTIONS:**

Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)

Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)

Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)

**Legume Vegetables (Succulent or Dried)**

[Bean (*Lupinus*: includes Grain lupin, Sweet lupin, White lupin, and White sweet lupin); Bean (*Phaseolus*: includes Field bean, Kidney bean, Lima bean, Navy bean, Pinto bean, Runner bean, Snap bean, Tepary bean, Wax bean); Bean (*Vigna*: includes Adzuki bean, Asparagus bean, Blackeyed pea, Catjang, Chinese longbean, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea, Urd bean, Yardlong bean); Broad bean (Fava); Chickpea (Garbanzo); Guar; Jackbean; Lablab bean; Lentil; Pea (*Pisum*: includes Dwarf pea, Edible-podded pea, English pea, Field pea, Garden pea, Green pea, Snowpea, Sugar snap pea); Pigeon pea; Soybeans (immature seed), Swordbean]

TYPES OF APPLICATION: Those listed in the section "ANNUAL AND PERENNIAL CROPS" plus the following: Spot Treatment (Dry varieties only), Pre-harvest (Dry varieties only).

**Spot Treatment (Dry Varieties Only)**

This product may be applied as a spot treatment to control troublesome weeds such as Canada thistle, Mayweed (Dog fennel), Milkweed, and Quackgrass in any dry legume variety listed above. Apply up to 20 fluid ounces of this product per acre in Dry beans or up to 60 fluid ounces per acre in Dry peas, Lentils, and Chickpeas in 10 to 20 gallons of water

using ground application equipment or use a 2% solution in a handheld sprayer. For enhanced results, apply at or beyond the bud stage of growth.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 7 days between application and harvest. Only one spot treatment application may be made per year. Do not combine spot treatment with a pre-harvest broadcast application on the same crop area. Allow a minimum of 30 days between application and planting for any crop not listed in this label. Do not feed vines and hay from the application area to livestock. Do not apply this product as a spot treatment in Cowpeas or Field (feed) peas since these crops are considered grown only as livestock feed.

### **Pre-harvest (Dry Varieties Only)**

This product may be applied over-the-top of any dry legume variety listed in this section prior to harvest, except Cowpeas or Field (feed) peas. Apply up to 20 fluid ounces of this product per acre in Dry beans or up to 60 fluid ounces per acre in Dry peas, Lentils, and Chickpeas in 3 to 20 gallons of water per acre at the hard dough stage of the legume seed (30% grain moisture or less).

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 7 days between application and harvest. Only one pre-harvest application may be made per year. Do not combine a pre-harvest application with a spot treatment on the same crop area. Allow a minimum of 30 days between application and the planting of any crop not listed on this label. Do not feed vines and hay from the application area to livestock. Do not make a pre-harvest application of this product in Cowpeas or Field (feed) peas since these crops are considered grown only as livestock feed.

### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### **Root and Tuber Vegetables**

**[Arracacha; Arrowroot; Chinese artichoke; Jerusalem artichoke; Beet (Garden); Burdock; Canna; Carrot; Cassava (Bitter and Sweet); Celeriac; Chayote (Root); Chervil (Turnip-rooted); Chicory; Chufa; Dasheen (Taro); Galangal; Ginger; Ginseng; Horseradish; Leren; Kava (Turnip-rooted); Parsley (Turnip-rooted); Parsnip; Potato; Radish; Oriental radish; Rutabaga; Salsify; Salsify (Black, Spanish); Skirret; Sweet potato; Tanier; Turmeric; Turnip; Wasabi; Yacon; Yam bean; True yam]**

TYPES OF APPLICATION: Those listed in the section "*ANNUAL AND PERENNIAL CROPS*" plus the following: Directed Application (Non-Bearing Ginseng only), Wiper Applicator (Carrot, Rutabaga, Sweet Potato only).

### **Directed Application (Non-Bearing Ginseng Only)**

This product may be applied to control weeds in established non-bearing Ginseng using a boom sprayer, CDA, shielded sprayer, wiper applicator, handheld or backpack wand, lance or orchard gun. See additional use instructions in the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label.

Control the application so as not to allow any contact of this product with the Ginseng plant. Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation could result in discoloration, stunting or destruction.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Application must be made at least one year prior to harvest of Ginseng.

### **Wiper Applicator (Carrot, Rutabaga, and Sweet Potato Only)**

A 33% solution of this product by volume in water may be applied using a wiper applicator over-the-top of Carrot, Rutabaga, and Sweet potato to control tall weeds. See "*SELECTIVE EQUIPMENT*" under the "*APPLICATION EQUIPMENT AND TECHNIQUES*" section of this label for additional information.

USE RESTRICTIONS: For Carrot, a maximum of 2 wiper or sponge bar applications may be made at least 60 days prior to harvest following the first application and 7 days prior to harvest following the second application or if only one wiper application is made over-the-top of the Carrot crop.

For Rutabaga, allow at least 14 days between application and harvest.

For Sweet potato, a maximum of 5 wiper or sponge bar applications may be made at least 14 days between applications and a minimum of 7 days prior to harvest.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**MISCELLANEOUS CROPS**

**[Aloe vera, Asparagus, Bamboo shoots, Globe artichoke, Okra, Peanuts, Pineapple, Sugar beets]**

TYPES OF APPLICATIONS: Those listed in the section "ANNUAL AND PERENNIAL CROPS" plus the following: Spot Treatment (Asparagus).

For Sugar beets with Roundup Ready Technology, see the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label.

USE PRECAUTIONS: To avoid severe crop injury, make pre-emergence applications before the crop emerges from the soil. Apply before seed germination in *coarse sandy soils* to further minimize the risk of crop injury. In crops with vines, apply this product in row middles using a hooded sprayer, shielded sprayer or wiper applicator prior to vine development, otherwise, severe crop injury or destruction could result.

**Spot Weed Control, Site Preparation**

This product may be applied for spot weed control and for site preparation prior to planting or transplanting crops listed in this section.

USE PRECAUTIONS: This product could cause crop injury when applied prior to transplanting or direct seeding crops into plastic mulch. Remove residues of this product from the plastic with a single 0.5 inch application of water either by natural rainfall or by irrigation prior to planting. Ensure that the washwater flushes off the plastic mulch and does not enter transplant holes.

USE RESTRICTIONS: Allow at least 21 days between residue removal and transplanting. Do not apply within 7 days prior to emergence of the first Asparagus spears. Do not feed or graze Pineapple forage from within the application area.

**Spot Treatment (Asparagus)**

This product may be applied immediately after cutting, but prior to the emergence of new spears.

USE RESTRICTIONS: Do not treat more than 10% of the total field area to be harvested. Pre-Harvest Interval (PHI): Do not harvest within 5 days of treatment.

**Post-harvest Applications (Asparagus)**

This product may be applied after the last harvest of Asparagus and all spears have been removed. If spears are allowed to regrow, delay applications until ferns have developed and apply as a directed or shielded spray in order to avoid contact of the spray with ferns, stems or spears. See additional use instructions in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

USE PRECAUTIONS: Direct contact of the spray with the Asparagus could result in serious crop injury.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS**

ROUNDUP READY AND OTHER LISTED GLYPHOSATE TOLERANT CROPS CONTAIN PATENTED GENES THAT PROVIDE TOLERANCE TO GLYPHOSATE, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO CROPS THAT ARE NOT GLYPHOSATE TOLERANT OR THAT ARE NOT SPECIFICALLY LISTED AND LABELED BELOW. AVOID CONTACT OF THIS PRODUCT WITH FOLIAGE, GREEN STEMS OR FRUIT OF CROPS OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A GLYPHOSATE TOLERANCE GENE AS SEVERE PLANT INJURY

OR DESTRUCTION WILL RESULT. Information on Roundup Ready crops can be obtained from your seed supplier or Manufacturer's representative. For information on other brands of Glyphosate tolerant crops, contact the appropriate company representative.

The directions for use in the sections that follow or those published separately on supplemental labeling for this product include all applications of this product that may be made onto a specified Roundup Ready or other Glyphosate tolerant crops during the complete cropping season. DO NOT combine these directions for use with the directions for use with the same crops listed in the "ANNUAL AND PERENNIAL CROPS" and "PASTURE GRASSES, FORAGE LEGUMES, AND RANGELAND" sections of this label which are intended for crops that do not contain a Glyphosate tolerance gene.

Refer to the "ANNUAL WEEDS" and "PERENNIAL WEEDS" found under the "WEEDS CONTROLLED" section for application rates for specific weeds. When applied as directed, this product will control the annual and perennial grasses and broadleaf weeds listed. Observe the maximum application rates and crop stage timings specified for individual Roundup Ready and other Glyphosate tolerant crops in the sections that follow.

**Note:** For the list of patents, covering Roundup Ready seed, please go to [www.monsantotechnology.com](http://www.monsantotechnology.com) [This list will be updated at the time of printing, if necessary.] A license to use Roundup Ready seed must be obtained prior to planting. Monsanto Company retains ownership of the gene and process technologies, and the Purchaser of the seed receives the right to use the licensed genes and technologies subject to the limited use license conditions. Seed containing a Roundup Ready trait cannot be used for research and demonstration, reverse engineering or in connection with herbicide registration. Progeny seed containing a Roundup Ready trait may not be saved for replanting or transferred to others for replanting. Contact your Authorized Monsanto Retailer for information on obtaining a limited use license.

**SPRAYER PREPARATION:** It is important that sprayer and mixing equipment be clean and free of pesticide residue before being used to apply this product over-the-top of Roundup Ready or other listed Glyphosate tolerant crops. Follow the cleaning procedures specified on the label of the product(s) previously used. THOROUGHLY CLEAN THE SPRAY TANK AND ALL LINES AND FILTERS TO ELIMINATE POTENTIAL CONTAMINATION FROM OTHER HERBICIDES PRIOR TO MIXING AND APPLYING THIS PRODUCT.

ATTENTION: AVOID DRIFT. USE EXTREME CARE WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS THAT DO NOT CONTAIN A GLYPHOSATE TOLERANCE GENE.

### **Ground Broadcast Application**

Unless otherwise directed, apply this product in 5 to 20 gallons of spray solution per acre. Select proper nozzles and spray pressure settings to avoid generating a fine mist. For enhanced results, use flat fan nozzles. Check for even distribution of spray droplets.

### **Aerial Application**

Unless otherwise prohibited, all applications of this product described in this section may be made using aerial application equipment where appropriate provided that the applicator complies with the precautions and restrictions specified on this label and on all supplemental labeling published separately for this product.

Apply this product in 3 to 15 gallons of water per acre. See "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for important information on aerial application and procedures for avoiding spray drift that could cause injury to any vegetation not intended for application. Use of appropriate buffer zones will help prevent injury to adjacent vegetation.

See "MIXING" and "APPLICATION EQUIPMENT AND TECHNIQUES" sections of this label for additional directions and restrictions on the application of this product.

### **Tank-Mixtures**

Tank-mixtures of this product with other herbicides, insecticides, fungicides, micronutrients or foliar fertilizers could result in reduced weed control or crop injury when applied over-the-top of Roundup Ready and other listed Glyphosate tolerant crops. Read the label of all products used in the tank-mixture prior to use to determine the potential for crop injury. 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.

If compatibility of the tank-mixture is not known, determine the compatibility of the tank-mix product(s) prior to use. See "MIXING" section of this label for more information on tank-mixtures.



**[Optional label text:** Unless otherwise directed, nonionic surfactant may be added to the spray solution for application to Roundup Ready and other listed Glyphosate tolerant crops. The addition of certain surfactants to a spray solution of this product could result in some crop response including leaf speckling or leaf necrosis due to the surfactant. Refer to the individual Roundup Ready or other listed Glyphosate tolerant crop sections that follow or to separate supplemental labeling for additional precautions or restrictions on the use of surfactants. Refer to the “MIXING” section of this label for additional information on the use of surfactants.]

Ammonium sulfate may be added to spray solutions of this product for application to Roundup Ready and other listed Glyphosate tolerant crops. Refer to the “MIXING” section of this label for instructions on the use of ammonium sulfate.

The following use directions are based on a clean start at planting by using a burndown application or tillage to control existing weeds before crop emergence. In no-till and stale seedbed systems, apply this product as a pre-plant burndown application to control existing weeds prior to crop emergence. Some weeds such as Annual morningglory, Black nightshade, Broadleaf signalgrass, Burcucumber, Giant ragweed, Sandbur, Shattercane, Sicklepod, Texas panicum, Wild proso millet, and Woolly cupgrass with multiple germination times or suppressed (stunted) weeds might need a second application of this product for complete control. Make second application after some regrowth has occurred and a minimum of 10 days after a previous application of this product.

Application rates of this product specified on this label for hard-to-control weeds or those specified on separate supplemental labeling for this product supersede rates in the “ANNUAL WEEDS” and “PERENNIAL WEEDS” sections of this label.

**Use Restrictions**

Observe the maximum application rates stated throughout this label. Maximum application rates apply to the use of this product combined with the use of any and all other herbicides containing Glyphosate whether applied separately or as mixtures. Calculate the application rates (glyphosate acid equivalent) and ensure that the total use of this and other glyphosate containing products does not exceed the stated maximum rate. See the “PRODUCT INFORMATION” section of this label for more information on maximum application rates. When applying this product as a tank-mixture with one or more products, refer to each individual tank-mix product label for restrictions. 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.

**Alfalfa With Roundup Ready Technology**

(Optional: The directions for use of this product provided in this section are specific to Alfalfa containing events J101 and J163 (which includes Alfalfa with Roundup Ready Technology).

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop).

Refer to the following table for the maximum application rates of this product:

Maximum Application Rates Per Acre	
Combined total per year for all applications including pre-plant during year of establishment	160 fl. oz. (5 qt.)
Pre-plant, At-planting, and Pre-emergence single application	40 fl. oz. (1.25 qt.)
Combined total per year for in-crop applications on newly established and established stands	124 fl. oz. (3.875 qt.)

See the “ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “PRODUCT INFORMATION” section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Alfalfa with Roundup Ready Technology.

**Post-emergence (In-crop)**

This product may be applied over-the-top of Alfalfa with Roundup Ready Technology (in-crop) from emergence until 5 days prior to cutting. To maximize crop yield and quality potential of forage and hay, apply this product after weeds have emerged but before Alfalfa growth or regrowth interferes with spray coverage of the target weeds.

Refer to the “ANNUAL WEEDS” and “PERENNIAL WEEDS” found under the “WEEDS CONTROLLED” section of this label for application rate for specific weeds. When applied as directed, this product will control listed annual and perennial grasses, and broadleaf weeds. This product will also suppress or control the parasitic weed, Dodder (*Cuscuta* spp.) in Alfalfa with Roundup Ready Technology. More than one application might be necessary for complete control.

Freezing or near freezing conditions or large temperature swings within 5 days after application of this product to Alfalfa with Roundup Ready Technology could result in a limited, temporary crop response.

**New Stand Establishment (Seeding Year):**

Due to the biology and breeding constraints of Alfalfa, up to 10% of the seedlings might not contain a Roundup Ready gene and will not survive after the first application of this product. To eliminate the undesirable effects of stand gaps created by this loss of plants, make a single application of at least 20 fluid ounces of this product per acre at or before the 4 trifoliolate growth stage. Refer to the following table for application rates during stand establishment (seeding year).

New Stand Establishment (Seeding Year) Application Rates per Acre	
<b>Before First Cutting:</b>	
From emergence up to 4 trifoliolate leaves	20 to 40 fl. oz. (0.625 to 1.25 qt.)
From 5 trifoliolate leaves up to 5 days before first cutting	Up to 40 fl. oz. (Up to 1.25 qt.)
<b>After First Cutting:</b>	
In-crop application, per cutting, up to 5 days before cutting	Up to 40 fl. oz. (Up to 1.25 qt.)

TANK-MIXTURES: Up to 40 fluid ounces of this product per acre may be applied post-emergence (in-crop) over-the-top of Alfalfa with Roundup Ready Technology in the seeding year in a tank-mix with other products (examples are listed below) after weeds have emerged but before Alfalfa growth or re-growth interferes with spray coverage of the target weeds.

Acetochlor Clethodim	Imazamox Imazethapyr	Quizalofop-p-ethyl Sethoxydim
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[**Optional label text:** Imazethapyr or Imazamox applied to seedling Alfalfa could result in a temporary reduction in growth. Do not include crop oil concentrate or methylated seed oil in tank-mixtures of this product with Imazethapyr or Imazamox as unsatisfactory crop injury could result.]

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.

**Established Stands (Non-seeding Year):**

Refer to the following table for directions and application rates for in-crop application to established stands of Alfalfa (non-seeding year).

New Stand Establishment (Non-Seeding Year) Application Rates per Acre	
In-crop applications per cutting up to 5 days before cutting	Up to 40 fl. oz. (Up to 1.25 qt.)

TANK-MIXTURES: This product may be applied post-emergence (in-crop) over-the-top of established stands of Alfalfa with Roundup Ready Technology in tank-mixtures with other herbicides (examples are listed below) according to the growing condition of the crop.

**Actively Growing Alfalfa:**

For control of emerged annual grasses and broadleaf weeds when Alfalfa is actively growing, this product may be applied up to 40 fluid ounces per acre in a tank-mixture with other herbicides (examples are listed below):

Acetochlor Clethodim	Imazamox Imazethapyr	Quizalofop-p-ethyl Sethoxydim
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[**Optional label text:** Do not include crop oil concentrate or methylated seed oil in tank-mixtures of this product with Imazethapyr or Imazamox as unsatisfactory crop injury could result.]

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.

**Dormant Alfalfa:**

For control of emerged annual grasses and broadleaf weeds when Alfalfa is dormant, this product may be applied up to 40 fluid ounces per acre in a tank-mixture with other herbicides (examples are listed below) when daily temperatures remain above freezing:

Imazamox Imazethapyr	Metribuzin Pronamide	Propyzamide
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**[Optional label text:** Do not include crop oil concentrate or methylated seed oil in tank-mixtures of this product with Imazethapyr or Imazamox as unsatisfactory crop injury could result.]

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.

### Use Precautions

Where Alfalfa with Roundup Ready Technology is grown with a companion or cover crop or is over seeded with a second species, in-crop (over-the-top) application of this product will eliminate the non-Roundup Ready (non-glyphosate tolerant) species.

### Use Restrictions

Do not exceed 40 fluid ounces (1.25 qt.) per acre for any single in-crop application of this product. Sequential applications of this product must be minimum 7 days apart. The combined total per year for all in-crop applications in both newly established (seeding year) and established stands (non-seeding year) must not exceed 124 fluid ounces (3.875 qt.) per acre. Do not apply to frozen or snow-covered ground. Remove domestic livestock before application. Wait for at least 5 days after application before grazing or cutting or feeding of forage and hay.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### Canola With Roundup Ready Technology (Spring Varieties)\*

\*(Roundup Ready Spring Canola is defined as those Canola with Roundup Ready Technology varieties that are seeded in the Spring and harvested in the Fall and do not enter a Winter dormancy period.)

(Optional: The directions for use of this product provided in this section are specific to Canola containing Event RT73 (which includes Canola with Roundup Ready Technology).)

**Note:** For use directions on Canola with TruFlex Technology, refer to that section of this label. DO NOT combine these directions for use on Canola with Roundup Ready Technology with the directions for use on Canola with TruFlex Technology.

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Post-emergence (In-Crop) in Hybrid Seed Production Only.

Refer to the following table for the maximum application rates for this product with Spring varieties of Canola with Roundup Ready Technology:

Maximum Application Rate per Acre	
Total for all Pre-plant, At-Planting, Pre-emergence applications	40 fl. oz. (1.25 qt.)
Total for all in-crop applications from emergence to 6 leaf stage	20 fl. oz. (0.625 qt.)

See the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See the "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

### Pre-plant, At-Planting, Pre-emergence

This product may be applied before, during or after planting Spring Canola with Roundup Ready Technology.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 40 fluid ounces (1.25 qt.) per acre per year.

### Post-emergence (In-crop)

This product may be applied post-emergence (in-crop) to Spring varieties of Canola with Roundup Ready Technology from emergence through the 6 leaf stage of development unless otherwise directed. Application made during bolting or flowering could result in crop injury and yield loss. To maximize yield potential, eliminate competing weeds early.

SINGLE APPLICATION: Apply 10 to 15 fluid ounces of this product per acre no later than the 6 leaf stage to control annual weeds. Avoid overlapping applications as this could result in temporary yellowing, delayed flowering and/or

growth reduction. Similar crop injury could result when more than 10 fluid ounces per acre are applied after the 4 leaf stage.

**SEQUENTIAL APPLICATION:** Apply 10 fluid ounces of this product per acre to 1 to 3 leaf Canola followed by a sequential application at a minimum interval of 10 days but no later than the 6 leaf stage. Sequential application works enhanced for control of early emerging annual and perennial weeds such as Canada thistle and Quackgrass or whenever more than one application is needed for adequate weed control.

**USE RESTRICTIONS:** No more than two in-crop (over-the-top) broadcast applications may be made from crop emergence through the 6 leaf stage of development and the total in-crop application must not exceed 20 fluid ounces (0.625 qt.) of this product per acre. Pre-Harvest Interval (PHI): Allow a minimum of 60 days between application and Canola harvest.

**Post-emergence (In-crop) in Hybrid Seed Production Only**

THIS POST-EMERGENCE APPLICATION IS FOR USE ONLY IN HYBRID CANOLA SEED PRODUCTION OF BOTH SPRING AND WINTER VARIETIES. DO NOT MAKE THIS APPLICATION ON CANOLA GROWN FOR FOOD OR FEED.

This product may be applied at a rate of between 10 and 20 fluid ounces per acre from emergence until pollination is complete or near completion for the control of non-glyphosate tolerant Canola pollen parental line(s) in hybrid Canola seed production fields containing both a Canola with Roundup Ready Technology line(s) and a non-glyphosate tolerant line(s). Sequential applications may be made for the control of non-glyphosate tolerant pollen parental lines up to a maximum total application rate of 20 fluid ounces per acre.

**USE RESTRICTIONS:** Allow a minimum of 5 days between sequential applications. Maximum total application rate of this product for ALL post-emergence (in-crop) applications in hybrid Canola seed production fields including application for weed control and control of non-glyphosate tolerant Canola is 20 fluid ounces (0.625 qt.) per acre.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**Canola with Roundup Ready Technology (Winter Varieties)\***

\*(Roundup Ready Winter Canola is defined as those Canola with Roundup Ready Technology varieties that are seeded in early Fall and harvested the following Spring or Summer. Winter Canola varieties are intended to enter a cold period dormancy in the Winter.)

(Optional: The directions for use of this product provided in this section are specific to Canola containing Event RT73 (which includes Canola with Roundup Ready Technology).)

**Note:** For use directions on Canola with TruFlex Technology, refer to that section of this label. DO NOT combine these directions for use on Canola with Roundup Ready Technology with the directions for use on Canola with TruFlex Technology.

**TYPES OF APPLICATION:** Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop).

Refer to the following table for the maximum application rates of this product with Winter varieties of Canola with Roundup Ready Technology.

<b>Maximum Application Rate per Acre</b>	
Total for all Pre-plant, At-Planting, Pre-emergence applications	40 fl. oz. (1.25 qt.)
Total for all in-crop applications from emergence to canopy closure or prior to bolting in the Spring	40 fl. oz. (1.25 qt.)

See the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label for information regarding the use of this product in Roundup Ready crops. See the "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Roundup Ready Winter Canola.

### Post-emergence (In-Crop)

This product may be applied to Winter varieties of Canola with Roundup Ready Technology from emergence to canopy closure in the Fall and prior to bolting in the Spring. Application made during or after bolting could result in crop injury and yield loss. To maximize yield potential, eliminate competing weeds early.

Some weeds with multiple germination times or suppressed (stunted) weeds or weeds that have overwintered might require a sequential application of this product for control. Make the second application after some regrowth has occurred and minimum 60 days after the initial application of this product.

**SINGLE APPLICATION:** Apply 15 to 20 fluid ounces of this product per acre in the Fall when weeds are small and actively growing. Use the higher rate within this range when weed densities are high when weeds have overwintered or when weeds become large and well established. Application of more than 15 fluid ounces per acre prior to the 6 leaf stage could result in reduced crop growth in the Fall. Avoid spray overlaps as this could result in temporary yellowing and/or growth reduction.

**SEQUENTIAL APPLICATION:** Apply 10 to 20 fluid ounces of this product per acre to 2 leaf or larger Canola in the Fall followed by a sequential application at the same rate and at a minimum interval of 60 days but before bolting in the Spring. Sequential application works enhanced for control of early emerging annual weeds and winter emerging weeds including Downy brome, Jointed goatgrass, and Ryegrass and for weeds that have overwintered. This product will control or suppress most perennial weeds. For some perennial weeds, a sequential application might be required to reduce competition with the crop.

**USE RESTRICTIONS:** No more than two over-the-top broadcast applications may be made from crop emergence up to the onset of bolting and the total in-crop application must not exceed 40 fluid ounces (1.25 qt.) of this product per acre. Pre-Harvest Interval (PHI): Allow a minimum of 60 days between application and harvest of Canola grain. No waiting period is required between application and open grazing of livestock.

#### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### Field Corn Hybrids with Roundup Ready 2 Technology\*

\*(Field corn hybrids with Roundup Ready 2 Technology include Roundup Ready Corn 2 and Field corn seed products displaying the Roundup Ready 2 Technology logo.)

(Optional: The directions for use of this product provided in this section are specific to Field corn hybrids containing Event NK603, MON 88017 or MON 87411 (which includes Field corn hybrids with Roundup Ready 2 Technology).)

**TYPES OF APPLICATION:** Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Spot Treatment, Pre-harvest, Post-harvest, Post-emergence (In-Crop) for Tassel Control in Roundup Hybridization Systems Only.

For use directions on Sweet corn hybrids that contain Roundup Ready 2 Technology, see "SWEET CORN HYBRIDS WITH ROUNDUP READY 2 TECHNOLOGY" section of this label.

Refer to the following table for maximum application rates of this product with Field corn hybrids with Roundup Ready 2 Technology:

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Maximum single in-crop application rate up to 48 inch Corn	30 fl. oz. (0.94 qt.)
Total for all in-crop applications from emergence through 48 inch Corn	60 fl. oz. (1.875 qt.)
Maximum pre-harvest application rate after maximum kernel fill is complete and the crop is physiologically mature (black layer formation) until 7 days before harvest*	20 fl. oz. (0.625 qt.)

\* See "USE RESTRICTIONS" under the "PRE-HARVEST APPLICATIONS" section below.

See "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

USE PRECAUTIONS: The use of the in-crop (over-the-top) rates described in this section on other than Field corn hybrids with Roundup Ready 2 Technology could cause crop injury and reduced yields.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied alone or in a tank-mixture before, during or after planting Field corn hybrids with Roundup Ready 2 Technology.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) for use before, during or after planting Field corn hybrids with Roundup Ready 2 Technology. Apply these tank-mixtures in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre.

Acetochlor Atrazine Bicyclopyrone Carfentrazone-ethyl Clopyralid 2,4-D Dicamba Diflufenzopyr Dimethenamid	Dimethenamid-p Flufenacet Flumetsulam Flumiclorac pentyl ester Fluthiacet-methyl Isoxaflutole Linuron Mesotrione Metolachlor	Metribuzin Pendimethalin Pyroxasulfone Rimsulfuron Saflufenacil Tembotrione Thiencarbazone-methyl
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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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year. Application of 2,4-D or Dicamba must be made at least 7 days prior to planting Corn.

**Note:** For maximum weed control, make a post-emergence (in-crop) application of this product following the use of a pre-emergence residual product listed above.

**Post-emergence Applications (In-Crop)**

This product may be applied alone or in a tank-mix over-the-top of Field corn hybrids with Roundup Ready 2 Technology from emergence through the V8 stage (8 leaves with collars) or until Corn plant height reaches 30 inches (free standing) whichever comes first unless otherwise directed. Use drop nozzles for optimum spray coverage and weed control when Corn plant height is 24 to 30 inches. When Corn plants are 30 to 48 inches tall (free standing), apply this product using **only** ground application equipment fitted with drop nozzles aligned to avoid spraying into the whorls of the Corn plants. Maximum single in-crop application rate of this product up to 48 inch Field corn is 30 fluid ounces per acre. Total in-crop application of this product from Corn plant emergence through 48 inches in height must not exceed 60 fluid ounces per acre.

When applied as directed, this product will control annual grasses and broadleaf weeds listed on this label. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product. Make a post-emergence application at the rate of 15 to 20 fluid ounces of this product per acre before weeds exceed 4 inches in height (before they become competitive with the crop). Repeat this application before new flushes of weeds exceed 4 inches in height.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) for post-emergence (in-crop) applications to Field corn hybrids with Roundup Ready 2 Technology.

Acetochlor Atrazine Bicyclopyrone Carfentrazone-ethyl Clopyralid 2,4-D	Dicamba Diflufenzopyr Flumetsulam Flumiclorac pentyl ester Halosulfuron-methyl Isoxaflutole	Mesotrione Metolachlor Metribuzin Nicosulfuron Pendimethalin Rimsulfuron	Tembotrione Thiencarbazone-methyl Thifensulfuron-methyl Topramezone
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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.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 10 days between in-crop applications of this product. Allow a minimum of 50 days between application of this product and harvest of Corn forage or grain.

### Pre-harvest Applications

Apply up to 20 fluid ounces of this product per acre for annual and perennial weed control prior to harvest when kernel fill is complete and Corn is physiologically mature (black layer formed) and grain moisture is 35% or less.

USE RESTRICTIONS: A pre-harvest application may be made only if the combined total of previously applied over-the-top or drop nozzle applications does not exceed 40 fluid ounces (1.25 qt.) of this product per acre. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest or feeding of Corn stover or grain.

### Post-harvest Applications

This product may be applied for weed control after crop harvest. Higher rates might be required for control of large weeds that were growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest or the feeding of vegetation within the application area. Application must be made a minimum of 30 days prior to the planting of any crop not listed on this label.

### Post-emergence (In-crop) for Tassel Control in Roundup Hybridization Systems (RHS) Only

THIS APPLICATION IS FOR USE ONLY IN SEED PRODUCTION OF CORN HYBRIDS USING THE ROUNDUP HYBRIDIZATION SYSTEM (RHS). DO NOT MAKE THIS APPLICATION ON CORN GROWN FOR FOOD OR FEED.

The RHS designation indicates that the Corn contains a proprietary gene technology that allows for tassel only susceptibility to this product. Use of this product on Corn hybrids or inbreds that are not designated as RHS or as Corn containing Roundup Ready 2 Technology could result in severe crop injury and yield loss.

This product may be applied at rates of between 10 and 30 fluid ounces per acre as an over-the-top broadcast application for tassel control in RHS-based seed Corn production fields from the V8 stage until either the V13 stage or 100 GDU (Growing Degree Units) before flowering.

USE RESTRICTIONS: Make no more than two applications of this product for tassel control. The maximum total application rate of this product for tassel control is 60 fluid ounces (1.875 qt.). The maximum combined total amount of this product that may be applied per year for both weed control and tassel control is 160 fluid ounces (5 qt.) per acre.

#### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### Sweet Corn Hybrids with Roundup Ready 2 Technology\*

\*(Sweet corn hybrids with Roundup Ready 2 Technology include Roundup Ready Sweet Corn and Sweet corn seed products displaying the Roundup Ready 2 Technology logo.)

(Optional: The directions for use of this product provided in this section are specific to Sweet corn hybrids containing Event MON 88017 (which includes Sweet corn hybrids with Roundup Ready 2 Technology).)

The directions for use in this section refer only to Sweet corn hybrids with Roundup Ready 2 Technology. *[Alternative text: The directions for use in this section apply only to use on Roundup Ready Sweet Corn].* For use directions on Field Corn hybrids that contain Roundup Ready 2 Technology, see the "FIELD CORN HYBRIDS WITH ROUNDUP READY 2 TECHNOLOGY" section of this label.

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop).

Refer to the following table for maximum application rates of this product with Sweet corn hybrids with Roundup Ready 2 Technology. *[Alternative text: Refer to the following table for maximum application rates of this product with Roundup Ready sweet corn.]*

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)

Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Maximum single in-crop application rate up to 48 inch Sweet corn	40 fl. oz. (1.25 qt.)
Total of all in-crop applications from emergence through 48 inch Sweet corn	124 fl. oz. (3.875 qt.)

See the “*ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS*” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “*PRODUCT INFORMATION*” section of this label for more information on maximum application rates.

USE PRECAUTIONS: The use of the in-crop (over-the-top) applications described in this section on other than Sweet corn hybrids with Roundup Ready 2 Technology could cause crop injury and reduced yields. *[Alternative Text: The use of the in-crop (over-the-top) applications described in this section on other than Roundup Ready Sweet corn could cause crop injury and reduced yields.]*

### Pre-plant, At-Planting, Pre-emergence

This product may be applied alone or in a tank-mixture before, during or after planting Sweet corn hybrids with Roundup Ready 2 Technology. *[Alternative Text: This product may be applied alone or in tank-mixture before, during or after planting Roundup Ready Sweetcorn.]*

TANK-MIXTURES: This product may be tank-mixed with the residual herbicides (examples are listed below) for maximum weed control. Apply these tank-mixtures in 10 to 20 gallons of water or in 10 to 60 gallons of nitrogen solution per acre.

Acetochlor Atrazine Bicyclopyrone	Carfentrazone-ethyl Dimethenamid-p Mesotrione	Metolachlor
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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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

### Post-emergence Applications (In-Crop)

Apply this product alone or in a tank-mixture over-the-top of Sweet corn hybrids with Roundup Ready 2 Technology *[Alternative Text: Roundup Ready Sweet corn]* from emergence through the V8 stage (8 leaves with collars) or until Sweet corn plant height reaches 30 inches (free standing) whichever comes first. Use drop nozzles for optimum spray coverage and weed control when Sweet corn plant height is 24 to 30 inches. When Sweet corn plants are 30 to 48 inches tall (free standing), apply this product using **only** ground application equipment fitted with drop nozzles aligned to avoid spraying into the whorls of the Sweet corn plants. Avoid spraying if the crop has reached the reproductive stage. Maximum single in-crop application rate of this product up to 48 inch Sweet corn is 40 fluid ounces (1.25 qt.) per acre. Total in-crop application of this product from emergence through 48 inches in height must not exceed 124 fluid ounces (3.875 qt.) per acre per year.

When applied as directed, this product will control annual grasses and broadleaf weeds listed on this label. Many perennial grasses and broadleaf weeds will be controlled or suppressed with one or more applications of this product. Apply 15 to 20 fluid ounces of this product per acre before weeds exceed 4 inches in height or before they become competitive with the crop. If new flushes of weeds occur, a sequential application of 15 to 20 fluid ounces per acre may be made before weeds exceed 4 inches in height.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) for post-emergence (in-crop) applications to Sweet corn with Roundup Ready 2 Technology *[Alternative Text: Roundup Ready Sweet corn]*.

Atrazine Carfentrazone-ethyl	Mesotrione Tembotrione	Topramezone
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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.

USE RESTRICTIONS: Allow a minimum of 10 days between in-crop applications of this product. Do not apply Atrazine in a tank-mix with this product when Sweet corn plants are greater than 12 inches tall. Pre-Harvest Interval (PHI): Allow a minimum of 30 days between application of this product and harvest of Sweet corn forage or grain.



**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**Cotton With Roundup Ready Technology**

(Optional: The directions for use of this product provided in this section are specific to cotton containing Event MON 1445 (which includes Cotton with Roundup Ready Technology).)

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Selective Equipment (In-Crop), Pre-harvest.

Refer to the following table for maximum application rates of this product with Cotton with Roundup Ready Technology.

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total of all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Total for all in-crop applications from cracking to layby	80 fl. oz. (2.5 qt.)
Maximum pre-harvest application rate	40 fl. oz. (1.25 qt.)
Combined total of all in-crop applications from emergence through harvest	120 fl. oz. (3.75 qt.)

See the "ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS" section of this label for information regarding the use of this product in Roundup Ready and other Glyphosate tolerant crops. See "PRODUCT INFORMATION" section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Cotton with Roundup Ready Technology.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D or Dicamba and applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence.

Acetochlor Clomazone Diuron Flumioxazin	Fluometuron Fomesafen Metolachlor Norflurazon	Pendimethalin Prometryn Pyriithobac-sodium Saflufenacil
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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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

**Post-emergence Applications (In-Crop)**

This product may be applied over-the-top of Cotton with Roundup Ready Technology (in-crop) at rates up to 20 fluid ounces per acre per application from cracking until the 4 leaf (node) stage of development (until the fifth true leaf reaches the size of a quarter). NO MORE THAN TWO OVER-THE-TOP BROADCAST APPLICATIONS MAY BE MADE FROM CROP EMERGENCE THROUGH THE 4 LEAF (NODE) STAGE OF DEVELOPMENT. SEQUENTIAL OVER-THE-TOP OR POST-DIRECTED APPLICATIONS OF THIS PRODUCT IN-CROP MUST BE A MINIMUM OF 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS. Over- the-top applications made after the 4 leaf (node) stage of development could result in boll loss, delayed maturity, and/or yield loss.

TANK-MIXTURES: This product may be tank-mixed with the other herbicides (examples are listed below) and applied over-the-top of Cotton with Roundup Ready Technology up to the 4 leaf stage.

Acetochlor Clethodim Fluazifop-p-butyl Fomesafen	Metolachlor MSMA Pyriithobac-sodium Quizalofop-p-ethyl	Sethoxydim-sodium Trifloxysulfuron-sodium
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**[Optional label text:** Pyriithiobac-sodium could cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) to Cotton with Roundup Ready Technology. Metolachlor applied over-the-top of Cotton with Roundup Ready Technology could cause leaf injury in the form of necrotic spotting.]

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.

**Salvage Treatment:** This application may be made after the 4 leaf stage of development and only when weeds threaten to cause the loss of the crop. Apply 20 fluid ounces of this product per acre either as an over-the-top application or as post-directed application sprayed higher on the Cotton plants and onto the weeds.

IN THE STATE OF ARIZONA ONLY: Up to 30 fluid ounces of this product may be applied per acre either as an over-the-top application or a post-directed application for salvage treatment. **Note:** SALVAGE TREATMENT WILL RESULT IN SIGNIFICANT BOLL LOSS DELAYED MATURITY AND/OR YIELD LOSS. NO MORE THAN ONE SALVAGE TREATMENT MAY BE MADE PER GROWING SEASON.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all in-crop applications from cracking to layby combined is 80 fluid ounces (2.5 qt.) per acre per year. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest of Cotton. DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT (OTHER THAN THOSE CONTAINED IN ANY TANK-MIX PRODUCT) FOR OVER-THE-TOP APPLICATION TO COTTON WITH ROUNDUP READY TECHNOLOGY.

### Selective Equipment (In-Crop)

This product may be applied using precision post directed or hooded sprayers at rates up to 20 fluid ounces per acre per application to Cotton with Roundup Ready Technology through layby. At this stage, use post-directed application equipment to direct the spray towards the base of the Cotton plants avoiding contact of the herbicide spray with the leaves of the plant. To minimize spray contact, maintain a low spray pressure (less than 30 lb. psi) and place nozzles in a low position directing a horizontal spray pattern under the leaves of the Cotton plant and onto the weeds in the row. For enhanced results, apply this product while weeds are small (less than 3 inches in height). See additional use instructions in "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) for in-crop application using precision post-directed or hooded sprayers.

Acetochlor Carfentrazone-ethyl Diuron Flumioxazin Fluometuron	Fomesafen Linuron Metolachlor MSMA Pendimethalin	Prometryn Pyriithiobac-sodium Trifloxysulfuron-sodium
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**[Optional label text:** Pyriithiobac-sodium could cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) to Cotton with Roundup Ready Technology.]

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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all in-crop applications from cracking to layby combined is 80 fluid ounces (2.5 qt.) per acre per year. Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest of Cotton. NO MORE THAN TWO APPLICATIONS OF THIS PRODUCT MAY BE MADE FROM THE 5 LEAF STAGE THROUGH LAYBY. SEQUENTIAL OVER-THE-TOP OR POST-DIRECTED IN-CROP APPLICATIONS OF THIS PRODUCT MUST BE A MINIMUM OF 10 DAYS APART AND COTTON MUST HAVE AT LEAST TWO NODES OF INCREMENTAL GROWTH BETWEEN APPLICATIONS.

### Pre-harvest Applications

Apply up to 40 fluid ounces of this product per acre for annual and perennial weed control prior to crop harvest after 20% boll crack. **Note:** This product will not enhance the performance of harvest aids when applied to Cotton with Roundup Ready Technology.

USE PRECAUTIONS: Do not apply this product for pre-harvest weed control to Cotton grown for seed as reduction in germination or vigor could occur.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow at least 7 days between application and harvest of Cotton. DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR PRE-HARVEST APPLICATION TO COTTON WITH ROUNDUP READY TECHNOLOGY.

**ATTENTION:** USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF COTTON WITH ROUNDUP READY TECHNOLOGY. HOWEVER, DUE TO THE SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES AND OTHER FACTORS, IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT EVEN WHEN APPLICATIONS ARE MADE IN ACCORDANCE WITH THE LABEL DIRECTIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS, DELAYED MATURITY AND/OR YIELDLOSS.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**Cotton With Roundup Ready Flex Technology**

(Optional: The directions for use of this product provided in this section are specific to cotton containing Event MON 88913 (which includes Cotton with Roundup Ready Flex Technology and Cotton with XtendFlex Technology).)

The directions for use provided in this section are specific to and may only be used with varieties designated as Cotton with Roundup Ready Flex Technology. Applications described in this section made over-the-top of Cotton other than Cotton with Roundup Ready Flex Technology will cause crop injury and reduced yields.

DO NOT combine the directions for use in this section with those in “COTTON WITH ROUNDUP READY TECHNOLOGY” or “COTTON WITH GLYTOL TECHNOLOGY” section of this label.

Drift of this product from application made to Cotton with Roundup Ready Flex Technology onto adjacent fields of post 4 leaf (node) Cotton with Roundup Ready Technology or Cotton with GlyTol Technology could cause extensive crop injury including boll loss, delayed maturity, and/or yield loss.

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Pre-harvest.

Refer to the following table for maximum application rates of this product with Cotton with Roundup Ready Flex Technology.

<b>Maximum Application Rate per Acre</b>	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Total for all in-crop applications from cracking to 60% open bolls	120 fl. oz. (3.75 qt.)
Total for all in-crop applications from between layby and 60% open bolls	40 fl. oz. (1.25 qt.)
Total for all in-crop applications from 60% open bolls to 7 days before harvest	40 fl. oz. (1.25 qt.)
Total for all in-crop applications from emergence through harvest	120 fl. oz. (3.75 qt.)

See “ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “PRODUCT INFORMATION” section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Cotton with Roundup Ready Flex Technology.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D or Dicamba and applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence.

Acetochlor	Fluometuron	Pendimethalin
Clomazone	Fomesafen	Prometryn
Diuron	Metolachlor	Pyriithiobac-sodium
Flumioxazin	Norflurazon	Saflufenacil

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.

USE RESTRICTIONS: Maximum quantity of this product that may be used for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

### Post-emergence Applications (In-Crop)

This product may be applied to Cotton with Roundup Ready Flex Technology to control annual grasses and broadleaf weeds listed on this label. To maximize yield potential, eliminate competing weeds early. Many perennial weeds will be controlled or suppressed with one or more applications of this product. Use an initial application rate of 20 fluid ounces per acre to control or suppress 1 to 3 inch tall annual grasses and broadleaf weeds. This product may be applied post-emergence to Cotton with Roundup Ready Flex Technology using ground application equipment at rates up to 30 fluid ounces per acre per application. In addition to broadcast application, post-directed spray equipment may be used to achieve more thorough weed coverage.

IN THE STATE OF ARIZONA, NEW MEXICO, AND TEXAS (WEST OF I-35) ONLY: Up to 40 fluid ounces of this product per acre may be applied post-emergence using ground application equipment.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) and applied post-emergence (in-crop) over-the-top of Cotton with Roundup Ready Flex Technology.

Acetochlor Clethodim Fluazifop-p-butyl Fomesafen	Metolachlor MSMA Pyriithiobac-sodium Quizalofop-p-ethyl	Sethoxydim Trifloxysulfuron-sodium
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**[Optional label text:** Pyriithiobac-sodium could cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) to Cotton with Roundup Ready Technology. Metolachlor applied over-the-top of Cotton with Roundup Ready Technology could cause leaf injury in the form of necrotic spotting.]

This product may also be tank-mixed with the following herbicides (examples are listed below) for in-crop application using precision post-directed or hooded sprayers.

Acetochlor Carfentrazone-ethyl Diuron Flumioxazin Fluometuron	Fomesafen Linuron Metolachlor MSMA Pendimethalin	Prometryn Pyriithiobac-sodium Trifloxysulfuron-sodium
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**[Optional label text:** Pyriithiobac-sodium could cause leaf yellowing and/or leaf crinkling when applied post-emergence (in-crop) in Cotton with Roundup Ready Flex Technology.]

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.

USE RESTRICTIONS: The maximum single in-crop application rate of this product to Cotton with Roundup Ready Flex Technology using ground application equipment is 30 fluid ounces (0.94 qt.) per acre except in Arizona, New Mexico, and Texas (west of I-35) where up to 40 fluid ounces (1.25 qt.) per acre may be applied in a single application using ground application equipment. **In-crop application rates above 20 fluid ounces (0.625 qt.) per acre made alone or with the addition of other products containing surfactant could cause a crop response including leaf speckling or leaf necrosis.** Do not exceed a maximum single, in-crop application rate of 20 fluid ounces (0.625 qt.) of this product per acre when using aerial application equipment except in Arizona, New Mexico, and Texas (west of I-35) where up to 30 fluid ounces (0.94 qt.) may be applied as a single application using aerial equipment. Between layby and 60% open bolls, the maximum combined total application rate of this product is 40 fluid ounces (1.25 qt.) per acre. The combined total of all applications of this product from crop emergence to 60% open bolls must not exceed 120 fluid ounces (3.75 qt.) per acre.

DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES CONTAINING SURFACTANT TO THIS PRODUCT FOR OVER-THE-TOP APPLICATION TO COTTON WITH ROUNDUP READY FLEX TECHNOLOGY.

### Pre-harvest Applications

Up to 40 fluid ounces of this product per acre may be applied to Cotton with Roundup Ready Flex Technology for annual and perennial weed control prior to harvest after 60% boll crack. **Note:** This product will not enhance the performance of harvest aids when applied to Cotton with Roundup Ready Flex Technology.

USE RESTRICTIONS: Pre-Harvest Interval (PHI): Allow a minimum of 7 days between application and harvest of Cotton with Roundup Ready Flex Technology. DO NOT ADD ADDITIONAL SURFACTANT OR ADDITIVES

CONTAINING SURFACTANT TO THIS PRODUCT FOR PRE-HARVEST APPLICATION TO COTTON WITH ROUNDUP READY FLEX TECHNOLOGY.

**ATTENTION:** USE OF THIS PRODUCT IN ACCORDANCE WITH LABEL DIRECTIONS IS EXPECTED TO RESULT IN NORMAL GROWTH OF COTTON WITH ROUNDUP READY FLEX TECHNOLOGY. HOWEVER, DUE TO THE SENSITIVITY OF COTTON FRUITING TO VARIOUS ENVIRONMENTAL CONDITIONS, AGRONOMIC PRACTICES, AND OTHER FACTORS, IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS ASSOCIATED WITH THIS PRODUCT EVEN WHEN APPLICATIONS ARE MADE IN ACCORDANCE WITH THE LABEL DIRECTIONS. IN SOME CASES, THESE FACTORS CAN RESULT IN BOLL LOSS DELAYED MATURITY AND/OR YIELDLOSS.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**Soybeans With Roundup Ready Technology**

(Optional: The directions for use of this product provided in this section are specific to Soybeans containing Event GTS 40-3-2 (which includes Soybeans with Roundup Ready Technology).

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Pre-harvest, Post-harvest.

Refer to the following table for maximum application rates of this product with Soybeans with Roundup Ready Technology.

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Total for all in-crop applications from cracking through flowering (R2 stage Soybeans)	60 fl. oz. (1.875 qt.)
Maximum Pre-harvest application rate	20 fl. oz. (0.625 qt.)

See the “ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “PRODUCT INFORMATION” section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Soybeans with Roundup Ready Technology.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D or Dicamba and applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence.

Acetochlor	Flumetsulam	Metribuzin
Carfentrazone-ethyl	Flumiclorac pentyl ester	Pendimethalin
Chlorimuron-ethyl	Flumioxazin	Pyroxasulfone
Clethodim	Fluthiacet-methyl	Quizalofop-p-ethyl
Clomazone	Fomesafen	Saflufenacil
Cloransulam-methyl	Imazaquin	Sulfentrazone
Dimethenamid	Imazethapyr	Thiafensulfuron
Dimethenamid-p	Lactofen	Tribenuron-methyl
Fluazifop-p-butyl	Linuron	Trifluralin
Flufenacet	Metolachlor	

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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

### Post-emergence Applications (In-Crop)

This product may be used to control annual grasses and broadleaf weeds in Soybeans with Roundup Ready Technology from emergence (cracking) through flowering (R2 stage Soybeans). R2 stage Soybeans ends when a pod of 5 millimeters (3/16 inch) long appears at one of the four uppermost nodes on the main stem with a fully developed leaf (R3 stage). Refer to "ANNUAL WEEDS" under the "WEEDS CONTROLLED" section of this label for application rates on specific annual weeds.

An initial application of 20 fluid ounces of this product per acre will control or suppress most 2 to 8 inch tall weeds which are normally found approximately 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product. This product may be applied up to 40 fluid ounces per acre as a single in-crop application for control of annual weeds and where dense weed populations exist.

Application of 20 to 40 fluid ounces of this product per acre (single or multiple applications) will control or suppress perennial weeds including Bermudagrass, Canada thistle, Common milkweed, Field bindweed, Hemp dogbane, Horsenettle, Marestail (Horseweed), Nutsedge, Quackgrass, Rhizome johnsongrass, Redvine, Trumpet creeper, Swamp smartweed, and Wirestem muhly. For enhanced results, allow perennial weed species to achieve at least 6 inches of growth before applying this product.

Under adverse growing conditions including drought hail or wind damage or a poor Soybeans stand that slows or delays canopy closure, a sequential application of this product might be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE NEEDED TO CONTROL NEW FLUSHES OF WEEDS IN THE SOYBEANS CROP WITH ROUNDUP READY TECHNOLOGY. To control Giant ragweed, apply 20 fluid ounces of this product per acre when weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) and applied post-emergence (in-crop) over-the-top of Soybeans with Roundup Ready Technology. In some cases, these tank-mix products may cause visual Soybeans injury.

Acetochlor	Fluazifop-p-butyl	Lactofen
Acifluorfen	Flumiclorac pentyl ester	Pendimethalin
Bentazon	Fluthiacet-methyl	Quizalofop-p-ethyl
Chlorimuron-ethyl	Fomesafen	Sethoxydim
Clethodim	Imazamox	Thifensulfuron-methyl
Cloransulam-methyl	Imazethapyr	

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.

USE RESTRICTIONS: The combined total application of this product from crop emergence through harvest must not exceed 60 fluid ounces (1.875 qt.) per acre. The maximum rate for any single in-crop application is 40 fluid ounces (1.25 qt.) per acre. The maximum combined total amount of this product that may be applied during flowering (R2 stage Soybeans) is 40 fluid ounces (1.25 qt.) per acre.

### Pre-harvest Applications

Apply up to 20 fluid ounces of this product per acre to Soybeans with Roundup Ready Technology for weed control prior to harvest after pods have set and lost all green color. Take care to avoid excessive seed shatter loss due to ground application equipment.

USE RESTRICTIONS: Allow a minimum of 14 days between application and harvest of Soybeans grain or feeding of Soybeans grain, forage or hay.

### Post-harvest Applications

This product may be applied for weed control after harvest of Soybeans with Roundup Ready Technology. Higher specified rates might be required to control large weeds that were growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

USE RESTRICTIONS: Application must be made at least 30 days prior to planting of any crop not listed on this label.

**USE RESTRICTIONS:****Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)****Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)****Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)****Soybeans With Roundup Ready 2 Yield Technology**

(Optional: The directions for use of this product provided in this section are specific to Soybeans containing Event MON 89788 (which includes Soybeans with Roundup Ready 2 Yield Technology, Soybeans with Roundup Ready 2 Xtend Technology, Soybeans with XtendFlex Technology).)

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop), Pre-harvest, Post-harvest.

Refer to the following table for maximum application rates of this product with Soybeans with Roundup Ready 2 Yield Technology.

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Total for all in-crop applications from cracking through flowering (R2 stage Soybeans)	60 fl. oz. (1.875 qt.)
Maximum Pre-harvest application rate	20 fl. oz. (0.625 qt.)

See the “*ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS*” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “*PRODUCT INFORMATION*” section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting Soybeans with Roundup Ready 2 Yield Technology.

TANK-MIXTURES: This product may be tank-mixed with 2,4-D or Dicamba and applied prior to planting only. This product may also be tank-mixed with other herbicides (examples are listed below) and applied prior to crop emergence.

Acetochlor	Flumetsulam	Metribuzin
Carfentrazone-ethyl	Flumiclorac pentyl ester	Pendimethalin
Chlorimuron-ethyl	Flumioxazin	Pyoxasulfone
Clethodim	Fluthiacet methyl	Quizalofop-p-ethyl
Clomazone	Fomesafen	Saflufenacil
Cloransulam-methyl	Imazaquin	Sulfentrazone
Dimethenamid	Imazethapyr	Thifensulfuron
Dimethenamid-p	Lactofen	Tribenuron-methyl
Fluazifop-p-butyl	Linuron	Trifluralin
Flufenacet	Metolachlor	

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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

**Post-emergence Applications (In-Crop)**

This product may be used to control annual grasses and broadleaf weeds in Soybeans with Roundup Ready 2 Yield Technology from emergence (cracking) through flowering (R2 stage Soybeans). R2 stage Soybeans ends when a pod of 5 millimeters (3/16 inch) long appears at one of the four uppermost nodes on the main stem with a fully developed leaf (R3 stage). Refer to “*ANNUAL WEEDS*” under the “*WEEDS CONTROLLED*” section of this label for application rates for specific annual weeds.

An initial application of 20 fluid ounces of this product per acre will control or suppress most 2 to 8 inches tall weeds which are normally found approximately 2 to 5 weeks after planting. If the initial application is delayed and weeds are larger, apply a higher rate of this product. This product may be applied up to 40 fluid ounces per acre as a single in-crop application for control of annual weeds and where dense weed populations exist.



Application of 20 to 40 fluid ounces of this product per acre (single or multiple applications) will control or suppress perennial weeds including Bermudagrass, Canada thistle, Common milkweed, Field bindweed, Hemp dogbane, Horsenettle, Marestail (Horseweed), Nutsedge, Quackgrass, Rhizome johnsongrass, Redvine, Trumpet creeper, Swamp smartweed, and Wirestem muhly. For enhanced results, allow perennial weed species to achieve at least 6 inches of growth before applying this product.

Under adverse growing conditions including drought, hail or wind damage or a poor Soybeans stand that slows or delays canopy closure, a sequential application of this product might be necessary to control late flushes of weeds. IN THE SOUTHERN STATES, A SEQUENTIAL APPLICATION OF THIS PRODUCT WILL BE NEEDED TO CONTROL NEW FLUSHES OF WEEDS IN SOYBEANS CROP WITH THE ROUNDUP READY 2 TECHNOLOGY. To control Giant ragweed, apply 20 fluid ounces of this product per acre when weed is 8 to 12 inches tall to increase control and possibly avoid the need for a sequential application.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) and applied post-emergence (in-crop) over-the-top of Soybeans with Roundup Ready 2 Yield Technology. In some cases, these tank-mix products will cause visual Soybeans injury.

Acetochlor	Fluazifop-p-butyl	Lactofen
Acifluorfen	Flumiclorac pentyl ester	Metolachlor
Bentazon	Fluthiacet methyl	Pendimethalin
Chlorimuron-ethyl	Fomesafen	Quizalofop-p-ethyl
Clethodim	Imazamox	Sethoxydim
Cloransulam-methyl	Imazaquin	Thifensulfuron-methyl
Fenoxaprop	Imazethapyr	

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.

USE RESTRICTIONS: The combined total application of this product from crop emergence through harvest must not exceed 60 fluid ounces (1.875 qt.) per acre. The maximum rate for any single in-crop application is 40 fluid ounces (1.25 qt.) per acre. The maximum combined total amount of this product that may be applied during flowering (R2 stage Soybeans) is 40 fluid ounces (1.25 qt.) per acre.

### Pre-harvest Applications

Apply up to 20 fluid ounces of this product per acre to Soybeans with Roundup Ready 2 Yield Technology for weed control prior to harvest after pods have set and lost all green color. Take care to avoid excessive seed shatter loss due to ground application equipment.

USE RESTRICTIONS: Allow a minimum of 14 days between application and harvest of Soybeans grain or feeding of Soybeans grain, forage or hay.

### Post-harvest Applications

This product may be applied for weed control after harvest of Soybeans with Roundup Ready 2 Yield Technology. Higher specified rates might be required to control large weeds that were growing in the field at the time of harvest. Tank-mixtures with 2,4-D or Dicamba may be used. 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.

USE RESTRICTIONS: Application must be made at least 30 days prior to the planting of any crop not listed on this label.

### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

### Sugar Beets With Roundup Ready Technology

(Optional: The directions for use of this product provided in this section are specific to Sugar beet containing Event H7-1 (which includes Sugar beet with Roundup Ready Technology).)

TYPES OF APPLICATION: Pre-plant, At-Planting, Pre-emergence, Post-emergence (In-Crop).

Refer to the following table for maximum application rates of this product with Sugar beets with Roundup Ready Technology.

Maximum Application Rate per Acre	
Combined total per year for all applications	160 fl. oz. (5 qt.)
Total for all Pre-plant, At-Planting, Pre-emergence applications	99.2 fl. oz. (3.1 qt.)
Maximum single application rate from emergence to 8 leaf stage	30 fl. oz. (0.94 qt.)
Total for all applications made from emergence to 8 leaf stage	50 fl. oz. (1.56 qt.)
Maximum single application rate between 8 leaf stage and canopy closure	20 fl. oz. (0.625 qt.)
Total for all applications made between 8 leaf stage and canopy closure	40 fl. oz. (1.25 qt.)

See the “*ROUNDUP READY AND OTHER GLYPHOSATE TOLERANT CROPS*” section of this label for information regarding the use of this product in Roundup Ready and other listed Glyphosate tolerant crops. See “*PRODUCT INFORMATION*” section of this label for more information on maximum application rates.

**Pre-plant, At-Planting, Pre-emergence**

This product may be applied before, during or after planting of Sugar beets with Roundup Ready Technology.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (an example is listed below) and applied prior to crop emergence.

Ethofumesate
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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.

USE RESTRICTIONS: Maximum quantity of this product that may be applied for all pre-plant, at-planting, and pre-emergence applications combined is 99.2 fluid ounces (3.1 qt.) per acre per year.

**Post-emergence Applications (In-Crop)**

This product may be applied over-the-top of Sugar beets with Roundup Ready Technology to control annual grasses and broadleaf weeds from emergence to 30 days prior to harvest. To maximize yield potential, eliminate competing weeds early. Up to 4 applications of this product may be made with a minimum of 10 days between each application. This product will control or suppress most perennial weeds. For some perennial weeds, repeat applications might be required to eliminate crop competition throughout the growing season. Refer to “*ANNUAL WEEDS*” and “*PERENNIAL WEEDS*” under the “*WEEDS CONTROLLED*” section of this label for application rates for specific weeds.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) and applied post-emergence (in-crop) over-the-top of Sugar beets with Roundup Ready Technology.

Acetochlor Clethodim Clopyralid Desmedipham	Dimethenamid-p Ethofumesate Fluazifop-p-butyl Metolachlor	Phenmedipham Pendimethalin Quizalofop-p-ethyl Trisulfuron-methyl
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[**Optional label text:** Ethofumesate can cause significant Sugar beet injury. Refer to the labels of these products for crop injury precautions.]

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.

USE RESTRICTIONS: The combined total application of this product from crop emergence through harvest must not exceed 90 fluid ounces (2.81 qt.) per acre. The maximum rate for any single application from crop emergence until the 8 leaf stage is 30 fluid ounces (0.94 qt.) per acre. The maximum rate for any single application between the 8 leaf stage and canopy closure is 20 fluid ounces (0.625 qt.) per acre. Pre-Harvest Interval (PHI): Allow a minimum of 30 days between application and Sugar beetharvest.

**USE RESTRICTIONS:****Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)****Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)****Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)****FARMSTEAD USES**

TYPES OF USES: Chemical Mowing, Cut Stump Application, Farmstead Weed Control, Trim and Edge, Greenhouse/Shadehouse, Habitat Management

Refer to "ANNUAL WEEDS" and "PERENNIAL WEEDS" under the "WEEDS CONTROLLED" section of this label for application rates for specific weeds. When applied as directed, this product will control the listed annual and perennial grasses and broadleaf weeds.

Application rates of this product specified in the following sections or on separate supplemental labeling or Fact Sheets published for this product for hard-to-control weeds supersede rates in the "ANNUAL WEEDS" and "PERENNIAL WEEDS" sections.

**Chemical Mowing**

This product may be used to suppress growth of perennial grasses listed in this section along farm ditches and on any other parts of the farmstead to serve as a substitute for mowing. Apply 4 fluid ounces of this product per acre to suppress Bahiagrass, Fine fescue, Kentucky bluegrass, Orchardgrass, Quackgrass or Tall fescue covers or 10 fluid ounces to suppress Bermudagrass or 40 fluid ounces to suppress Paragrass or Torpedograss. Apply in 10 to 20 gallons of spray solution per acre.

USE PRECAUTIONS: Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

**Cut Stump Application**

TYPES OF USES: Treating cut stumps on any terrestrial site.

This product may be used to control regrowth and resprouting of many species of woody brush, trees, and vines. Cut the woody brush or tree close to the soil surface and immediately apply 50 to 100% (undiluted) solution of this product to the freshly cut surface using application equipment capable of covering the entire cambium. A delay in application could result in reduced performance. For enhanced results, cut the woody brush or tree during period of active growth and full leaf expansion and apply this product. Some of the species controlled are as follows:

Alder Eucalyptus Madrone Oak	Pepper (Brazilian) Pine (Austrian) Reed (Giant) Saltcedar	Sweetgum Tan oak Willow
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USE PRECAUTIONS: Do not make cut stump application when roots of desirable woody brush or trees might be grafted to the roots of the cut stump. Some sprouts, stems or trees can share a common root system. Adjacent trees having a similar age, height, and spacing could be an indicator of a shared root system. Whether grafted or shared, injury is likely to occur to adjacent stems or trees when this product is applied to one or more trees sharing a common root system.

**Farmstead Weed Control, Trim and Edge**

This product may be used to control annual weeds, perennial weeds, woody brush, trees, and vines found on any part of the farmstead including around building foundations and equipment storage areas, along and in fences, in dry ditches and canals, along ditch banks, driveways, farm roads, farm yards, fencerows, parking areas, rangeland, rights-of-way, shelterbelts, storage areas, and prior to planting landscape ornamentals.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) to control weeds on farmstead.

Bromacil Chlorsulfuron 2,4-D Dicamba Diuron	Imazapic Imazapyr Metsulfuron-methyl Oryzalin Oxadiazon	Pendimethalin Prodiamine Sulfometuron-methyl
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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.

For annual weeds, apply 20 fluid ounces of this product per acre when weeds are less than 6 inches tall, 30 fluid ounces per acre when weeds are 6 to 12 inches tall, and 40 fluid ounces per acre when weeds are greater than 12 inches tall. For perennial weeds, apply 40 to 99.2 fluid ounces (1.25 to 3.1 qt.) per acre in a tank-mix with one of the products listed above. For application of tank-mixtures using a backpack sprayer, handgun or other handheld applicators, see "ANNUAL WEEDS" and "PERENNIAL WEEDS" under the "WEEDS CONTROLLED" section of this label for the required concentration of this product in the tank-mix.

### **Greenhouse / Shadehouse Use**

This product may be used to control weeds in and around greenhouses and shadehouses.

Remove desirable vegetation before applying this product inside a greenhouse or shadehouse.

USE RESTRICTIONS: Turn air circulation fans off when applying this product inside a greenhouse or shadehouse and leave them off until the application solution has dried. Do not use this product inside residential greenhouses.

### **Habitat Management**

TYPES OF USES: Habitat Restoration and Maintenance, Wildlife Food Plots.

#### **HABITAT RESTORATION AND MAINTENANCE**

This product may be used to control exotic and other undesirable vegetation in habitat management areas. Application may be made to allow recovery of native plant species or prior to planting desirable native species and for similar broad spectrum vegetation control requirements in habitat management areas. Spot treatment may be used to selectively remove unwanted plants for habitat maintenance and enhancement.

#### **WILDLIFE FOOD PLOTS**

This product may be used to eliminate annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait at least 7 days after application before tilling.

USE RESTRICTIONS: There are no rotational restrictions for planting any wildlife food species or for allowing native species to repopulate the area following application of this product.

#### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

### **FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES**

This product may be used according to the directions for use described in this section.

#### **TERRESTRIAL USE SITES**

This product may be used to control weeds, woody brush, trees and vines on maintained landscapes, on improved and unimproved land, on lawns and turf and around ornamentals on industrial, commercial and residential sites\*, including airports, apartment complexes\*, chaparrals, ditch banks, driveways, dry canals, farmsteads, fencerows, forestry sites, golf courses, greenhouses, lumber yards, manufacturing sites, municipal sites, nurseries, natural areas, office complexes, ornamental beds, parks, parking areas, pastures, petroleum tank farms, pumping installations, railroads, rangeland, recreational areas, residential areas\*, roadsides, schools, shadehouses, sod and Turfgrass seed farms, sports complexes, storage areas, substations, utility rights-of-way, utility sites, warehouse areas, wildlife food plots and wildlife management areas.

#### **\*Intended To Be Applied By Certified/Professional Applicators**

This product may be used for non-selective control of unwanted vegetation on any site listed in this section for trim-and-edge application around objects, including around building foundations, equipment storage areas and trees, along and in fences, and to eliminate unwanted weeds growing in and around established shrub beds and ornamental plantings.

This product may also be used for complete elimination of vegetation from a terrestrial site prior to planting ornamentals, flowers or Turfgrass (sod or seed), and prior to land development, including prior to beginning construction projects or the laying of asphalt or other road material. Application of this product may be repeated, as needed, to maintain bare ground, up to a total application of 7 quarts per acre per year.

This product may be used for establishment and maintenance of fuel breaks, for establishing fire perimeters and black lines, along fire roads and to facilitate prescribed burning practices on any site described in this section.

[Optional label text: This product may also be used for weed control or growth regulation on] [Optional list of any terrestrial uses that are included in this section, including: Christmas tree farms, Farmsteads, Production nurseries, Sod farms and Turfgrass seed farms.]

Unless otherwise specified, application of this product may be made according to the directions for use in the sections that follow to any of these sites using any application equipment described on this label to control any weeds listed under “*WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” section at the end of this label. [Alternative Text: Unless otherwise directed, application of this product may be made according to the directions for use in the sections that follow to any of these sites using any method of application described on this label to control any weeds, woody brush, trees and vines listed in the “*WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” section at the end of this label.] [Alternative Text: Unless otherwise directed, application of this product may be made according to the directions for use in the sections that follow on any of these sites using any method of application described on this label to control any weeds, woody brush, trees and vines listed in the “*ANNUAL WEEDS*” “*PERENNIAL WEEDS*” and “*WOODY BRUSH, TREES AND VINES*” found under “*WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” section at the end of this label.]

### **ADDITIONAL USE SITES**

In addition to the above listed uses, this product may be used in the management of the following sites: Commercial, Residential\* and Recreational Area Management; Forestry, Hardwood, and Christmas Tree Management; Native and Wildlife Habitat Management; Ornamental and Production Nursery Management; Pasture Management; Railroad Management; Rangeland Management; Roadside Management; Utility Management.

#### **\*Intended To Be Applied By Certified/Professional Applicators**

Unless otherwise directed, any application of this product described under the “*TURF*” section or any other section of this label may be made on the following use sites described, where applicable, using any method of application on this label that is appropriate.

### **APPLICATION EQUIPMENT AND METHODS**

This product may be applied to “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” using the appropriate equipment and methods listed in the section “*APPLICATION EQUIPMENT AND TECHNIQUES*” at the beginning of this label.

#### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

### **Commercial, Residential\*, and Recreational Area Management**

All applications of this product described in this section may be used in commercial, residential\*, and recreational areas, including parks, schools and athletic fields, using any appropriate method of application described on this label, including spot treatment of unwanted vegetation, trim-and-edge application around trees, fences, walking paths, buildings, sidewalks, nature trails and other objects in these areas, to eliminate unwanted weeds growing in established shrub and ornamental beds, for Turf management and renovation, and to eliminate vegetation from a site prior to development, including prior to planting an area to ornamentals, flowers or Turfgrass (sod or seed) or beginning construction projects.

#### **\*Intended To Be Applied By Certified/Professional Applicators**

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Forestry, Hardwood, and Christmas Tree Management**

This product may be used to control or partially control woody brush, trees, and herbaceous weeds on any tree site, including forestry settings, Christmas tree plantations, and silvicultural and production nursery sites using any appropriate method of application listed on this label.

See the “WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES” section at the end of the label for application rates and specific use directions.

**Weed Management, Site Preparation**

This product may be used to control or partially control undesirable woody brush, trees, vines, and herbaceous weeds listed in this section for preparing sites prior to planting any tree species, including Christmas trees, Eucalyptus trees and hybrid tree cultivars, and for controlling weeds around established trees, [*Optional text:* for the release of conifer and hardwood trees.] establishing wildlife openings and maintaining roads on any tree site.

TANK-MIXTURES: This product may be applied in a tank-mix with the other herbicides (examples are listed below) to increase the spectrum of vegetation controlled. Any application rate of this product listed in this section may be used in a tank-mix with the following products for tree site management, including site preparation, provided that the product is labeled for the use on the site of application and prior to planting the desired species.

Imazapyr	Sulfometuron-methyl
Metsulfuron-methyl	Triclopyr

For control of herbaceous weeds, apply these tank-mix products at the lower end of the application rate range specified on the product label. For control or partial control of dense stands or hard-to-control woody brush, trees, and vines, apply these products at a rate or spray solution concentration towards the higher end of the given range.

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.

**Conifer Release, Mid-Rotation Conifer Release, Hardwood Release, Timber Stand Improvement**

This product may be applied as a directed spray using a handheld sprayer or using any selective application equipment described on this label to control woody and herbaceous weeds and other undesirable understory vegetation below the tree crop canopy in conifer plantations, hardwood sites, Christmas tree plantations, and silvicultural and ornamental nurseries to facilitate the release and growth of conifer and hardwood trees.

This product may also be applied using ground broadcast equipment or as a directed spray application for mid-rotation release under the canopy of pines, other conifers and hardwoods.

USE PRECAUTIONS: Avoid contact of spray drift, mist or drips with foliage, green bark or non-woody surface roots of desirable plant species. Use application techniques that prevent or minimize contact of this product with foliage of desired trees or other plants through direct contact or off-target spray movement.

[*Optional label text:* USE RESTRICTIONS: Do not apply this product as an over-the-top broadcast application for conifer or hardwood release, unless otherwise directed on this label or on separate supplemental labeling for this product.]

**[This section is optional in the final printed label] Conifer Release – Broadcast Application**

This product may be broadly applied over the top of conifer tree species listed in this section after formation of final conifer resting buds in the Fall or prior to initial bud swelling in the spring for control, partial control or suppression of herbaceous weeds and hardwoods listed in the “WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF AND ORNAMENTAL SITES” at the end of this label to facilitate the release of these tree species in a forestry, plantation or nursery for a minimum of one growing season.

USE PRECAUTIONS: Conifer injury can occur when this product is applied at rates higher than prescribed on this label, where spray applications overlap, if application is made when conifers are actively growing or when they are growing under stress from drought, flood, improper planting or insect, animal or disease damage.



**Conifer Release Outside the Southeastern United States:** For release of the following conifer species growing for a minimum of one growing season in most areas outside the southeastern United States, apply 20 to 40 fluid ounces acre as a broadcast application over the top of the conifer trees.

Douglas fir Fir species	Hemlock Pines*	California redwood Spruce
* Includes all species except Loblolly, Longleaf, Shortleaf or Slash pine.		

Apply 20 to 34 fluid ounces of this product for release of Douglas fir, Pine, and Spruce that have been established for only one growing season (except in California).

For release of Spruce (*Picea* spp.) in Maine, Michigan, Minnesota, New Hampshire and Wisconsin, up to 60.8 fluid ounces of this product may be applied after formation of final resting buds in the Fall for control of woody brush and tree species.

USE PRECAUTIONS: Ensure that the conifers are well hardened off before application of this product. [**Optional text if adding surfactant to spray solutions of this product is allowed:** The addition of nonionic surfactants to spray solutions of this product when making over-the-top conifer release applications could cause conifer injury.]

**Conifer Release in the Southeastern United States:** For release of the following conifer species established for more than one growing season in the southeastern United States, apply 30 to 51 fluid ounces of this product per acre in the Fall as a broadcast application over the top of the trees. For release of these species after only one growing season, apply only 20 fluid ounces of this product per acre.

Eastern white pine Loblolly pine	Longleaf pine Short leaf pine	Slash pine Virginia pine
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TANK-MIXTURES: This product may be applied for conifer release in a tank-mix with other herbicides (examples are listed below) to provide a broader spectrum of post-emergence weed control and for residual control of weeds listed on the label of those products. Apply only these tank-mixtures over-the-top of conifer species that are approved for this use for all products in the mix.

Imazapyr Metsulfuron-methyl	Sulfometuron-methyl
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For herbaceous release of Loblolly pine, Longleaf pine, and Virginia pine in the Spring and early Summer, apply 10 to 15 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl.

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.]

#### Late Summer and Fall after Resting Bud Formation

For release of Jack pine, White pine, and White spruce, apply 20 to 40 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl that will not harm these conifer species.

For release of Douglas fir, apply 20 to 30 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Imazapyr.

For release of Balsam fir and Red spruce, apply 40 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Imazapyr.

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.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Native and Wildlife Habitat Management**

This product may be used to control exotic and other undesirable vegetation in wildlife habitat and natural areas, including riparian and estuarine areas, rangeland, and wildlife refuges. Application may be made to allow recovery of native plant species or prior to planting desirable native species, and for similar broad spectrum vegetation control.

Spot treatment, cut stump, cut stem, stem injection, wiper applicator and all other methods of application listed on this label may be used to selectively remove unwanted plants for habitat management and enhancement.

This product may also be used to eliminate annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait a minimum of 7 days after application before tillage to allow translocation of this herbicide into underground plantparts.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Ornamental and Production Nursery Management**

All uses of this product described in this section may be used in a plant nursery setting using any appropriate method of application described on this label.

This product may be used to clear an area of unwanted vegetation prior to planting any ornamental plant, tree, shrub or other plants.

This product may also be used to control weeds growing around established woody ornamental species, including Arborvitae, Azalea, Boxwood, Crabapple, Eucalyptus, Euonymus, Fir, Douglas fir, Jojoba, Hollies, Lilac, Magnolia, Maple, Oak, Poplar, Privet, Pine, Spruce and Yew. This product may also be used to trim and edge around potted plants and other objects in a plant nursery.

USE PRECAUTIONS: Protect desirable plants from the spray solution using shields or coverings made of waterproof material. Take care to avoid contact of spray, drift or mist with foliage, green stems or immature bark of established ornamental species.

**Greenhouse/Shadehouse**

This product may be used to control weeds growing in and around greenhouses and shadehouses.

USE RESTRICTIONS: Desirable vegetation must not be present during application in a greenhouse. Turn air circulation fans off before applying this product inside a greenhouse or shadehouse and leave them off until the application solution has dried.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Pasture Management**

The use of this product in pastures includes use on Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guinea grass, Kikuyu grass, Orchardgrass, Pangola grass, Ryegrass, Timothy and Wheatgrass.

### **Pre-plant, Pre-emergence, Pasture Renovation**

This product may be applied prior to planting or emergence of forage or perennial grasses. Refer to the “*WEEDS CONTROLLED—FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES*” section at the end of this label for application rates of this product for control of specific weeds.

USE RESTRICTIONS: If the total application rate of this product is 60.8 fluid ounces (1.9 qt.) per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 60.8 fluid ounces (1.9 qt.) per acre, remove domestic livestock before application and wait a minimum of 8 weeks after application before grazing or harvesting.

### **Spot Treatment, Wiper Applicator**

This product may be applied in pastures as a spot treatment or over-the-top of desirable grasses using a wiper applicator to control taller growing weeds. For enhanced weed control, remove domestic livestock before application to allow for sufficient plant growth and wait a minimum of 7 days after application before grazing livestock or harvesting for feed. See additional instructions on the use of wiper applicators in the “*APPLICATION EQUIPMENT AND TECHNIQUES*” section of this label.

USE RESTRICTIONS: For spot treatment or use with a wiper applicator at rates of 60.8 fluid ounces (1.9 qt.) per acre or less, this product may be applied over the entire pasture or any portion of it. At rates greater than 60.8 fluid ounces (1.9 qt.) per acre, this product may be applied over no more than 10% of the total pasture at any one time. Application may be repeated in the same area at 30 day intervals.

### **Weed Suppression in Dormant Pastures**

This product may be applied in dormant pastures to suppress competitive growth and seed production of annual weeds and other undesirable vegetation. Apply 8 to 10 fluid ounces of this product per acre using broadcast application equipment on pastures in late-fall after desirable perennial grasses have reached dormancy or in late-winter before desirable perennial grasses break dormancy and initiate green growth.

USE PRECAUTIONS: Higher application rates may be used for hard-to-control weeds; however, higher rates can cause stand reduction. Some stunting of perennial grasses can occur if broadcast application is made when they are not dormant.

USE RESTRICTIONS: No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 60.8 fluid ounces (1.9 qt.) of this product per acre per year onto pasture grasses except for renovation. If reseeding is needed due to severe stand reduction, no waiting period is required after application of this product before seeding the pasture grasses listed at the beginning of this section; for all other pasture grasses, wait a minimum of 30 days after application before seeding.

#### **USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

### **Railroad Management**

All uses of this product described in the “*TURF*” section or any other sections found under “*FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF AND ORNAMENTAL SITES*” may be used on railroad sites using any method of application described.

Application of this product along railroad rights-of-way may be made in up to 80 gallons of spray solution per acre.

### **Bare Ground, Ballast and Shoulders, Crossings, Spot Treatment**

This product may be used to maintain bare ground on railroad ballast and shoulders and reduce the need for mowing and mechanical brush removal along railroad rights-of-way.

Application of this product may be repeated as weeds continue to emerge to maintain bare ground up to a maximum total application rate of 216 fluid ounces (6.75 qt.) of this product per acre per year.

TANK-MIXTURES: This product may be applied in a tank-mixture with other herbicides (examples are listed below) for enhanced control of woody brush and trees for bare ground, ballast and shoulder, crossings, and spot treatment applications, and other brush, tree, and vine control on railroad sites, provided that the product used is labeled for the application being made.

Bromacil Chlorsulfuron Clopyralid 2,4-D Dicamba	Diquat Diuron Hexazinone Imazapyr Metsulfuron-methyl	Pelargonic acid Sulfometuron-methyl Sulfosulfuron Tebuthiuron Triclopyr
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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.

### Brush, Tree, and Vine Control

This product may be used to control woody brush, trees, and vines along railroad rights-of-way.

Apply 80 to 216 fluid ounces (2.5 to 6.75 qt.) of this product in up to 80 gallons of spray solution per acre as a broadcast application using either a boom or boomless sprayer. Apply a 0.6 to 1.3% solution of this product when using high volume application equipment with a spray-to-wet technique or a 3.1 to 6.2% solution when using low volume directed sprays for spot treatment.

TANK MIXTURES: This product may be applied in a tank-mix with other products (examples are listed below) for enhanced control of woody brush, trees, and vines along railroad rights-of-way, provided that the product is labeled for use on these sites.

Chlorsulfuron Clopyralid 2,4-D Dicamba	Fosamine Hexazinone Imazapyr Metsulfuron-methyl	Picloram Triclopyr
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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.

### Weed Control in Dormant and Actively Growing Bermudagrass

This product may be used to control or partially control many annual and perennial weeds in dormant and actively growing Bermudagrass along Railroad rights-of-way. See the "WEEDS CONTROLLED - FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF AND ORNAMENTAL SITES" section at the end of this label for weed control directions for use.

#### USE RESTRICTIONS:

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

### Rangeland Management

This product will control or suppress many annual weeds growing in perennial cool and warm season grass rangeland. Slight discoloration of the desirable grasses could occur, but will regreen and resume growing under moist soil conditions as effects of this product wear off.

Preventing seed production is critical to the control of invasive annual grassy weeds on rangeland. Yearly application of this product to eliminate invasive annual weeds before they produce seed will help eliminate viable weed seeds from the soil. Delay grazing of the area after application of this product to allow desirable perennials to grow, flower and re-seed the area.

**Bromus Control:** A broadcast application of 4 to 10 fluid ounces of this product per acre will control or suppress Cheatgrass (*Bromus secalinus*), Cereal rye, Downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), Jointed goatgrass and Soft chess (*Bromus mollis*) on rangeland. For enhanced results, apply this product when most Brome plants are in early-flower and before the plants, including seedheads turn color. Allow for secondary weed

flushes to occur after spring rains to further deplete the seed reserve in the soil and encourage perennial grass conversion on weedy sites. Apply this product in the Fall in areas where spring moisture is normally limited and Fall germination allows for good weed growth and weed seed depletion.

**Medusahead Control:** To control or suppress Medusahead, apply 10 fluid ounces of this product per acre at the 3 leaf stage. Delaying application beyond this stage will result in reduced or unacceptable control. Controlled burning prior to application of this product will eliminate the thatch layer produced by slowly decaying culms. Allow new weed growth to occur before applying this product after a burn. Repeat this application annually to eliminate Medusahead seeds in the soil and allow desirable perennial grasses to repopulate the area.

USE RESTRICTIONS: Do not apply more than 60.8 fluid ounces (1.9 qt.) of this product per acre per year on rangeland. Do not use ammonium sulfate when applying this product on rangeland grasses. No waiting period between application of this product and feeding or livestock grazing is required.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 10 fl. Oz/Ac (0.38 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 10 fl Oz/Ac (0.38 Lbs AE/Ac)**

**Maximum Annual Application Rate: 60 fl. Oz/Ac (2.25 Lbs AE/Ac)**

**Roadside Management**

All uses of this product described under “FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF AND ORNAMENTAL SITES” section of this label may be used for weed management along roadways, including weed control in dormant and active Bermudagrass and Bahiagrass, weed control along shoulders and under and around guardrails, signposts, and other objects along the road using any method of application described on this label.

TANK-MIXTURES: This product may be tank-mixed with other herbicide (examples are listed below) for shoulder, guardrail, spot treatment, and maintaining bare ground applications provided that the product used is labeled for use on these sites.

Bromacil Chlorsulfuron Clopyralid 2,4-D Dicamba Diuron Fosamine	Hexazinone Imazapic Imazapyr Metsulfuron-methyl Oryzalin Oxadiazon Pendimethalin	Picloram Prodiamine Sulfometuron Sulfosulfuron Triclopyr
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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.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Turf**

**Weed Control, Renovation, and Chemical Mowing in Turf**

The use of this product described below may be applied to Turfgrass growing on any terrestrial site listed under “FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES” section of this label.

**Weed Control in Dormant Bermudagrass and Bahiagrass**

This product may be used to control or suppress many Winter annual weeds and Tall fescue for effective release of dormant Bermudagrass and Bahiagrass prior to spring green-up in areas where these Turfgrasses are desirable ground covers and some temporary injury or discoloration can be tolerated.

Apply 4 to 40 fluid ounces of this product in 10 to 40 gallons of water per acre when Bermudagrass and Bahiagrass are dormant and prior to Springgreen-up.

Application of more than 10 fluid ounces of this product per acre on highly maintained Bermudagrass and Bahiagrass turf including golf courses and lawns could result in injury or delayed green-up in the Spring.

For residual weed control in dormant Bermudagrass and Bahiagrass, this product may be tank-mixed with Sulfometuron-methyl, Sulfometuron-methyl plus Metsulfuron-methyl or Sulfosulfuron herbicides. Apply 4 to 40 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfometuron-methyl, Sulfometuron-methyl plus Metsulfuron-methyl or Sulfosulfuron in 10 to 40 gallons of water per acre. To avoid delays in green-up and minimize injury, apply no more than the required amount of Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl herbicide per acre on Bermudagrass and on Bahiagrass, and avoid application when these grasses are in a semi-dormant condition.

DO NOT apply this product in a tank-mix with Sulfometuron-methyl, Sulfometuron-methyl plus Metsulfuron-methyl or Sulfosulfuron herbicides on highly maintained Bermudagrass and Bahiagrass turf including golf courses and lawns.

### Weed Control in Actively Growing Bermudagrass

This product may be used to control or partially control many annual and perennial weeds in actively growing Bermudagrass. Some Bermudagrass injury could result from the application of this product, but the Bermudagrass will recover under moist conditions once the effects of the product wear off. Use only on well-established Bermudagrass where some temporary injury or discoloration can be tolerated.

Apply 10 to 30 fluid ounces of this product in 10 to 40 gallons of spray solution per acre. Use a lower application rate within this range when controlling annual weeds less than 4 inches tall (or runner length) and increase the rate towards the upper end of the range as weeds increase in size or as they approach flower or seed head formation. At these application rates, this product will provide partial control of the following perennial weeds in actively growing Bermudagrass:

Bahiagrass Bluestem (Silver)	Fescue (Tall) Johnsongrass	Trumpetcreeper Vaseygrass
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USE PRECAUTIONS: Applying more than 10 fluid ounces of this product per acre on highly maintained Bermudagrass including golf courses and lawns, could cause unacceptable turf injury and discoloration.

For a broader weed control spectrum in actively growing Bermudagrass, this product may be tank-mixed with an appropriate rate of Sulfometuron-methyl, Sulfometuron-methyl plus Metsulfuron-methyl or Sulfosulfuron. Apply these tank-mixtures only on well-established Bermudagrass where some temporary injury or discoloration can be tolerated. Make no more than one application of this product in these tank-mixtures in the same season, otherwise the Bermudagrass could be severely injured.

Apply 4 to 20 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfosulfuron to control or partially control Johnsongrass and other weeds listed on the Sulfosulfuron label. Use a higher application rate of both products within the given ranges for control of annual or perennial weeds greater than 6 inches tall.

Apply 10 to 20 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl for enhanced control of weeds listed on those labels. Use a lower application rate of each product within the given ranges to control annual weeds listed on the labels that are less than 4 inches tall (or runner length) and increase the rates toward the upper end of the ranges as annual weeds increase in size and approach the flower or seed head stage. This tank-mix will provide partial control of the following perennial weeds in actively growing Bermudagrass:

Bahiagrass Bluestem (Silver) Broomsedge Dallisgrass	Dock (Curly) Dogfennel Fescue (Tall) Johnsongrass	Poorjoe Trumpetcreeper Vaseygrass Verbain (Blue)
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USE PRECAUTIONS: Apply these tank-mixtures only on well-established Bermudagrass where some temporary injury or discoloration can be tolerated.

DO NOT apply this product in tank-mixture with Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl on highly maintained Bermudagrass including golf courses and lawns.

### Weed Control in Actively Growing Bahiagrass

For suppression of vegetative growth and seed head inhibition of Bahiagrass for approximately 45 days, apply 4 fluid ounces of this product in 10 to 40 gallons of water per acre 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches prior to seed head emergence.



For growth suppression of Bahiagrass for up to 120 days, apply 2.5 fluid ounces of this product per acre followed by an application of 1.4 to 2.5 fluid ounces per acre about 45 days later. Make no more than two growth suppression applications per year.

For broad spectrum weed control in actively growing Bahiagrass, this product may be tank-mixed with appropriate rate of Sulfometuron-methyl, Sulfometuron-methyl plus Metsulfuron-methyl or Sulfosulfuron.

Apply 1.4 to 3.3 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Sulfosulfuron per acre to control perennial weeds or annual weeds greater than 4 inches in height.

Apply 4 fluid ounces of this product per acre in a tank-mix with appropriate rate of Sulfometuron-methyl or Sulfometuron-methyl plus Metsulfuron-methyl 1 to 2 weeks following an initial Spring mowing for enhanced control of weeds listed on the Sulfometuron-methyl label in actively growing Bahiagrass. Make this application only once per year.

USE PRECAUTIONS: Apply these tank-mixtures only on well-established Bahiagrass where some temporary injury or discoloration can be tolerated.

### **Turf Renovation**

This product controls most existing vegetation prior to renovating Turfgrass areas or establishing Turfgrass grown for seed or sod.

For maximum control of existing vegetation, delay planting or sodding until after determining if any regrowth of underground plant parts will occur. Where repeat applications are necessary, sufficient regrowth must be attained prior to re-application of this product. Summer or Fall application provides enhanced control of warm season grasses including Bermudagrass. For managed Turfgrass, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray solution.

This product has no residual soil activity and will not affect plants, seed or sod planted back into the area after application.

A handheld sprayer may be used for spot treatment of unwanted vegetation growing in existing Turfgrass. Broadcast application or spot treatment using a handheld sprayer may be used to control sod remnants or other unwanted vegetation after sod is harvested.

USE PRECAUTIONS: Do not disturb soil or underground plant parts before application of this product. Delay tillage and renovation techniques, such as vertical mowing, coring or slicing, for at least 7 days after application to allow translocation of this product into underground plant parts.

USE RESTRICTIONS: If application rates total 60.8 fluid ounces (1.9 qt.) of this product per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 60.8 fluid ounces (1.9 qt.) per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

### **Chemical Mowing**

This product may be used to suppress growth of perennial and annual grasses listed in this section to serve as a substitute for mowing.

**Annual Grasses:** Apply 2.5 to 4 fluid ounces of this product in 10 to 40 gallons of spray solution per acre to suppress growth of some annual grasses, such as Annual ryegrass, Wild barley, and Wild oats when actively growing in coarse Turf on roadsides or other industrial areas and before the seed heads are in the boot stage of development. This application could injure the desired annual grasses.

**Perennial Grasses:** Apply 4 fluid ounces of this product per acre to suppress growth of Kentucky bluegrass or 5 fluid ounces to suppress Canarygrass, Fine fescue, Orchardgrass, Quackgrass, Reed or Tall fescue in 10 to 40 gallons of spray solution per acre after grasses have greened up to at least 75% green color in the Spring or 7 to 10 days after mowing when sufficient regrowth has occurred to provide a desirable height for growth regulation. Use chemical mowing only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

#### USE PRECAUTIONS

Use this product for chemical mowing only in areas where some temporary injury or discoloration of annual and perennial grasses can be tolerated.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 100 fl. Oz/Ac (3.75 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 41 fl. Oz/Ac (1.55 Lbs AE/Ac)**

**Maximum Annual Application Rate: 160 fl. Oz/Ac (6 Lbs AE/Ac)**

**Utility Management**

This product may be used along electrical power, pipeline and telephone rights-of-way, and on all sites associated with these utility rights-of-way, including substations, access roads and railroads, and along similar rights-of-way that run in conjunction with utilities, for spot treatment of unwanted vegetation, side trimming, trim-and-edge application around objects, weed control prior to planting a utility site to ornamentals, flowers or Turfgrass (sod or seed), Turf management, to eliminate unwanted weeds growing in established shrub or ornamental beds, to prepare or establish wildlife openings and for eliminating vegetation prior to or beginning construction projects.

Application of this product may be repeated as needed to maintain bare ground as weeds continue to emerge up to a maximum application rate of 216 fluid ounces (6.75 qt.) per acre per year.

TANK-MIXTURES: This product may be tank-mixed with other herbicides (examples are listed below) for use on utility sites. For control of herbaceous weeds, use a lower application rate or spray solution concentration within the given ranges for these tank-mix products and increase the rate or concentration toward the higher end of the ranges for control of dense stands or hard-to-control woody brush, trees and vines.

Bromacil	Fosamine	Pendimethalin
Chlorsulfuron	Hexazinone	Prodiamine
Clopyralid	Imazapic	Sulfometuron-methyl
2,4-D	Imazapyr	Sulfosulfuron
Dicamba	Metsulfuron-methyl	Triclopyr
Diuron	Oryzalin	

Ensure that product(s) containing Triclopyr is thoroughly mixed with water according to label directions before adding this product to the spray mixture. Maintain continuous agitation when adding this product to avoid tank-mix incompatibility problems.

For enhanced results with side-trimming, apply this product in a tank-mix with Triclopyr.

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.

**USE RESTRICTIONS:**

**Ground Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Aerial Maximum Single Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**Maximum Annual Application Rate: 213 fl. Oz/Ac (8 Lbs AE/Ac)**

**WEEDS CONTROLLED – FORESTRY, INDUSTRIAL, UTILITY RIGHTS-OF-WAY, TURF, AND ORNAMENTAL SITES**

Always use a higher application rate or spray solution concentration of this product within a given range when weed growth is heavy or dense, or when weeds are growing in an undisturbed (non-cultivated) area.

Poor weed control could be realized if application is made to weeds covered with dust. For weeds that have been mowed, grazed or cut, allow re-growth to occur prior to application of this product.

Refer to the sections that follow for application rates and timing of application for the control of annual and perennial weeds, woody brush, trees and vines.

**Annual Weeds**

Annual weeds are easiest to control when they are small and actively growing. New leaf development indicates active growth.

To control annual weeds, make application when weeds are small and prior to seedhead or bud formation.

To control or partially control the annual weeds listed in this section when they are less than 6 inches in height or runner length and actively growing, apply 20 fluid ounces of this product per acre. If they are over 6 inches in height or runner length or slowly growing under stressed conditions, increase the application rate to 32 to 80 fluid ounces (1 to 2.5 qt.) per acre depending on weed height and severity of the poor growing conditions.

For application using a handheld sprayer with a spray-to-wet technique, apply a 0.3% solution of this product to annual weeds less than 6 inches in height or runner length prior to seed head formation in grasses or bud formation in broadleaf weeds.

To control annual weeds over 6 inches tall or even smaller weeds growing under stressed conditions, apply a 0.6 to 1.3% solution. Apply the maximum concentration of this product within this range to hard-to-control weeds or to control weeds over 24 inches tall.

To control annual weeds using a handheld controlled droplet applicator (CDA), apply a 14% solution of this product (18 fl.oz. of this product per gallon of spray solution) at a flow rate of 2 fluid ounces of spray solution per minute and a walking speed of 1.5 miles per hour (1 qt. of spray solution per acre). When using a vehicle-mounted CDA, apply the required amount of this product as indicated in this section in 2 to 15 gallons of water per acre.

For enhanced control, do not mow, cut, till, burn or disturb vegetation in the application area for at least 3 days after application.

This product has no residual soil activity and does not control emergence of new annual weeds from seed. Subsequent applications of this product will be needed to control weeds that continue to emerge.

Ammania (Purple)	Fleabane (Annual)	Purslane (Common)
Anoda (Spurred)	Fleabane (Hairy) ( <i>Conyza bonariensis</i> )	Pusley (Florida)
Balsam apple*	Fleabane (Rough)	Ragweed (Common)
Barley	Foxtail	Ragweed (Giant)
Barley (Little)	Foxtail (Carolina)	Rice (Red)
Barnyardgrass	Geranium (Carolina)	Rocket (London)
Bassia (Fivehook)	Goatgrass (Jointed)	Rocket (Yellow)
Beggarweed (Florida)	Goosegrass	Rye
Bittercress	Groundcherry	Ryegrass
Bluegrass (Annual)	Groundsel (Common)	Sandbur (Field)
Bluegrass (Bulbous)	Henbit	Sesbania (Hemp)
Brome (Downy)	Horseweed / Marestalk ( <i>Conyza canadensis</i> )	Shattercane
Brome (Japanese)	Itchgrass	Shepherdspurse
Broomsedge	Jimsonweed	Sicklepod
Buckwheat (Wild)	Johnsongrass (Seedling)	Signalgrass (Broadleaf)
Burcucumber	Junglerice	Smartweed (Ladysthumb)
Buttercup	Knotweed	Smartweed (Pennsylvania)
Carpetweed	Kochia	Sorghum (Grain) (Milo)
Castor bean**	Lambsquarters	Sowthistle (Annual)
Cheatgrass	Lettuce (Prickly)	Spanish needles***
Cheeseweed ( <i>Malva parviflora</i> )	Mannagrass (Eastern)	Speedwell (Corn)
Chervil	Mayweed	Speedwell (Purslane)
Chickweed	Medusahead	Sprangletop
Cocklebur	Morningglory ( <i>Ipomoea</i> spp.)	Spurge (Annual)
Copperleaf (Hophornbeam)	Mustard (Blue)	Spurge (Prostrate)
Copperleaf (Virginia)	Mustard (Tansy)	Spurge (Spotted)
Coreopsis (Plains/Tickseed)	Mustard (Tumble)	Spurry (Umbrella)
Corn	Mustard (Wild)	Starthistle (Yellow)
Crabgrass	Nightshade (Black, Hairy)	Stinkgrass
Crowfoot grass	Oats	Sunflower
Cupgrass (Woolly)	Oats (Wild)	Swinecress
Cutleaf evening primrose	Panicum (Browntop)	Teaweed / Prickly sida
Dandelion (Dwarf)	Panicum (Fall)	Thistle (Russian)
Dandelion (False)	Panicum (Texas)	Velvetleaf
Devilsclaw (Unicorn plant)	Pennycress (Field)	Waterhemp****
Eclipta	Pepperweed (Virginia)	Wheat
Falseflax (Smallseed)	Pigweed	Witchgrass
Fiddleneck	Puncturevine	Woolly cupgrass
Filaree		

\* To control Balsam apple, apply this product using handheld equipment only.

\*\* Control of Castor bean can also be achieved by injecting 4 ml of the concentrated (undiluted) product per plant into the lower portion of the main stem.

\*\*\* To control Spanish needles, apply 40 fl. oz. of this product per acre.

\*\*\*\* A glyphosate-resistant biotype has been confirmed. For additional information, refer to the "WEED RESISTANCE MANAGEMENT" section of this label. You can also visit [www.weedscience.org](http://www.weedscience.org).

## Perennial Weeds

To control perennial weeds, apply after flowering and before Fall color and leaf drop.

Enhanced control of perennial weeds can be obtained when this product is applied to target weeds that are small and actively growing. New leaf development indicates active growth. If application must be made to larger weeds or to weeds that are slowly growing under stressful conditions, apply this product at a rate or spray solution concentration towards the upper end of the specified range.

If weeds have been mowed or tilled, do not apply this product until plants have resumed active growth and have reached the specified stage of growth or sufficient growth has been achieved to allow for good interception of the spray solution. For enhanced control, do not mow, cut, till, burn or disturb vegetation in the application area for a minimum of 7 days after application.

To control perennial weeds listed below using backpack or handheld equipment and low volume application technique, apply 3.1 to 6.2% solution of this product over the crown of the target plant to cover 50% of the upper plant foliage.

To control perennial weeds using a handheld controlled droplet applicator (CDA), apply 14 to 28% solution of this product (18 to 36 fl. oz. of this product per gal. of spray solution) at a flow rate of 2 fluid ounces of spray solution per minute and a walking speed of 0.75 miles per hour (2 to 4 qt. of spray solution per acre). When using a vehicle-mounted CDA, apply the required amount of this product as indicated in the following table in 2 to 15 gallons of water per acre.

Apply this product in the Fall before a killing frost.

This product has no soil activity and does not control emergence of perennial weeds from seed and dormant underground roots, rhizomes or tubers present in the soil at the time of application. More than one application of this product will be necessary for continued control of weeds that emerge following application.

Perennial Weeds	Rate (Qt./A)	Handheld Sprayer Concentration (% Solution)
Alfalfa*	1 to 1.25	1.3
Alligatorweed*	2.5	0.9
	Apply this product when most of the target plants are in bloom. More than one application will be needed to achieve control.	
Anise (Fennel)	1.25 to 2.5	0.9 to 1.3
Bahiagrass	1.9 to 3.1	1.3
Beachgrass (European) ( <i>Ammophila arenaria</i> )	-	3.1
	Apply 3.1% solution of this product using a spray-to-wet technique or 7.5% solution using low volume application technique. Enhanced results can be obtained when application is made onto target weeds that are actively growing at the boot through the full heading stage of development. Apply prior to loss of more than 50% of green leaf color in the Fall. Monitor application site and reapply this product to any target weeds that were missed, if necessary, before reseeding the area with desirable vegetation. For selective control of European beachgrass, apply 30% solution of this product during period of active growth using a wiper applicator. Maximizing the amount of individual leaf tissue contacted by the wiper applicator and making a second pass in the opposite direction will improve control. Avoid contact of the herbicide solution with desirable vegetation.	
Bentgrass*	1	1.3
	This product alone will provide partial control of Bentgrass ( <i>Agrostis</i> spp.) only. For enhanced control, apply 1.5 to 2.1 qt. of this product in a tank-mix with an appropriate rate of Clethodim, Fluazifop-p-butyl, Fenoxaprop-p-ethyl + Fluazifop-p-butyl or Sethoxydim in a spray volume of 20 to 40 gal./A using broadcast application equipment. For enhanced control using a handheld sprayer, apply this product at a concentration of 1.4 fl. oz./gal. of spray solution in a tank-mix with an appropriate amount of Clethodim, Fluazifop-p-butyl, Fenoxaprop-p-ethyl + Fluazifop-p-butyl or Sethoxydim. More than one application might be needed for complete control.	
Bermudagrass	3.1	1.3
	Apply when seed heads are present.	
Bermudagrass (Water) (Knotgrass)	1	1.3
Bindweed (Field)	2.5 to 3.1	1.3

	For control, apply 2.5 to 3.1 qt. of this product per acre as a broadcast application west of the Mississippi River and 1.9 to 2.5 qt./A east of the Mississippi River when Bindweed is at or beyond full bloom. For enhanced results, apply in late Summer or Fall.	
Bluegrass (Kentucky)	1.25	1.3
	Apply when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the Fall, make application before plants have turned brown.	
Blueweed (Texas)	2.5 to 3.1	1.3
	Apply 2.5 to 3.1 qt. of this product per acre west of the Mississippi River and 2.2 to 2.5 qt./A east of the Mississippi River when most target plants are at or beyond full bloom. For enhanced results, apply in late Summer or Fall.	
Brackenfern	1.9 to 2.5	0.9
	Apply to fully expanded fronds that are at least 18 inches long.	
Bromegrass (Smooth)	1.25	1.3
	Apply this product when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the Fall, make application before plants have turned brown.	
Bursage (Woolyleaf)	-	1.3
Canarygrass (Reed)	1.25 to 1.9	1.3
	Apply this product when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the Fall, make application before plants have turned brown.	
Cattail	1.9 to 3.1	1.3
	Apply this product when target plants are actively growing and are at or beyond the early to full bloom stage of development. Enhanced results are achieved when application is made during the Summer or Fall months.	
Clover (Red, White)	1.9 to 3.1	1.3
Cogongrass	1.9 to 3.1	1.3
	Apply this product in late Summer or Fall when Cogongrass is at least 18 inches tall and actively growing. Due to uneven stages of growth and the dense nature of Cogongrass vegetation, more than one application might be necessary to achieve control.	
Dallisgrass	1.9 to 3.1	1.3
Dandelion	1.9 to 3.1	1.3
Dock (Curly)	1.9 to 3.1	1.3
Dogbane (Hemp)	2.5	1.3
	Apply this product when most target plants have reached the late bud to flower stage of growth. For enhanced results, make application in late Summer or Fall.	
Fescue (Tall)	1.9	1.3
	Apply this product when most target plants have reached the boot to head stage of growth. If applied prior to the boot stage, less than desirable control might be obtained.	
Fescue (except Tall)	2.5	1.3
Guineagrass	1.9	0.9
	Apply this product when most target plants have at least reached the 7 leaf growth stage.	
Hogweed, Giant	-	-
	Inject 5 ml of a 5% solution of this product into one leaf cane per plant, 12 inches above the root crown.**	
Horsenettle	1.9 to 3.1	1.3
Horseradish	2.5	1.3
	Apply this product when most target plants have reached the late bud to flower stage of development. For enhanced results, apply in late Summer or Fall.	
Horsetail, Field	-	-
	Inject 0.5 ml of this product per stem directly into the plant stem, one segment above the root crown.**	
Iceland	1.25	1.3 to 1.9
Ivy (Cape, German)	1.25 to 2.5	0.9 to 1.3

Jerusalem artichoke	1.9 to 3.1	1.3
Johnsongrass	1.25 to 1.9	0.9
	Apply this product when most target plants have reached the boot to head stage of development or before plants have turned brown in the Fall. When applied prior to the boot stage, reduced control can result.	
Kikuyugrass	1.25 to 1.9	1.3
Knapweed	2.5	1.3
	Apply this product when most target plants have reached the late bud to flower stage of growth. For enhanced results, apply in late Summer or Fall.	
Knotweed (Bohemian, Giant, Japanese)	2.5	1.9
	Apply 2.5 qt. of this product per acre as a broadcast application in 3 to 40 gallons of spray solution. For application using a backpack sprayer and a spray-to-wet technique, apply a 1.9% solution. For enhanced control, do not disturb vegetation in the application area for at least 7 days after application. Control can also be achieved by cutting stems cleanly just below the 2nd or 3rd node above the ground and immediately apply 0.36 fluid ounce (10 ml) of a 50% solution of this product in water into the "well" or remaining internode. Ensure that the upper plant material that was removed is gathered and properly discarded to prevent new plants from propagating from sprouting buds. Use of a bio-barrier (e.g., cardboard, plywood or plastic sheeting) will help guard against the spread of plant material. The combined total application rate of this product must not exceed 5.6 qt./A.** Control can also be achieved by injecting 5 ml of this product per stem into the 2nd or 3rd internode using a handheld injection device.**	
Lantana	-	0.9
	Apply this product when most target plants are at or beyond the bloom stage of growth. Use the higher spray solution concentration on plants that have reached the woody stage of growth.	
Lespedeza	1.9 to 3.1	1.3
Loosestrife (Purple)	1.65	0.9 to 1.3
Lotus (American)	1.65	0.7
	Apply this product when most target plants are at or beyond the bloom stage of growth. Enhanced results can be achieved when application is made during Summer or Fall months before a killing frost. More than one application of this product might be necessary to control regrowth of underground plant parts and seeds.	
Milkweed (Common)	1.9	1.3
	Apply this product when most target plants have reached the late bud to flower stage of growth.	
Muhyl (Wirestem)	1.25	1.3
	Make application when most target plants are at least 8 inches in height (3 to 4 leaf stage of development) and actively growing.	
Mullein (Common)	1.9 to 3.1	1.3
Napiergrass	1.9 to 3.1	1.3
Nightshade (Silverleaf)	1.25	1.3
	Apply 2.5 to 3.1 qt./A as a broadcast application west of Mississippi River and 1.9 to 2.5 qt./A east of Mississippi River when most target plants are at or beyond full bloom. For enhanced results, apply in the late Summer or Fall after berries have formed.	
Nutsedge (Purple, Yellow)	1.9	0.9 to 1.3
	Apply this product to control existing nutsedge plants and attached immature nutlets when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and will require repeated application of this product for long term control.	
Orchardgrass	1.25	1.3



	Apply when most target plants have reached the boot to head stage of development. When applied prior to the boot stage, less than desirable control could be obtained. In the Fall, make application before plants have turned brown.	
Oriental bittersweet	1.9	1.3
	To control Oriental bittersweet, apply this product as a broadcast spray in 30 to 40 gallons of spray solution per acre. For enhanced results, ensure complete coverage of the target plant with the spray solution.	
Pampasgrass	1.9 to 3.1	0.9 to 1.3
Paragrass	1.9 to 3.1	1.3
	More than one application of this product will be needed to achieve complete control. Allow plants to regrow to the 7 to 10 leaf stage before making next application.	
Pepperweed (Perennial)	2.5	1.3
Phragmites*	1.9 to 3.1	0.9 to 1.3
	For partial control of Phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 3.1 qt. of this product per acre as a broadcast application or a 1.3% solution using a handheld sprayer. In other areas of the U.S., apply 1.65 to 2.5 qt./A as a broadcast application or for partial control, apply a 0.7% solution using a handheld sprayer. For enhanced results, make application in late Summer or Fall when plants are actively growing and in full bloom. Due to the dense nature of this vegetation which can prevent good spray coverage and uneven stages of growth, more than one application of this product might be necessary to achieve control. Visual symptoms of control will be slow to develop.	
Poison hemlock	1.25 to 2.5	0.9 to 1.3
	Control can also be achieved by injecting 5 ml of a 5% solution of this product using a handheld injection device in one leaf cane per plant, 12 inches above the root crown.**	
Pokeweed (Common)	1	1.3
	Apply to actively growing target plants up to 24 inches tall.	
Quackgrass	1.25 to 1.9	1.3
	Apply this product when most target plants are at least 8 inches in height (3 to 4 leaf stage of development) and actively growing.	
Redvine*	1.25	1.3
Reed (Common, Giant)	2.5 to 3.1	1.3
	Enhanced results can be obtained when application is made in late Summer or Fall. Control can also be achieved by injecting 5 ml of this product (undiluted) directly into the 2 <sup>nd</sup> or 3 <sup>rd</sup> internode using a handheld injection device.**	
Ryegrass (Perennial)	1.25 to 1.9	0.9
	Apply this product when most target plants have reached the boot to head stage of growth. When applied prior to the boot stage, reduced control can result. In the Fall, make application before Ryegrass turns brown.	
Smartweed (Swamp)	1.9 to 3.1	1.3
Spatterdock	2.5	0.7
	Apply when most target plants are in full bloom. For enhanced results, apply in the Summer or Fall.	
Sowthistle (Perennial)	1.25 to 1.9	1.3
Spurge (Leafy)*	-	1.3
Starthistle (Yellow)	1.25	1.3
Sweet potato (Wild)*	-	1.3
	Apply when most target plants are at or beyond the bloom stage of growth. More than one application will be needed to achieve control.	
Thistle (Artichoke)	1.25 to 1.9	0.9 to 1.3
	Apply when target plants are at or beyond the bud stage of growth.	
Thistle (Canada)	1.25 to 1.9	1.3
	Apply when target plants are at or beyond the bud stage of growth. Control can also be achieved by stem injection. Cut 8 to 9 of tallest plants in a clump at bud stage. Push a cavity needle into the stem center and then slowly remove it as you inject 0.5 ml of this concentrated (undiluted) product into the stem.**	
Timothy	1.25 to 1.9	1.3

	Apply when most target plants have reached the boot to head stage of development. If application is made prior to the boot stage, reduced control can result. In the Fall, make application before plants turn brown.	
Torpedograss*	2.5 to 3.1	1.3
Trumpetcreeper*	1.25 to 1.9	1.3
Tules (Common)	-	1.3
	Apply to target plants at or beyond the seed head stage of development. Visual symptoms will be slow to appear and might not appear for 3 or more weeks after application.	
Vaseygrass	1.9 to 3.1	1.3
Velvetgrass	1.9 to 3.1	1.3
Wheatgrass (Western)	1.25 to 1.9	1.3
	Apply when most target plants have reached the boot to head stage of development. Application made prior to the boot stage could result in reduced control. In the Fall, make application before plants turn brown.	
* Partial control.		
** When using stem injection, the combined total use of this product must not exceed 6.75 qt./A per year. At 5 ml of concentrated (undiluted) product per stem, 6.75 qt. will treat approximately 1,300 stems per acre per year. The number of stems that can be treated per acre will vary depending on the injection volume and the concentration of this product in the application solution.		

## Woody Brush, Trees, and Vines

Unless otherwise directed, apply this product to brush and trees that are actively growing after full leaf expansion. Use a higher application rate or spray solution concentration within the given range for control of larger brush and trees and/or for application in areas of dense vegetative growth, or for the control of vines that have reached the woody stage of growth.

Enhanced control of woody brush and trees can be obtained when application is made in late Summer or Fall after fruit formation. However, in arid areas, enhanced control can be obtained when application is made in the Spring to early Summer when brush and trees are at high moisture content and flowering. Poor control can be expected when this product is applied to drought stressed brush and trees.

When applying this product using a spray-to-wet technique with a handheld sprayer to control tough woody brush and trees, use a 1.3% solution of this product.

Some autumn color on undesirable deciduous species is acceptable when applying this product to brush and trees in the Fall provided no major leaf drop has occurred. Reduced performance of this product could result if application is made following a frost. Symptoms might not appear prior to frost or senescence following a Fall application.

Repeat applications of this product might be required to control plants regenerating from underground parts or from seed.

For enhanced results, allow 7 or more days after application before mowing, cutting, tilling, burning or removal of woody brush, trees and vines from that application site. Additional applications of this product will be needed to control brush and trees regenerating from underground parts or seed.

**TANK-MIXTURES:** This product may be applied at any rate stated on this label in a tank-mixture other products (examples are listed below) to increase the spectrum of control of herbaceous weeds, woody brush, trees, and vines.

For control of herbaceous weeds, apply the tank-mix product at the lower end of the given application rate or spray solution concentration range. For control of dense stands or hard-to-control woody brush, trees and vines, increase the application rate or spray solution concentration of the tank-mix product towards the higher end of the range.

Imazapyr	Metsulfuron-methyl	Triclopyr
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Ensure that the proper amount of product(s) containing Triclopyr is thoroughly mixed with water in the spray tank according to label directions before adding this product.

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.

## Cut Stump Application

This product may be used to control regrowth and resprouting of woody brush and trees on any site listed on this label.

Cut the woody brush or tree close to the soil surface and immediately apply a 50 to 100% (undiluted) solution of this product to the freshly cut surface using an applicator capable of applying this product to the entire cambium. A delay in application could result in reduced performance. For enhanced results, cut the woody brush or tree during period of active growth and full leaf expansion and apply this product.

For control of the tree of heaven (*Ailanthus altissima*), cut the tree close to the soil surface and immediately apply a 50% solution of this product (16 fl. oz./qt. of solution) and an appropriate rate of Imazapyr in water to the freshly cut surface.

DO NOT MAKE A CUT STUMP APPLICATION WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MIGHT BE GRAFTED TO THE ROOTS OF THE CUT STUMP, AS INJURY COULD OCCUR IN THE ADJACENT TREES. Some sprouts, stems, or trees can share a common root system. Adjacent trees having a similar age, height and spacing could be an indicator of a shared root system. Whether grafted or shared, injury is likely to occur to adjacent stems or trees when this product is applied to one or more trees sharing a common root system.

## Woody Brush and Tree Injection and Frill Application

This product may be used to control woody brush and trees listed in this section by injection or frill application on any site listed on this label.

Inject or apply the equivalent of 1 milliliter (0.04 fl. oz.) of this product for every 2 to 3 inches of trunk diameter at breast height (DBH). If injecting this product into the woody brush or tree, use equipment capable of penetrating into the living plant tissue under the bark.

For frill application, apply a 50 to 100% (undiluted) solution of this product in water to either a continuous frill around the tree or to cuts evenly spaced around the tree below all branches. As tree diameter increases, enhanced results can be achieved by applying this product to a continuous frill or to more closely spaced cuttings. Avoid application techniques that allow runoff of this product to occur from frilled or cut areas. In species that freely exude sap, make the frill or cuts at an oblique angle to produce a cupping effect and apply this concentrated product undiluted. For enhanced results, make this application during period of active growth and after full leaf expansion.

## Modified High-Volume and Low-Volume Backpack Application

For control or partial control of listed woody brush, trees, and vines when using a backpack sprayer or other handheld equipment and a directed low-volume foliar application technique, apply 3.1 to 6.2% solution of this product evenly over the plant crown to cover 50% of the upper foliage of undesirable woody brush, trees, and vines.

Woody Brush, Trees, and Vines	Rate (Qt./A)	Handheld Spray-To-Wet Concentration (% Solution)
Alder	1.9 to 2.5	0.9
Ash*	1.25 to 3.1	0.9 to 1.3
Aspen (Quaking)	1.25 to 1.9	0.9
Bearmat (Bearclover)*	1.25 to 3.1	0.9 to 1.3
Beech*	1.25 to 3.1	0.9 to 1.3
Birch	1.25 to 1.9	0.9
Blackberry	1.9 to 2.5	0.9
Blackgum	1.25 to 3.1	0.9 to 1.3
Bracken	1.25 to 3.1	0.9 to 1.3
Broom (French, Scotch)	1.25 to 3.1	0.9 to 1.3
Buckwheat (California)*	1.25 to 2.5	0.9 to 1.3
Cascara*	1.25 to 3.1	0.9 to 1.3
Castor bean	-	-
	For control, inject 4 ml of this product (undiluted) per plant directly into the lower portion of the main stem using a handheld injection device.**	
Catsclaw*	-	0.9
	For partial control, apply this product when at least 50% of the new leaves are fully developed.	
Ceanothus*	1.25 to 3.1	0.9 to 1.3

Chamise*	1.25 to 3.1	0.9
Cherry (Bitter, Black, Pin)	1.25 to 1.9	0.9
Coyote brush	1.9 to 2.5	0.9 to 1.3
	For control, apply this product when at least 50% of the new leaves are fully developed.	
Deerweed	1.25 to 3.1	0.9
Dogwood*	1.25 to 3.1	0.9 to 1.3
Elderberry	1.25 to 1.9	0.9
Elm*	1.25 to 3.1	0.9 to 1.3
Eucalyptus	-	1.3
	To control Eucalyptus resprouts, apply this product using a handheld sprayer when resprouts are 6 to 12 feet tall. Ensure complete coverage.	
Florida holly (Brazilian peppertree)*	1.25 to 3.1	0.9 to 1.3
Gallberry	1.25 to 3.1	0.9 to 1.3
Gorse*	1.25 to 3.1	0.9 to 1.3
Hackberry (Western)	1.25 to 3.1	0.9 to 1.3
Hasardia*	1.25 to 2.5	0.9 to 1.3
Hawthorn	1.25 to 1.9	0.9
Hazel	1.25 to 1.9	0.9
Hickory*	1.25 to 3.1	0.9 to 1.3
Honeysuckle	1.9 to 2.5	0.9
Hornbeam (American)*	1.25 to 3.1	0.9 to 1.3
Kudzu	2.5 to 3.1	1.3
Locust (Black)*	1.25 to 2.5	0.9 to 1.3
Madrone (Resprouts)*	-	1.3
Manzanita*	1.25 to 3.1	0.9 to 1.3
Maple (Red)	1.25 to 2.5	0.9
	For control, apply a 0.9% solution of this product using a handheld sprayer when leaves are fully developed. For partial control, apply 1.25 to 2.5 qt./A as a broadcast application.	
Maple (Sugar)	-	0.9
	For control, apply this product using a handheld sprayer when at least 50% of the new leaves are fully developed.	
Maple (Vine)*	1.25 to 3.1	0.9
Monkey flower*	1.25 to 2.5	0.9 to 1.3
Oak (Black, White)*	1.25 to 2.5	0.9 to 1.3
Oak (Northern, Pin)	1.25 to 2.5	0.9
	For control, apply this product when at least 50% of the new leaves are fully developed.	
Oak (Poison)	2.5 to 3.1	1.3
	Repeat application may be needed to maintain control. Make Fall applications before leaves lose green color.	
Oak (Post)	1.9 to 2.5	0.9
Oak (Red)	-	0.9
	For control, apply this product using a handheld sprayer when at least 50% of the new leaves are fully developed.	
Oak (Scrub)*	1.25 to 2.5	0.9
Oak (Southern red)	1.25 to 1.9	0.9
Orange (Osage)	1.1 to 3.1	0.9 to 1.3
Persimmon*	1.25 to 3.1	0.9 to 1.3
Pine	1.25 to 3.1	0.9 to 1.3
Poison ivy	2.5 to 3.1	1.3
Poplar (Yellow)*	1.25 to 3.1	0.9 to 1.3

Redbud (Eastern)	1.25 to 3.1	0.9 to 1.3
Rose (Multiflora)	1.25	0.9
	Make application prior to leaf deterioration caused by leaf feeding insects.	
Russian olive*	1.25 to 3.1	0.9 to 1.3
Sage (Black)	1.25 to 2.5	0.9
Sage (White)*	1.25 to 2.5	0.9 to 1.3
Sage brush (California)	1.25 to 2.5	0.9
Salmonberry	1.25 to 1.9	0.9
Saltcedar*	1.25 to 3.1	0.9 to 1.3
	For partial control, apply 0.9 to 1.3% solution of this product using a handheld sprayer or 1.25 to 3.1 qt./A as a broadcast application. For control, apply 0.9 to 1.3% solution of this product in a tank-mix with Imazapyr herbicide using a handheld sprayer. For control using broadcast application, apply 1.25 qt. of this product per acre in a tank-mix with an appropriate rate of Imazapyr to plants less than 6 feet tall. To control Saltcedar greater than 6 feet tall using broadcast application, apply 2.6 qt./A of this product in a tank-mix with a higher rate of Imazapyr.	
Sassafras*	1.25 to 3.1	0.9 to 1.3
Sourwood*	1.25 to 3.1	0.9 to 1.3
Sumac (Laurel, Poison, Smooth, Sugarbush, Winged)*	1.25 to 2.5	0.9 to 1.3
Sweetgum	1.25 to 1.9	0.9
Swordfern*	1.25 to 3.1	0.9 to 1.3
Tallowtree (Chinese)	-	0.9
Tan oak (Resprouts)*	-	1.3
Thimbleberry	1.25 to 1.9	0.9
Tobacco (Tree)*	1.25 to 2.5	0.9 to 1.3
Toyon*	-	1.3
Trumpetcreeper	1.25 to 1.9	0.9
Vine maple*	1.25 to 3.1	0.9 to 1.3
Virginia creeper	1.25 to 3.1	0.9 to 1.3
Waxmyrtle (Southern)*	1.25 to 3.1	0.9 to 1.3
Willow	1.9 to 2.5	0.9
Yerba santa*	-	1.3
*Partial control		

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container. Keep container tightly closed. Keep away from heat and flame.

**PESTICIDE DISPOSAL:** To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

### CONTAINER HANDLING:

**Nonrefillable Container (rigid material;  $\leq$  5 gallons):** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or dispose of empty container in a sanitary landfill or by or by other procedures allowed by state and local authorities.

**Nonrefillable Container (rigid material; > 5 gallons up to < 250 gallons):** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available, or dispose of empty container in a sanitary landfill or by or by other procedures allowed by state and local authorities.

**Refillable Container ( $\geq$  250 gallons & Bulk):** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling, if available, or dispose of empty container in a sanitary landfill or by or by other procedures allowed by state and local authorities.

## WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable laws, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable laws, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

Manufactured By:



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**OPTIONAL MARKETING STATEMENTS:**

- Contains 4.5 pounds glyphosate acid, the active ingredient used in TOUCHDOWN
- Weed and (&) Grass Killer
- Grass Killer
- Herbicide for Roundup Ready® and other listed Glyphosate Tolerant Crops
- A (complete) broad spectrum post-emergence herbicide for weed control in many agricultural systems.
- Selective broad spectrum weed control in Roundup Ready® and other listed Glyphosate Tolerant Crops.
- A (complete) broad spectrum post-emergence herbicide for forestry, industrial, roadside, turf, ornamental, utility rights-of-way, and other listed terrestrial weed control.
- The broad spectrum post-emergence herbicide for agricultural, industrial, turf, and ornamental weed control.
- Selective broad spectrum weed control in Roundup Ready® crops including Flex cotton.
- Selective broad spectrum weed control in Roundup Ready® Crops
- Approved for Roundup Ready® crops, including Flex cotton and other listed Glyphosate tolerant crops.
- For use in Roundup Ready® Flex Cotton
- Herbicide for Roundup Ready® Crops including Roundup Ready® Flex Cotton
- For use in Roundup Ready® Flex Cotton
- Non-selective broad spectrum weed control for many agricultural systems and farmsteads.
- Non-selective, broad spectrum weed control for many cropping systems, farmsteads, and conservation reserve program acres
- For use in cropping systems, including Roundup Ready® Alfalfa, Canola, Corn, Cotton, Soybeans, and Sugar beets.
- For reduced tillage and fallow systems.
- Complete broad spectrum post-emergence herbicide for vegetation management, ornamental weed control, and non-planted areas around residential, industrial locations, and their immediate vicinities.
- For use around residential, industrial, institutional locations and their immediate vicinities.
- Controls many annual and perennial grasses and broadleaf weeds as listed.