U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505T) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: 94730-49	Date of Issuance: 6/15/23	
NOTICE OF PESTICIDE: <u>X</u> Registration Reregistration	Term of Issuance: Unconditional		
(under FIFRA, as amended)	Name of Pesticide Product: GCS Glufosinate 280sl		
Name and Address of Registrant (include ZIP Code): Generic Crop Science, LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707			
<b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration Registration Division prior to use of the label in commerce. In any correspondence on this product al			
On the basis of information furnished by the registrant, the above na under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFI Registration is in no way to be construed as an endorsement or reco Agency. In order to protect health and the environment, the Admini time suspend or cancel the registration of a pesticide in accordance name in connection with the registration of a product under this Act registrant a right to exclusive use of the name or to its use if it has b This product is unconditionally registered in accordance with FIFR. 1. Submit and/or cite all data required for registration/reregistr product when the Agency requires all registrants of similar p	RA). mmendation of th strator, on his mo with the Act. The t is not to be consi been covered by o A section 3(c)(5) ation/registration	his product by the ption, may at any acceptance of any trued as giving the thers. provided that you: review of your	
Signature of Approving Official:	Date:		
Heather E Mc Farley	6/15/23	3	
Heather McFarley, Product Manager 24 Fungicide Herbicide Branch, Registration Division (7505T) EPA Form 8570-6			

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- 2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 94730-49."
- 3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under 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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

• Basic CSF dated 03/01/2023

If you have any questions, please contact Manjula Unnikrishnan at 202-566-2949 or at <u>unnikrishnan.manjula@epa.gov</u>.

Enclosure:

• Accepted label

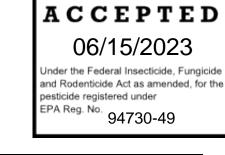
GCS Glufosinate 280SL V12 Draft Label Page **1** of **46** 

#### {Master Label: Sublabel A: Crop & Sublabel B: Non-Crop}

{Note to reviewer: {text} in braces is for reviewer info only; [text] in brackets denotes optional text.or final label text placement.}

## {Sublabel A: Crop}

{BOOKLET FRONT PANEL LANGUAGE}



GLUFOSINATE-AMMONIUM GROUP 10 HERBICIDE

# **GCS GLUFOSINATE 280SL**

{ABNs:} [ Farmer's First<sup>™</sup> Glufosinate 280SL; Farmer's First<sup>™</sup> Glufosinate 280SL; Willowood Glufosinate 2.34SL]

A non-selective herbicide for post emergence broadcast use on canola, corn, cotton, and soybean designated as [LibertyLink<sup>®</sup> glufosinate-resistant][glufosinate resistant]. **GCS Glufosinate 280SL** may be used for weed control in [non-LibertyLink<sup>®</sup> glufosinate resistant][non-glufosinate resistant] cotton when applied with a hooded sprayer in-crop. **GCS Glufosinate 280SL** may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional variety of canola, sweet corn<sup>\*</sup>, corn, cotton, soybean or sugar beet. **GCS Glufosinate 280SL** may be used for post emergence weed control in listed tree, vine and berry crops. **GCS Glufosinate 280SL** may also be applied for potato vine desiccation.

\*Not for use in California.

#### **ACTIVE INGREDIENT:**

Glufosinate ammonium*	
OTHER INGREDIENTS:	75.5%
TOTAL:	
*CAS Number 77182-82-2; **Equivalent to 2.34 pounds of active ingredient per U.S.	gallon.

## KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

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

[See] [inside] [label] [booklet] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

#### EPA Reg. No. 94730-UO

EPA Est. No.\_\_\_\_\_

Manufactured for: Generic Crop Science

1887 Whitney Mesa Drive #9740 Henderson, NV 89014

Net Contents:\_\_\_\_\_

## {LANGUAGE INSIDE BOOKLET}

	FIRST AID		
IF IN EYES:	<ul> <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 eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>		
	HOT LINE NUMBER		
HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For general information on product use, etc., call the National Pesticides Information Center (NPIC) at 1-800-858-7378. For emergencies, call the poison control center 1-800-222-1222. NOTE TO PHYSICIAN: If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible followed by charcoal and sodium sulfate administration.			

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING.** Causes substantial but temporary eye injury. **DO NOT** get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. Harmful if swallowed. Wash hands thoroughly with soap before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

## Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 14 mils
- Shoes and socks
- Protective eyewear (goggles, face shield or safety glasses)

Mixers/loaders supporting aerial applications must wear a minimum of a NIOSH-approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection. For more information, see <u>www.epa.gov/pesticide-respirators</u>.

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

## USER SAFETY RECOMMENDATIONS

#### Users should:

 Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENGINEERING CONTROL STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (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.

## ENVIRONMENTAL HAZARDS

**DO NOT** apply directly to water, or to areas where surface water is present. **DO NOT** apply to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

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

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

## PHYSICAL OR CHEMICAL HAZARDS

**DO NOT** use with or store near oxidizing agents since hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

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

**DO NOT** use this product until you have read the entire label. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

In the State of New York Only: Not For Use In Nassau and Suffolk Counties.

## AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours, with the following exceptions:

- The REI for workers engaged in scouting activities in corn, canola, and soybeans is 4 days.
- The REI for workers to move irrigation piping is 7 days for all crops.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 14 mils

- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

#### IMPORTANT CROP SAFETY INFORMATION: READ BEFORE USING THIS PRODUCT Burndown Treatments:

**GCS Glufosinate 280SL** may be applied as a burndown treatment prior to planting or prior to emergence of any conventional variety of canola, sweet corn\*, corn, cotton, soybean, or sugar beet.

#### \*Not for use in California. **Post-Emergent Treatments:**

Post emergence row crop applications of **GCS Glufosinate 280SL** may be made only to [LibertyLink® glufosinate-resistant][glufosinate-resistant] crops. The basis of selectivity of **GCS Glufosinate 280SL** in [LibertyLink glufosinate-resistant][glufosinate-resistant] crops is the presence of a gene that causes the crop to be non-sensitive to glufosinate. Crops not containing this gene will be sensitive to **GCS Glufosinate 280SL** and severe crop injury and/or death may occur. **DO NOT** allow spray to contact foliage or green tissue of desirable vegetation other than crops non-sensitive to the active ingredient in this product. **GCS Glufosinate 280SL** may be applied to conventional cotton sensitive to the active ingredient in **GCS Glufosinate 280SL** using a hooded sprayer.

#### Tree Nut, Vine and Berry Crop Treatments:

Avoid contact of **GCS Glufosinate 280SL** solution, spray drift, or mist with green bark, stems, or foliage, as injury may occur to trees, berries, and vines. Only trunks with callused, mature dark brown bark may be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of **GCS Glufosinate 280SL** with parts of trees, berries or vines other than mature brown bark can result in serious damage.

#### MANDATORY SPRAY DRIFT MITIGATION

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

#### SPRAY DRIFT ADVISORIES

#### POLLINATOR ADVISORY STATEMENT

This product contains an herbicide. Follow all label directions and precautions to minimize potential offtarget exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

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

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- 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.

#### **Controlling Droplet Size – Aircraft**

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length Longer booms increase drift potential. Therefore, a shorter boom length is recommended.
- Application Height Application more than 10 ft. above the canopy increases the potential for spray drift.

#### **BOOM HEIGHT**

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### DRIFT REDUCTION TECHNOLOGY (DRT)

The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: <a href="https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies">https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies</a>

#### WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar be familiar with local wind patterns and how they affect spray drift.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

#### TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

#### **PRODUCT INFORMATION**

**GCS Glufosinate 280SL** is a water soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds in canola, corn, cotton, and soybean designated as [LibertyLink®][glufosinate-resistant] and in trees, vines, and berries. **GCS Glufosinate 280SL** may be applied for potato vine desiccation. **GCS Glufosinate 280SL** may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional variety of canola, sweet corn\*, corn, cotton, soybean, or sugar beet.

\*Not for use in California.

**GCS Glufosinate 280SL** is only foliar active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply **GCS Glufosinate 280SL** to actively growing weeds as described in the Weed Control Directions for Row Crops section to get maximum weed control. Uniform thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

- **GCS Glufosinate 280SL** is rainfast four (4) hours after application to most weed species, therefore, rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control.
- Application needs to be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.
- Consult your local Cooperative Extension Service or Generic Crop Science, LLC representative for guidelines on the optimum application timing for **GCS Glufosinate 280SL** in your region.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present, or when weeds are under stress due to environmental conditions for example drought, cool temperatures, or extended periods of cloudiness.
- To maximize weed control, DO NOT cultivate from 5 days before an application to 7 days after an application.

#### **ROTATIONAL CROP RESTRICTIONS\***

Rotational crop planting intervals following application of **GCS Glufosinate 280SL** are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Sweet Corn, Corn, Cotton, Soybeans, and Sugar beets	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables, and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 days
All Other Crops	180 Days

\*See Application Directions for Potato Vine Desiccation for Rotational Crop Restrictions specifically after **GCS Glufosinate 280SL** applications to potatoes.

### Weed Resistance Management

Glufosinate-ammonium, the active ingredient in this product, is a Group 10 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 10 herbicides. Weed species with acquired resistance to Group 10 herbicides may eventually dominate the weed population if Group 10 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **GCS Glufosinate 280SL** or other Group 10 herbicides. Users should scout before and after application.

Suspected herbicide resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide applied at specified application rates, especially if control is achieved on adjacent weeds.
- The spreading of a patch of a particular weed species that survives a herbicide application; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of **GCS Glufosinate 280SL** or other target site of action Group 10 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long
  as the involved products are all registered for the same use, have different sites of action and are
  both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of
  action classification by itself may not adequately address specific weeds that are resistant to
  specific herbicides).
- Base herbicide use on a comprehensive Intergrated Pest Management (IPM) program.
- Scout prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout after application to verify that the treatment was effective.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistant management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Generic Crop Science, LLC retailer or representative [844-200-3276] [844-200-FARM] [(866)396-0465]. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

#### WEED CONTROL FOR ROW CROPS

Rates in ounces of formulated product per acre for the control of weeds at selected heights are shown in the weed control tables in weed populations with mixed species; apply at a rate needed for the species that requires the highest rate. Refer to crop specific directions for use and restrictions for allowable use rates. **DO NOT** exceed allowable use rates as seen in the restrictions section of each use site.

BROADLEAF WEED CONTROL					
		Veed Height			Need Height
		er (Inches)			er (Inches)
Weed Species	22 fl. oz./A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)	Weed Species	22 fl. oz./A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)
Amaranth, Palmer <sup>2</sup>	NA	4	Morningglory, smallflower <sup>2</sup>	4	6
Anoda, spurred	3	5	Morningglory, tall <sup>2</sup>	6	8
Beggarweed, Florida	4	5	Mustard, wild	4	6
Black, medic	5	7	Nightshade, black	4	6
Blueweed, Texas	5	7	Nightshade, eastern black	6	8
Buckwheat, wild	6	7	Nightshade, hairy	6	8
Buffalobur	6	7	Pennycress (stinkweed)	4	6
Burcucumber	6	10	Pigweed, redroot <sup>2</sup>	3	4
Catchweed bedstraw (cleavers)	2	4	Pigweed, prostrate <sup>2</sup>	3	4
Carpetweed	4	6	Pigweed, spiny <sup>2</sup>	3	4
Chickweed, common	6	8	Pigweed, smooth <sup>2</sup>	3	4
Cocklebur, common	6	14	Pigweed, tumble <sup>2</sup>	3	4
Copperleaf, Hophornbeam	4	6	Puncturevine	4	6
Cotton, volunteer <sup>1</sup>	6	8	Purslane, common	2	4
Croton, tropic	3	5	Pusley, Florida	S	3
Croton, woolly	2	4	Ragweed, common	6	10
Eclipta	4	6	Ragweed, giant	6	12
Devil's claw	2	4	Senna, coffee	4	6
Fleabane, annual	6	8	Sesbania, hemp	6	8
Galinsoga, hairy	6	8	Shepherd's Purse	6	8
Galinsoga, small flower	6	7	Sicklepod (java bean)	4	6
Groundcherry, cutleaf	4	5	Sida, prickly	4	5
Geranium, cutleaf	4	6	Smartweed, Pennsylvania	6	14
Hempnettle	4	6	Smellmelon	4	6
Horsenettle, Carolina <sup>3</sup>	2	4	Sowthistle, annual	6	8
Jimsonweed	6	10	Soybeans, volunteer <sup>1</sup>	6	8
Knotweed	3	5	Spurge, prostrate	2	4
Kochia <sup>2</sup>	4	6	Spurge, spotted	2	4
Ladysthumb	6	14	Starbur, bristly	4	6
Lambsquarters, common <sup>2</sup>	4	6	Sunflower, common	6	14
Mallow, common	4	6	Sunflower, prairie	3	5
Mallow, Venice	6	8	Sunflower, volunteer	6	10
Marestail	S	6-12	Thistle, Russian <sup>2</sup>	S	6-12
Marshelder, annual	4	6	Velvetleaf <sup>2</sup>	3	4
Morningglory,entireleaf <sup>2</sup>	6	8	Waterhemp, common <sup>2</sup>	NA	5
Morningglory, ivyleaf <sup>2</sup>	6	8	Waterhemp, tall <sup>2</sup>	NA	5

## **BROADLEAF WEED CONTROL**

	Maximum Weed Height or Diameter (Inches)				Veed Height er (Inches)
Weed Species	22 fl. oz./A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)	Weed Species	22 fl. oz./A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)
Morningglory, pitted <sup>2</sup>	6	8			
Morningglory, sharppod <sup>2</sup>	2	4			

<sup>1</sup> Volunteer [LibertyLink® glufosainate-resistant][glufosinate-resistant] crops from the previous season will not be controlled.

<sup>2</sup> For applications to corn, tank mixing with atrazine may enhance weed control of this species.

<sup>3</sup> May require sequential applications for control.

NA Not advised.

S Indicates suppression.

Weed Species	Maximum Weed Height or Diameter (inches)		or Diameter (inches)		Weed Species	Maximum Weed Height or Diameter (inches)	
	22 fl. oz./A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)		22 fl. oz. /A (0.40 lb. ai/A)	29 fl. oz./A (0.53 lb. ai/A)		
Barley, volunteer <sup>3</sup>	3	4	Millet, wild proso	6	7		
Barnyardgrass	3	5	Millet,proso volunteer	6	7		
Bluegrass, annual	3	5	Oat, wild <sup>2</sup>	3	4		
Corn, volunteer <sup>1</sup>	10	12	Panicum, fall	3	5		
Crabgrass, large <sup>2</sup>	3	5	Panicum, Texas	4	6		
Crabgrass, smooth <sup>2</sup>	3	5	Rice, red	4	6		
Cupgrass, woolly	6	12	Rice, volunteer <sup>1</sup>	4	6		
Foxtail, bristly	6	8	Sandbur, field <sup>2</sup>	S	2		
Foxtail, giant	6	12	Shattercane	6	8		
Foxtail, green	6	12	Signalgrass, broadleaf	3	5		
Foxtail, robust purple	6	8	Sprangletop	4	6		
Foxtail, yellow <sup>2</sup>	3	4	Sorghum, volunteer	6	8		
Goosegrass <sup>3</sup>	2	3	Stinkgrass	4	6		
Johnsongrass, seedling	3	5	Wheat, volunteer <sup>2</sup>	4	5		
Junglerice	3	5	Witchgrass	4	6		

#### GRASS WEED CONTROL

<sup>1</sup>Volunteer [LibertyLink® glufosinate-resistant][glufosinate-resistant] crops from the previous season will not be controlled. A timely cultivation, 7 to 10 days after an application and/or retreatment for 10-21 days after the first application is specified for controlling dense clumps of volunteer corn.

<sup>2</sup>For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to initiation.

<sup>3</sup>A sequential application may be necessary for control.

S Indicates suppression

#### **Biennial and Perennial Weeds\*\***

For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of **GCS Glufosinate 280SL** are specified 22 fl. oz./A (0.40 lb ai/A) followed by 22 fl. oz./A (0.40 lb ai/A)). Refer to crop specific directions for use and restrictions for allowable use rates. **DO NOT** exceed allowable use rates as seen in the restrictions section of each use site.

Alfalfa	Clover, Alsike	Nutsedge, purple*
Artichoke, Jerusalem	Clover, red	Nutsedge, yellow*
Bermudagrass	Dandelion	Orchardgrass

Bindweed, field	Dock, smooth	Poinsettia, wild
Bindweed, hedge	Dogbane, hemp*	Pokeweed
Bluegrass, Kentucky	Goldenrod, gray*	Quackgrass*
Blueweed, Texas	Johnsongrass, rhizome	Sowthistle, perennial
Bromegrass, smooth	Milkweed, common*	Thistle, bull
Burdock	Milkweed, honeyvine*	Thistle, Canada
Bursage, woollyleaf	Muhly, wirestem	Timothy*
Chickweed, Mouse ear	Nightshade, silverleaf	Wormwood, biennial

\*Suppression Only

\*\*See the Application Directions for Use on Cotton section of this label for additional use rates.

#### APPLICATION AND MIXING PROCEDURES

**DO NOT** use flood jet nozzles, controlled droplet application equipment, or air assisted spray equipment. Uniform thorough spray coverage is important to achieve consistent weed control.

#### **Ground Application**

Refer to the *Rate Tables* for proper application rates. **DO NOT** apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and ensure consistent weed control, apply **GCS Glufosinate 280SL** with the spray boom as low as possible while maintaining a uniform spray pattern. Apply **GCS Glufosinate 280SL** broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 psi and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is strongly advised for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. **Under dense weed/crop canopies a broadcast rate of 15-20 gallons of water per acre must be used so that thorough spray coverage will be obtained. DO NOT use raindrop nozzles.** See the Spray Drift Management section of this label for additional information on proper application of **GCS Glufosinate 280SL**.

#### **Aerial Application**

Poor coverage will result in reduced weed control. See the Spray Drift Management section of this label for additional information on proper application of **GCS Glufosinate 280SL**.

#### COMPATIBILITY TESTING

If **GCS Glufosinate 280SL** is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

- 1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1 quart jar.
- 2. For each pound of dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3. For each 16 fl. oz. of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 16 fl. oz. of **GCS Glufosinate 280SL** to be applied per acre, add 0.5 teaspoon to the jar.
- 5. After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
- Let the mixture stand for 15 minutes, and evaluate the solution uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, **DO NOT** use the mixture in a spray tank.
- 7. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the Storage and Disposal section of this label.

#### **MIXING INSTRUCTIONS**

#### Tank Mix Instructions

**GCS Glufosinate 280SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated.

**GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and 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.

**GCS Glufosinate 280SL** must be applied with properly calibrated and clean equipment. **GCS Glufosinate 280SL** is formulated to mix readily in water. Prior to adding **GCS Glufosinate 280SL** to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see Cleaning Instructions).

Mix GCS Glufosinate 280SL with water to make a finished spray solution as follows:

- 1. Fill the spray tank half full with water.
- 2. Start agitation.
- 3. If mixing with a flowable/wettable powder tank mix partner: Prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
- 4. Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
- 5. If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 6. Complete filling the spray tank with water.
- 7. Add the proper amount of GCS Glufosinate 280SL and continue agitation.
- 8. If foaming occurs, use a silicone based antifoam agent.

Ensure that all spray system lines including pipes, booms, etc., have the correct concentration of spray solution by flushing out the spray system lines before starting the crop application.

If tank mix partners specified on this label are added, maintain good agitation at all times until contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

#### **CLEANING INSTRUCTIONS**

Before using **GCS Glufosinate 280SL**, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Equipment must be thoroughly rinsed using a commercial tank cleaner.

After using **GCS Glufosinate 280SL**, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled as [LibertyLink®][glufosinate-resistant]. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

## APPLICATION DIRECTIONS FOR BURNDOWN USE

**GCS Glufosinate 280SL** may be applied as a burndown treatment prior to planting or prior to emergence of any conventional or glufosinate-resistant variety of canola, corn (field and silage), corn, sweet\*, cotton, soybean, or sugar beet. Apply a minimum of 29 fl. oz./A of **GCS Glufosinate 280SL** (0.53 lb ai/A) for burndown of existing weeds just prior to planting or prior to emergence of canola, corn, cotton, soybean, or sugar beets. For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. \*Not for use in California

**In cotton**, if environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. active ingredient/A) of **GCS Glufosinate 280SL**.

**Restrictions:** 

- If more than 29 fl. oz./A of this product (0.53 lb. ai/A) are used in any single application, the yearly total may not exceed 72 fl. oz./A of this product (1.32 lb. ai/A), including all application timings.
- **DO NOT** apply more than once per acre per year as a pre-harvest burndown application.

**In soybean,** if environmental conditions prevent timely applications, a single application may be made of up to 36 fl. oz./A (0.66 lb. ai/A) of **GCS Glufosinate 280SL**. If 29-36 fl. oz./A of this product (0.53 - 0.66 lb. active ingredient/A) are used in a single burndown application, one additional in season application may be made at up to 29 fl. oz./A of this product (0.53 lb. ai/A).

#### **Restrictions:**

- The yearly total may not exceed 65 fl. oz./A of this product (1.19 lbs. ai/A), including all application timings.
- **DO NOT** apply more than once per year as a post-harvest/pre-harvest burndown application.

# In canola, corn (field,sweet), and sugar beets, if environmental conditions prevent timely applications, a single application may be made of up to 36 fl. oz./A (0.66 lb. ai/A) of GCS Glufosinate 280SL. Restrictions:

• If used as a burndown application, no additional applications of **GCS Glufosinate 280SL** may be made post-emergence to the crop during the growing season.

	Burndown	In Season Applications ([LibertyLink®][glufosinate- resistant] only)	Yearly Max
Cotton Use Pattern 1	29 fl. oz./A	2 applications at	87 fl. oz./A
	(0.53 lb ai/A)	22 – 29 fl. oz./A* (0.40 lb – 0.53 lb ai/A)	(1.59 lbs ai/A)
Cotton Use Pattern 2	30 – 43 fl. oz./A	1 application at	72 fl. oz./A
	(0.55 lb – 0.79 lb ai/A)	22 – 29 fl. oz./A*	(1.32 lbs ai/A)
		(0.40 lb – 0.53 lb ai/A)	
Soybean Use Pattern	29 – 36 fl. oz./A	1 application at	65 fl. oz./A
	(0.53 lb – 0.66 lb ai/A)	22 – 29 fl. oz./A**	(1.19 lbs ai/A)
		(0.40 lb – 0.53 lb ai/A)	
Canola, Corn (Field,	29 – 36 fl. oz./A	None	36 fl. oz./A
Sweet), Sugar beets	(0.53 lb – 0.66 lb ai/A)		(0.66 lb ai/A)

\*Cotton labeled as [LibertyLink® glufosinate-resistant][glufosinate-resistant] OR with hooded sprayer for non-LibertyLink® glufosinate-resistant/ non-glufosinate-resistant varieties (see Cotton use directions)

\*\*Soybeans labeled as [LibertyLink glufosinate-resistant][glufosinate-resistant] only (see Soybean use directions)

## APPLICATION DIRECTIONS FOR USE ON SUGAR BEETS (Not for use in California)

# Apply GCS Glufosinate 280SL post-emergence to glufosinate-resistant sugar beets only to control weeds.

**THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. GCS Glufosinate 280SL** works best when weeds are actively growing. A cultivation may be made at least 5 days before a **GCS Glufosinate 280SL** application or 5 days after a **GCS Glufosinate 280SL** application.

#### APPLICATION TIMING

Post-emergence applications of **GCS Glufosinate 280SL** on glufosinate-resistant sugar beets may be made from the cotyledon stage up to the 10 leaf stage of the sugar beet. **GCS Glufosinate 280SL** is a foliar active material with no soil residual activity. For best results, apply to emerged, young, actively growing weeds. Weeds that emerge after application will not be controlled. **GCS Glufosinate 280SL** will have an

effect on weeds that are larger than the advised leaf stage, however, speed of activity and control may be reduced. Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present, or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness. **GCS Glufosinate 280SL** is rainfast 4 hours after application, therefore rainfall within 4 hours may necessitate retreatment.

For best weed control and sugar beet yield, **GCS Glufosinate 280SL** applications must begin when weeds are up to 1 inch in height or diameter. Second applications must be made when newly germinated weeds again reach 1 inch in height or diameter. Refer to the Rate Tables for Weed Control in Sugar Beets for selection of the proper rate dependent upon the weed species present and size. A second application of **GCS Glufosinate 280SL** or a tank mix application with a residual herbicide selected from the tank mix partners listed on this label will be needed to control weeds that have not yet emerged at the time of application.

#### **RESTRICTIONS FOR USE ON SUGAR BEETS**

- If **GCS Glufosinate 280SL** was used in a burndown application, no post emergence applications may be applied to the crop.
- Only make post-emergence applications on glufosinate-resistant sugarbeets. Post-emergence applications to conventional sugarbeets will severely damage the crop.
- DO NOT apply more than 30 fl. oz./A (0.55 lb. ai/A) of GCS Glufosinate 280SL per acre per application.
- DO NOT apply more than 60 fl. oz. (1.10 lbs. ai) of GCS Glufosinate 280SL per acre per year.
- DO NOT make more than two applications of GCS Glufosinate 280SL per year.
- Retreatment Interval: A second application may only be made a minimum of 10 days after the first application.
- **DO NOT** apply **GCS Glufosinate 280SL** within 60 days of harvesting sugar beets.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** add surfactants. Antifoams or drift control agents may be added if needed.
- **DO NOT** apply **GCS Glufosinate 280SL** if sugar beets show injury from prior herbicide or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the "*Rotational Crop Restrictions*" section under the "*Information*" heading of this label for the appropriate rotational crop plant back intervals.

#### RATE TABLES FOR WEED CONTROL IN SUGAR BEETS

The rate of **GCS Glufosinate 280SL** in fluid ounces (pints)(lb ai) of formulated product per acre to be used for the control of weeds at selected heights is shown in the following tables. In weed populations with mixed species, apply the rate needed for all species present.

Weed Species		ge of Weed* m Height)	Comments on Weed Growth Stage/Application Timing/Number of Applications
	15 fl. oz./A (0.9 pt./A) (0.27 lb ai/A)	20 fl. oz./A (1.25 pts./A) (0.37 lb ai/A)	
Barley, volunteer	1 – 2 leaf (2)	3 leaf (3)	Second application may be required
Barnyardgrass	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Corn, volunteer	1 – 2 leaf (3)	3 – 4 leaf (6)	
Crabgrass, large	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Crabgrass, smooth	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Cupgrass, woolly	1 – 5 leaf (4)	(8)	
Foxtail, giant	1 – 4 leaf (3)	5 – 6 leaf (4)	Maximum of 2 tillers
Foxtail, green	1 – 4 leaf (3)	5 – 6 leaf (4)	Maximum of 2 tillers

#### Grass Weeds Controlled with GCS Glufosinate 280SL

Weed Species		ge of Weed* m Height)	Comments on Weed Growth Stage/Application Timing/Number of Applications
	15 fl. oz./A (0.9 pt./A) (0.27 lb ai/A)	20 fl. oz./A (1.25 pts./A) (0.37 lb ai/A)	Applications
Foxtail, yellow	1 – 3 leaf (1)	4 leaf (2)	Apply prior to tillering
Millet, volunteer proso	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Millet, wild proso	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Oat, wild	1 – 2 leaf (2)	3 leaf (3)	Maximum of 1 tiller
Panicum, fall	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Panicum, Texas	1 – 3 leaf (2)	4 – 5 leaf (3)	Maximum of 1 tiller
Sandbur, field	-	1 – 4 leaf (2)	Apply prior to tillering
Wheat, volunteer	1 – 2 leaf (2)	3 leaf (3)	Maximum of 1 tiller

\*Apply up to 30 fl. oz./A or 1.88 pt./A (0.56 lb ai) if weeds exceed the growth stage shown in the table.

For improved control of heavy populations or larger than advised volunteer wheat, volunteer barley, yellow foxtail, and wild oats, **GCS Glufosinate 280SL** can be tank mixed with – Quizalofop-p-ethyl; Sethoxydim; and Clethodim.

#### Perennial Weeds Controlled by GCS Glufosinate 280SL

Weed Species	Growth Sta (Maximum Ho	Comments on Number of	
	15 fl. oz./A (0.9 pt./A) (0.27 lb ai/A)	20 fl. oz./A (1.25 pt./A) (0.37 lb ai/A)	Applications
Quackgrass	-	1 – 3 leaf (3")	Second application required
Sowthistle, perennial	-	1 – 4 leaf (3")	Second application required
Thistle, Canada	-	1 – 4 leaf (3")	Second application required

\*Apply up to 30 fl. oz./A or 1.88 pt./A (0.56 lb ai) if weeds exceed the growth stage shown in the table.

Weed Species	Growth Stage of Weed* (Maximum Diameter)			
	15 fl. oz./A (0.9 pt./A) (0.27 lb ai/A)	20 fl. oz./A (1.25 pt./A) (0.37 lb ai/A)		
Buckwheat, wild	1 – 4 leaf (2")	5 – 6 leaf (3")		
Buffalobur	1 – 4 leaf (2")	5 – 6 leaf (3")		
Carpetweed	-	1 – 4 leaf (2")		
Chickweed, common	1- 4 leaf (2")	5 – 6 leaf (3")		
Cocklebur, common	1 – 6 leaf (3")	7 – 8 leaf (5")		
Kochia	(1")	(2")		
Ladysthumb	1 – 2 leaf (1")	3 – 4 leaf (3")		
Lambsquarter, common	1 – 2 leaf (1")	4 – 5 leaf (3")		
Mallow, Venice	1 – 4 leaf (2")	5 – 6 leaf (3")		
Marshelder	1 – 2 leaf (1")	3 – 4 leaf (2")		
Mustard, wild	1 – 4 leaf (2")	5 – 6 leaf (3")		
Nightshade, eastern black	1 – 4 leaf (2")	5 – 6 leaf (3")		
Pigweed, prostrate	(1")	(3")		
Pigweed, redroot	1 – 2 leaf (1")	3 – 4 leaf (3")		
Pigweed, smooth	1 – 2 leaf (1")	3 – 4 leaf (3")		
Pigweed, spiny	1 – 2 leaf (1")	3 – 4 leaf (3")		

### Broadleaf Weeds Controlled by GCS Glufosinate 280SL

Weed Species	Growth Stage of Weed* (Maximum Diameter)			
	15 fl. oz./A (0.9 pt./A) (0.27 lb ai/A)	20 fl. oz./A (1.25 pt./A) (0.37 lb ai/A)		
Purslane, common	(1")	(2")		
Ragweed, common	1 – 6 leaf (3)	7 – 8 leaf (5")		
Ragweed, giant	1 – 4 leaf (2")	5 – 6 leaf (3")		
Shepherd's purse	1 – 4 leaf (2")	5 – 6 leaf (3")		
Smartweed, Pennsylvania	1 – 2 leaf (1")	3 – 4 leaf (3")		
Sowthistle, annual	1 – 4 leaf (2")	5 – 6 leaf (3")		
Sunflower, common	1 – 6 leaf (3")	7 – 8 leaf (5")		
Thistle, Russian	(1")	(2")		
Velvetleaf	1 – 2 leaf (1")	3 – 4 leaf (3")		

\*Apply up to 30 fl. oz./A or 1.88 pt./A (0.56 lb ai) if weeds exceed growth stage shown in the table.

## APPLICATION DIRECTIONS FOR USE ON CANOLA

Apply **GCS Glufosinate 280SL** only to canola labeled as [LibertyLink® glufosinate-resistant] [glufosinate-resistant]. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

#### APPLICATION RATE AND TIMING

For best results, apply to emerged, young actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of **GCS Glufosinate 280SL** on glufosinate-resistant canola may be made from the cotyledon stage up to the early bolting stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth maturity or yield.

Apply **GCS Glufosinate 280SL** at 22 fl. oz./A (0.40 lb ai/A) per application. A second application of **GCS Glufosinate 280SL** may be needed to control weeds that have not yet emerged at the time of application.

#### **RESTRICTIONS FOR USE ON CANOLA**

- If **GCS Glufosinate 280SL** was used in a pre-plant burndown application, no post emergence applications may be applied to the crop.
- Only make post-emergence applications on glufosinate-resistant canola.
- **DO NOT** use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- DO NOT apply more than two applications of GCS Glufosinate 280SL per year.
- Retreatment Interval: Sequential applications need to be at least 10 days apart.
- DO NOT apply GCS Glufosinate 280SL within 65 days of harvesting canola.
- DO NOT apply more than 44 fl. oz. (0.80 lb. ai) of GCS Glufosinate 280SL per acre per year.
- DO NOT apply more than 22 fl. oz. (0.40 lb ai) of GCS Glufosinate 280SL per acre per application.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply **GCS Glufosinate 280SL** if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the "*Rotational Crop Restrictions*" section under the "*Information*" heading of this label for the appropriate rotational crop plant back intervals.

#### SPRAY ADDITIVES

**GCS Glufosinate 280SL** must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Anti-foams or drift control agents may be added if needed. Use of additional surfactants or crop oils may increase risk of crop response.

#### CANOLA TANK MIX INSTRUCTIONS

**GCS Glufosinate 280SL** at 22 fl. oz./A (0.40 lb ai/A) plus AMS may be used in tank mix combination with certain herbicides for improved control of larger than labeled grasses. **GCS Glufosinate 280SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the canola to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing. The AMS rate may be reduced to 1.5 lbs./A when **GCS Glufosinate 280SL** is tank mixed with a reduced rate of one of the grass herbicides specified below.

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.

#### TANK MIX PARTNERS FOR GCS GLUFOSINATE 280SL ON [LIBERTYLINK®][GLUFOSINATE-RESISTANT][GLUFOSINATE-RESISTANT] CANOLA

Tank Mix Partner	Rate (fl. oz./A)
quizalofop-p-ethyl	Refer to product label for use rates.
Sethoxydim	Refer to product label for use rates.
Clethodim	Refer to product label for use rates.

# APPLICATION RATE AND TIMING FOR GLUFOSINATE - RESISTANT CANOLA FOR SEED PROPAGATION

{Note to reviewer: The following text in [ ] is optional text and may appear on the final label} [(Not for use in California)]

Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18-30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

#### **RESTRICTIONS FOR GLUFOSINATE - RESISTANT CANOLA FOR SEED PROPAGATION**

- **DO NOT** apply more than 22 fl. oz. (0.40 lb. ai) of **GCS Glufosinate 280SL** per application per acre .
- DO NOT apply more than three applications of GCS Glufosinate 280SL per year.
- **Retreatment Interval:** Wait a minimum of 10 days between applications.
- DO NOT apply more than 66 fl. oz. (1.21 lbs. ai) of GCS Glufosinate 280SL per acre per year.
- **DO NOT** apply **GCS Glufosinate 280SL** beyond the early bolting stage or within 65 days of harvesting canola seed.
- **DO NOT** use treated canola seed for food, feed or oil purposes.
- **DO NOT** apply **GCS Glufosinate 280SL** if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

## APPLICATION DIRECTIONS FOR USE ON CORN (SWEET) (Not for use in California)

#### APPLICATION TIMING FOR GLUFOSINATE-RESISTANT SWEET CORN

Applications for **GCS Glufosinate 280SL** on sweet corn may be made from emergence until sweet corn is 24" tall or in the V-7 stage of growth (i.e., 7 developed collars), whichever comes first. **GCS Glufosinate 280SL** must be applied with ammonium sulfate (AMS) for use on sweet corn.

#### **RESTRICTIONS FOR USE ON SWEET CORN**

- If **GCS Glufosinate 280SL** was used in a pre-plant burndown application, no post-emergence applications may be made to the crop.
- Only make post-emegence applications on glufosinate-resistant sweet corn.
- **DO NOT** apply **GCS Glufosinate 280SL** within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- DO NOT apply more than 20 fl. oz. (0.37 lb ai/A) per acre per application.
- DO NOT apply more than 40 fl. oz. (0.73 lb. ai) of GCS Glufosinate 280SL per acre per year.
- DO NOT apply more than two applications of GCS Glufosinate 280SL per year.
- Retreatment Interval: Sequential applications need to be at least 10 days apart.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply **GCS Glufosinate 280SL** if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.)
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the *"Rotational Crop Restrictions"* section under the *"Information"* heading of this label for the appropriate rotational crop plant back intervals.

See *"Application Directions for Use on Field Corn and Silage Corn"* for Application Methods, Mixing Instructions, and Weed Control Tables.

#### Tank Mix Instructions for use on Glufosinate-Resistant Sweet Corn

**GCS Glufosinate 280SL** may be tank mixed with tembotrione, mesotrione, atrazine, orhalosulfuron-methyl and thifensulfuron. When using **GCS Glufosinate 280SL** in tank mix combinations, carefully follow the "Directions for Use" labeling of the selected partner. 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.

## APPLICATION DIRECTIONS FOR USE ON CORN (FIELD AND GROWN FOR SILAGE)

Apply **GCS Glufosinate 280SL** only to corn labeled as [LibertyLink® glufosinate-resistant][glufosinate-resistant]. Uniform thorough spray coverage is necessary to achieve consistent weed control.

#### **APPLICATION RATE AND TIMING**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of **GCS Glufosinate 280SL** on corn may be made with over the top broadcast or drop nozzles from emergence until corn is 24 inches tall or in the V-7 stage of growth (i.e., 7 developed collars), whichever comes first. For corn 24 inches to 36 inches tall only apply **GCS Glufosinate 280SL** using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks. Applications of **GCS Glufosinate 280SL** following the use of soil applied insecticides will not injure corn.

Apply **GCS Glufosinate 280SL** at 22 fl. oz./A (0.40 lb. ai/A) per application. A second application of **GCS Glufosinate 280SL** or a tank mix application with a residual herbicide will be needed to control weeds that have not yet emerged at the time of application.

#### RESTRICTIONS FOR USE ON FIELD CORN AND SILAGE CORN

- If **GCS Glufosinate 280SL** was used in a pre-plant burndown application, no post-emergence applications may be applied to the crop.
- Only make post-emergence applications on glufosinate-resistant corn (field and silage).
- **DO NOT** apply **GCS Glufosinate 280SL** within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- **DO NOT** apply more than 22 fl. oz. (0.40 lb. a.i.) of **GCS Glufosinate 280SL** per acre per application.
- **DO NOT** apply more than two applications of **GCS Glufosinate 280SL** per year.
- Retreatment: Sequential applications need to be at least 10 days apart.
- DO NOT apply more than 44 fl. oz. (0.80 lb. a.i.) of GCS Glufosinate 280SL on corn per acre per year.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply **GCS Glufosinate 280SL** if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.)
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the "*Rotational Crop Restrictions*" section under the "*Information*" heading of this label for the appropriate rotational crop plant back intervals.

#### SPRAY ADDITIVES

For corn and sweet corn, **GCS Glufosinate 280SL** must be applied with ammonium sulfate (AMS Use only fine feed grade or spray grade AMS at 3 lbs. per acre (17 lbs./100 gallons). When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs. per acre (8.5 lbs./100 gallons) to reduce potential leaf burn.

Use of additional surfactants or crop oils may increase risk of crop response.

#### TANK MIX INSTRUCTIONS: Glufosinate-Resistant CORN (FIELD, SILAGE)

Certain herbicide tank mixes may aid in the performance of **GCS Glufosinate 280SL**. No additional surfactant is needed with any tank mix partner. **GCS Glufosinate 280SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the corn to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing.

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.

TANK MIX PARTNERS FOR GCS GLUFOSINATE 280SL ON CORN LABELED AS [LIBERTYLINK®	
GLUFOSINATE-RESISTANT][GLUFOSINATE-RESISTANT]	

2,4-D	s-metolachlor, mesotrione and glyphosate	pendimethalin <sup>1</sup>
acetochlor	clopyralid potassium and flumetsulam	halosulfuron-methyl and thifensulfuron
carfentrazone-ethyl	s-metolachlor and mesotrione	flumetsulam
atrazine	tembtrione	s metolachlor <sup>2</sup>

dicamba and primisulfuron- methyl	atrazine, s-metolachlor and mesotrione	primisulfuron-methyl and prosulfuron
atrazine and dimethenamide-P	nicosulfuron	diflufenzopyr-sodium and dicamba
thiencarbazone-methyl and temotrione	metolachlor	dicamba and halosulfuron- methyl

<sup>1</sup> Tank mixing with pendimethalin may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail, and volunteer corn.

<sup>2</sup> It is advised that these products are tank mixed at half the use rate with **GCS Glufosinate 280SL** to reduce risk of crop response.

#### CORN INSECTICIDE TANK MIX PARTNERS FOR GCS GLUFOSINATE 280SL

To provide weed and insect control in corn, **GCS Glufosinate 280SL** may be mixed with insecticides that contain the following active ingredients:

permethrin	cyfluthrin	lambda-cyhalothrin
esfenvalerate	chlorpyrifos	beta-cyfluthrin

#### APPLICATION DIRECTIONS FOR USE ON COTTON

### ([LIBERTYLINK® GLUFOSINATE-RESISTANT] [GLUFOSINATE-RESISTANT] AND NON-GLUFOSINATE RESISTANT)

Uniform thorough spray coverage is necessary to achieve consistent weed control. **GCS Glufosinate 280SL** may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to [LibertyLink® glufosinate-resistant][glufosinate-resistant] cotton. This product may be applied post emergence to non-[LibertyLink® glufosinate-resistant][glufosinate-resistant][glufosinate-resistant] cotton by using equipment designed to minimize contact of the spray with the cotton foliage. See the Application Methods on Non-[LibertyLink® glufosinate-resistant][glufosinate-resistant] Cotton section for selection of shielding equipment. Severe injury or death may result if the **GCS Glufosinate**-resistant].

#### APPLICATION RATE AND TIMING

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimum yield, early season weed removal is important.

Apply **GCS Glufosinate 280SL** to cotton from emergence up to the early bloom stage at 22 to 29 fl. oz./A (0.40 lb - 0.53 lb ai/A). If environmental conditions prevent a timely herbicide application, a single application of up to 43 fl. oz./A of **GCS Glufosinate 280SL** (0.79 lb ai/A) may be made to cotton. See **RESTRICTIONS FOR USE ON COTTON** below for additional information.

Refer to the Weed Control Table for Row Crops section of this label for selection of the proper rate dependent upon weed species present and size. In weed populations with mixed species, select the highest rate required to control all the species. Volunteer [LibertyLink® glufosinate-resistant][glufosinate-resistant] crop plants (corn, cotton, soybeans, sugar beets) from the previous season will not be controlled by applications of **GCS Glufosinate 280SL**. A repeat application of **GCS Glufosinate 280SL** or tank mixes with a residual herbicide will be needed to control weeds that have not emerged at the time of application. See the Tank Mix Instructions for Use on Cotton to select suitable tank mix partners.

#### **Use Rates for Cotton**

Use Pattern	1 <sup>st</sup> Application	2 <sup>nd</sup> Application	3 <sup>rd</sup> Application	Yearly Maximum
Option 1	22-29 fl. oz./A	22-29 fl. oz./A	22-29 fl. oz./A	87 fl. oz./A
				(1.59 lbs ai/A)

	(0.40 lb. – 0.53 lb. ai/A)	(0.40 lb. – 0.53 lb. ai/A)	(0.40 lb. – 0.53 lb. ai/A)	
Option 2	30-43 fl. oz./A	22-29 fl. oz./A	None	72 fl. oz./A
	(0.55 lb. – 0.79 lb.	(0.40 lb. – 0.53 lb.		(1.32 lbs. ai/A)
	ai/A)	ai/A)		

#### RESTRICTIONS FOR USE ON COTTON ([LIBERTYLINK® GLUFOSINATE-RESISTANT][GLUFOSINATE-RESISTANT] AND NON-GLUFOSINATE RESISTANT)

- **DO NOT** apply **GCS Glufosinate 280SL** to cotton in Florida South of Tampa (Florida Route 60), or in Hawaii (except for test plots or breeding nurseries).
- DO NOT apply GCS Glufosinate 280SL within 70 days prior to cotton harvest.
- Post-emergence applications to non-glufosinate resistant cotton must be made using equipment designed to minimize contact of the spray with the cotton foliage.
- **Option 1**: Up to three applications of **GCS Glufosinate 280SL** may be made to cotton per year at a maximum application rate of 29 fl. oz./A (0.53 lb. ai/A).
  - **DO NOT** apply more than 87 fl. oz. (1.59 lbs. ai) (including all application timings) to cotton per acre per year under this application scenario.
  - **Retreatment interval:** Sequential applications need to be at least 10 days apart.
- **Option 2:** If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of **GCS Glufosinate 280SL** at up to 43 fl. oz./A (0.79 lb. ai/A) may be made to cotton.
  - DO NOT apply more than 43 fl. oz. of GCS Glufosinate 280SL (0.79 lb. ai) in a single application under this use scenario. If a single application greater than 29 fl. oz. (0.53 lb. ai) is made, a subsequent application not to exceed 29 fl. oz. (0.53 lb. ai) may be made to cotton. The yearly total use rate under this scenario may not exceed 72 fl. oz. of GCS Glufosinate 280SL (1.32 lbs. ai).
  - **Retreatment interval**: Sequential applications need to be made at least 10 days apart.
  - **DO NOT** apply this product through any type of irrigation system.
- Refer to the "*Rotational Crop Restrictions*" section under the "*Information*" heading of this label for the appropriate rotational crop plant back intervals.

#### **POST HARVEST**

**GCS Glufosinate 280SL** may be applied as a post-harvest burndown treatment to fields (after cotton harvest).

#### **Restrictions:**

- Up to 43 fl. oz./A of **GCS Glufosinate 280SL** (0.73 lb ai/A) may be applied in a single application to control larger weeds growing in the crop at the time of harvest.
- If more than 29 fl. oz./A (0.53 lb ai/A) is used in a single application, the yearly total may not exceed 72 fl. oz./A (1.32 lb ai/A), including all application timings.
- Refer to the "Rotational Crop Restrictions" section of this label for appropriate rotational crop information.

#### APPLICATION METHODS TO COTTON LABELED AS [LIBERTYLINK® GLUFOSINATE-RESISTANT][ GLUFOSINATE-RESISTANT]

Refer to the Weed Control Table for Row Crops to select the proper application rate based upon the weeds present and their size. Uniform and thorough spray coverage is required to achieve consistent weed control. For ground application, apply **GCS Glufosinate 280SL** to [LibertyLink][glufosinate-resistant] cotton as an over-the-top foliar spray directed to the lower one-third of the cotton stand.

# APPLICATION METHODS TO NON-[LIBERTYLINK® GLUFOSINATE-RESISTANT][GLUFOSINATE-RESISTANT] COTTON

Application of **GCS Glufosinate 280SL** to cotton varieties not labeled as [LibertyLink][glufosinate-resistant] requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton

stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With a hooded sprayer, the spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and come into contact with the cotton, causing damage or destruction of the crop.

Herbicide rates and spray volume instructions are presented as broadcast equivalents and must be reduced in proportion to the area actually treated. Use the following formulas to calculate the correct rate and volume per planted (field) acre:

Band width in inches Row width in inches	Х	Broadcast RATE per acre	=	Amount of banded product needed per acre
Band width in inches	v	Broadcast spray VOLUME	_	Banded spray volume
Row width in inches	^	per acre	-	needed per acre

#### TANK MIX INSTRUCTIONS: COTTON

Certain tank mixes may aid in the performance of **GCS Glufosinate 280SL**. No additional surfactant is needed with any tank mix partner. **GCS Glufosinate 280SL** may be applied in tank mix combination with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing. 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 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.

[LibertyLink® Glufosinate-Resistant][Glufosinate-Resistant Cotton- For cotton that is not sensitive to GCS Glufosinate 280SL, products containing s-metolachlor or pyrithiobac-sodium may be tank mixed with GCS Glufosinate 280SL and applied over the top post-emergence to enhance weed control and/or provide residual control.

**All Cotton Types** –Herbicides containing the following active ingredients may be tank mixed with **GCS Glufosinate 280SL** for hooded spray application to enhance weed control and/or provide residual weed control.

# POSTEMERGENCE OVER THE TOP TANK MIX PARTNERS FOR GCS GLUFOSINATE 280SL ON [LIBERTYLINK® GLUFOSINATE-RESISTANT][GLUFOSINATE-RESISTANT] COTTON

quizalofop-p-ethyl	metolachlor	clethodim
sethoxydim	fluazifop-p-butyl	pyrithiobac-sodium
fluazifop-P-butyl and		
fenoxaprop-p-ethyl		

## APPLICATION DIRECTIONS FOR USE ON SOYBEANS

Apply **GCS Glufosinate 280SL** only to soybean designated as [LibertyLink® glufosinate-resistant][glufosinate-resistant]. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

#### APPLICATION RATE AND TIMING

For best results apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Adding ammonium sulfate with **GCS Glufosinate 280SL** may improve weed control if weeds are under stress. For optimal yield, early season weed removal is important.

Applications of **GCS Glufosinate 280SL** on soybeans may be made from emergence up to but not including the bloom growth stage.

Apply **GCS Glufosinate 280SL** to [LibertyLink glufosinate-resistant][glufosinate-resistant] soybeans from emergence up to but not including the bloom growth stage at 22 to 29 fl. oz./A (0.40 lb – 0.53 lb ai/A). See weed chart to determine rate. If environmental conditions prevent a timely herbicide application, a single application of up to 36 fl. oz./A of **GCS Glufosinate 280SL** (0.66 lb ai/A) may be made to soybeans followed by one additional application at maximum of 29 fl. oz./A (0.53 lb ai/A). **GCS Glufosinate 280SL** may be applied alone or in a tank mix application with a residual herbicide to control weeds that have not yet emerged at the time of application. See **RESTRICTIONS FOR USE ON SOYBEANS** below for additional information.

Although timely post applications of **GCS Glufosinate 280SL** can provide complete weed control, residual herbicides at burndown planting, or tank mixed with **GCS Glufosinate 280SL** help ensure optimal weed management, particularly if environmental conditions delay timely post applications. Residual herbicides can also reduce early season weed competition and are a key element of good weed resistance management practices.

Use Rate Ranges - Soybeans			
1 <sup>st</sup> Application 2 <sup>nd</sup> Application Yearly Maximum			
22 – 36 fl. oz./A	22 – 29 fl. oz./A	65 fl. oz./A	
(0.40 lb. – 0.66 lb. ai/A)	(0.40 lb. – 0.53 lb. ai/A)	(1.19 lb. ai/A)	

#### **RESTRICTIONS FOR USE ON SOYBEANS**

- **DO NOT** apply **GCS Glufosinate 280SL** more than once per acre per year as a post-harvest/preharvest burndown application.
- **DO NOT** apply more than once per year as a post-harvest/pre-harvest burndown application.
- Only make post-emergence applications on glufosinate-resistant soybean.
- **DO NOT** apply **GCS Glufosinate 280SL** within 70 days of harvesting soybean seed.
- **DO NOT** apply more than 65 fl. oz. (1.19 lbs. ai) of **GCS Glufosinate 280SL** (including all application timings) on soybeans per acre per year.
- DO NOT make more than two applications of GCS Glufosinate 280SL per year.
- **Retreatment interval**: A second application may only be made a minimum of 10 days after the first application.
- DO NOT apply more than 36 fl. oz./A (0.66 lb. active ingredient/A) of GCS Glufosinate 280SL per acre per application.
- **DO NOT** graze the treated crop or cut for hay.

- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply **GCS Glufosinate 280SL** if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.)
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the "*Rotational Crop Restrictions*" section under the "*Information*" heading of this label for the appropriate rotational crop plant back intervals.

#### TANK MIX INSTRUCTIONS: GLUFOSINATE\_RESISTANT SOYBEANS

Certain herbicide tank mixes may complement **GCS Glufosinate 280SL**. No additional surfactant is needed with any tank mix partner. **GCS Glufosinate 280SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the soybean to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing. 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 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.

TANK MIX PARTNERS FOR GCS GLUFOS	SINATE 280SL IN [LIBERTYLINK® GLUFOSINATE-
RESISTANT][GLUFOSINATE-RESISTANT]	SOYBEANS

quizalofop-p-ethyl	fluazifop-p-buyl and fenoxaprop-	imazamox
	p-ethyl	
chlorimuron	thifensulfuron	sodium salt of fomesafen
clethodim	saflufenacil and imazethapyr	flumiclorac
lactofen	metolachlor	sodium salt of acifluorfen
pyroxasulfone and flumioxazin	s-metolachlor and sodium salt of	saflufenacil
	fomesafen	
cloransulam-methyl	sethoxydim	thifensulfuron and chlorimuron
fluazifop-p-buyl	imazethapyr, ammonium salt	

## APPLICATION DIRECTIONS FOR CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

**GCS Glufosinate 280SL** may be applied to select out susceptible "segregates" i.e., canola, corn, cotton, and soybean plants that are sensitive to glufosinate-ammonium (do not contain the [LibertyLink® glufosinate-resistant[glufosinate-resistant] trait) during seed propagation.

**Canola: GCS Glufosinate 280SL** may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry the [LibertyLink® glufosinate-resistant][glufosinate-resistant] trait and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the [LibertyLink® glufosinate-resistant][glufosinate-resistant] trait will be severely injured or killed if treated with this herbicide. See *Application Use Directions for Use on Canola* for use rates and application timing. See **RESTRICTIONS FOR USE ON CANOLA** for additional information.

**Corn:** Inbred lines (plants not possessing the [LibertyLink® glufosinate-resistant]][glufosinate-resistant] trait) will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of non-sensitive corn segregates, **GCS Glufosinate 280SL** may be applied at 22 fl. oz./A (0.40 lb ai/A) plus AMS at 3 lbs./A (17 lbs./100 gallons) when corn is in the V-3 to V-4 stage of growth (i.e., 3 to 4 developed collars). A second treatment of 22 fl. oz./A (0.40 lb ai/A) plus AMS at 3 lbs./A may be applied when the corn is in the V-6 to V-

7 stage of growth or up to 24" tall. When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs./A (8.5 lbs./100 gallons) to reduce potential leaf burn. See **RESTRICTIONS FOR USE ON CORN** for additional information.

**Cotton: GCS Glufosinate 280SL** may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry the [LibertyLink® glufosinate-resistant][glufosinate-resistant] trait and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the [LibertyLink® glufosinate-resistant][glufosinate-resistant] trait will be severely injured or killed if treated with this herbicide. See *Application Use Directions for Use on Cotton* for use rates and application timing. See **RESTRICTIONS FOR USE ON COTTON** for additional information.

**Soybean:** For the selection of non-sensitive soybean (segregates), **GCS Glufosinate 280SL** may be applied at up to 22 to 36 fl. oz./A (0.40 lb. – 0.66 lb. ai/A) when soybean is in the third trifoliate stage. A second treatment of 22 to 29 fl. oz./A (0.40 lb. – 0.53 lb. ai/A) may be applied up to but not including the bloom growth stage of soybean. See **RESTRICTIONS FOR USE ON SOYBEANS** for additional information.

**SEED DISPOSAL:** To dispose of out of date or otherwise unmarketable seed from plants which have been treated with this product, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

## APPLICATION DIRECTIONS FOR USE ON LISTED TREE, VINE, AND BERRY CROPS

Apply **GCS Glufosinate 280SL** to the tree, vine, and berry orchard crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

#### CROP GROUPS/SUBGROUPS

- Berries:
  - **Bushberry Crop:** Blueberry, highbush; blueberry, lowbush; currant; elderberry; gooseberry; huckleberry
  - Berries (other): Juneberry; lingonberry; salal
- Citrus Crop Group 10-10
  - Orange or tangerine/mandarin, calamondin; citron, citrus hybrids; Mediterranean mandarin; orange, sour; orange; sweet; satsuma darin; tachibana orange; tangerine (manderine); tangelo; tangor, trifoliate orange; cultivars, varieties and/or hybrids of these
  - Lemon or lime Australian desert lime; Australian finger lime; Australian round lime; brown river finger lime; kumquat; lemon; lime; mount white lime; New Guinea wild lime; Russel River lime; sweet lime; Tahiti lime; cultivars, varieties and/or hybrids of these
  - Grapefruit Grapefruit; Japanese summer grapefruit; pummelo; tangelo; uniq fruit; cultivars, varieties and/or hybrids of these.
- **Olives:** all olive varieties

#### • Pome Fruit Crop Group 11-10

Apple; azarole; crabapple; loquat; mayhaw; Hook. & Arn.; medlar; pear; pear, asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these.

• Stone Fruit Crop Group 12-12

Apricot; Apricot, Japanese; Capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine, peach; plum; plum, American; plum, beach, plum, Canada, plum, cherry; plum, Chicksaw; Damson; plum, Japanese; plum, Klamath; plumcot; prune; plumcot; and sloe; cultivars, varieties and/or hybrids of these.

#### • Tree Nuts Crop Group 14-12

Almond; beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; hickory nut; macadamia nut (bush nut); pecan; pistachio; walnut, black and English

• Grapes: all grape varieties (table, wine, and raisins)

#### **APPLICATION RATE AND TIMING**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **GCS Glufosinate 280SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. **DO NOT** retreat these weeds with **GCS Glufosinate 280SL** until sufficient regrowth has occurred.

Apply **GCS Glufosinate 280SL** as a directed spray to control undesirable vegetation in tree, vine, and berries listed on this label. Apply as a broadcast, banded or spot treatment (1,000 sq. ft.) application depending on the situation to control weeds listed under the heading Weeds Controlled in Tree, Vine, and Berry crops. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of **GCS Glufosinate 280SL** may be necessary to control plants generating from underground parts or seed.

Avoid contact of GCS Glufosinate 280SL solution, spray, drift or mist with green bark, stems, or foliage, as injury may occur to trees, vines, and berries. Only trunks with callused mature brown bark may be sprayed unless protected from spray contact by nonporous wraps, grow tubes, or waxed containers. Contact of GCS Glufosinate 280SL with parts of trees, vines, or berries other than mature brown bark can result in serious damage.

#### Application Methods for Broadcast Applications

Apply **GCS Glufosinate 280SL** at the rates listed below for broadcast applications based on weed size and stage of growth.

Weed Size and Stage	GCS Glufosinate 280SL Rate
Weeds < 3" in height	48 fl. oz./A (0.88 lb. ai/A)
Weeds < 6" in height pre-tiller grasses	56 fl. oz./A (1.02 lbs. ai/A)
Weeds > 6" in height, and or/grasses that have	56 – 82 fl. oz./A (1.02 lbs. – 1.50 lbs. ai/A)
tillered	

#### **Application Methods for Banded Spray Applications**

Banded applications may be used using the following formula to calculate the amount of herbicide needed for orchard or vineyard strip sprays:

Band width in inches	v	Pata par Aara Praadaaat	-	Amount of Herbicide
Row width in inches	^	Rate per Acre Broadcast	-	Needed for Treatment

#### Application Methods for Spot or Directed Spray Applications

For spot or directed spray applications by backpack sprayers only (no mechanically pressured handgun applications allowed), mix **GCS Glufosinate 280SL** at 1.7 fl. oz. of product (0.03 lb ai) per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. **DO NOT** make spot or directed spray applications to tree or vine trunk as injury may occur.

#### Weeds Controlled in Tree, Vine, and Berry Crops

Broadleaf Weeds			
Alkali sida	Fleabane, annual	Morningglory, ivyleaf	Smartweed, Pennsylvania

Ammannia, purple	Goosefoot	Morningglory, pitted	Sowthistle, annual
Arrowhead, California	Gromwell, field	Mullein, turkey	Spurge, prostrate
Buckwheat, wild	Groundcherry, cutleaf	Mustard, wild	Starthistle, yellow
Buffalobur	Groundsel, common	Nettle	Sunflower, common
Burclover, California	Henbit	Nightshade, black	Sunflower, prairie
Carpetweed	Jimsonweed	Nightshade, eastern black	Sunflower, volunteer
Chickweed, common	Knotweed	Nightshade, hairy	Swinecress
Chinese, thornapple	Kochia	Pennycress	Thistle, Russian
Cocklebur, common	Lambsquarters,	Pigweed, redroot	Turnip, wild
	common		
Copperleaf, Virginia	Lettuce, miner's	Pineapple weed	Velvetleaf
Cudweed	Lettuce, prickly	Puncturevine	Vervain
Cutleaf	London rocket	Purslane, common	Vetch
Eveningprimrose			
Dodder	Mallow, common	Radish, wild	Virginia copperleaf
Eclipta	Malva (little mallow)	Ragweed, common	Willowherb, panicle
Fiddleneck	Marestail	Ragweed, giant	
Filaree	Mayweed	Redmaids	
Filaree, redstem	Morningglory, entireleaf	Shepherd's Purse	

Grass Weeds			
Barnyardgrass	Crabgrass, smooth	Junglerice	Shattercane
Bluegrass, annual	Cupgrass, woolly	Oat, wild	Sprangletop
Brome, ripgut	Foxtail, giant	Panicum, fall	Stinkgrass
Bromegrass, downy	Foxtail, green	Panicum, Texas	Wheat, volunteer
Canarygrass	Foxtail, yellow	Rush, toad**	Windgrass
Chess, soft	Goosegrass	Ryegrass, annual*	Witchgrass
Crabgrass, large	Johnsongrass, seedling	Sandbur, field	

## **Biennial and Perennial Weeds**

Aster, white heath	Dallisgrass	Mustard, tansy	Rubus spp.
Bindweed, field	Dandelion	Nutsedge, purple	Spurge, leafy
Bindweed, hedge	Dock, curly	Nutsedge, yellow	Thistle, bull
Bluegrass, Kentucky	dogbank, hemp	Onion, wild	Thistle, musk
Bromegrass, smooth	Fescue	Orchardgrass	Torpedograss
Bulrush*	Goldenrod, gray	Paragrass	Vaseygrass
Burdock	Guineagrass	plantain	woodsorrel
Canada thistle	Horsetail	Poison ivy/oak	Yarrow, common
Clover, alsike	Love grass	Quackgrass	
Clover, red	Mugwort	Rocket, yellow	
Clover, white	Mullein, common	Rose, wild	

\*Apply to annual ryegrass prior to 3 inches in height.

\*\*Indicates suppression.

#### **RESTRICTIONS FOR USE ON TREE, VINE AND BERRY CROPS**

- **DO NOT** graze, harvest, and/or feed treated orchard cover crops to livestock.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product aerially.
- **DO NOT** apply this product within 14 days of harvest.
- **DO NOT** make spot spray applications to suckers, as tree injury may occur.

#### Berry Bushes and Stone Fruit Only:

- **DO NOT** apply more than 164 fl. oz. of **GCS Glufosinate 280SL** per acre (3 lbs. ai/A) in a 12 month period.
- For spot applications, **DO NOT** apply more than 3.8 fl. oz. of product per 1,000 sq. ft. (0.06 lbs. a.i.) in a 12 month period.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** apply more than 82 fl. oz. of product per acre (1.5 lbs. ai/A) per application.
- For spot applications, **DO NOT** apply more than 1.9 fl. oz. of product per 1,000 sq. ft. (0.03 lbs. a.i.) per application.
- **Retreatment Interval:** Applications must be a minimum of 28 days apart.

#### Tree Nuts, Vines, Pome Fruit, Citrus and Olives Only:

- **DO NOT** apply more than 246 fl. oz. (4.5 lbs. ai/A) of this product per acre in any calendar year.
- For spot applications, **DO NOT** apply more than 5.64 fl. oz. of product per 1,000 sq. ft. (0.10 lbs ai) in any calendar year.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** apply more than 82 fl. oz. of product per acre (1.5 lbs. ai/A) per application.
- For spot applications, **DO NOT** apply more than 1.9 fl. oz of product per 1,000 sq. ft. (0.03 lbs. a.i.) per application.
- **DO NOT** apply this product within 14 days of harvest.
- Retreatment Interval: Applications must be a minimum of 14 days apart.

#### TANK MIX PARTNER INSTRUCTIONS

**GCS Glufosinate 280SL** does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of **GCS Glufosinate 280SL** or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. **GCS Glufosinate 280SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **GCS Glufosinate 280SL** cannot be mixed with any product containing a label prohibition against such mixing. 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.

#### **Tank Mix Partners**

flumioxazin	simazine	terbacil
oryzalin	diuron	norflurazon
oxyfluorfen		

## APPLICATION DIRECTIONS FOR POTATO VINE DESSICATION

#### APPLICATION RATE AND TIMING

Apply **GCS Glufosinate 280SL** at the beginning of natural senescence of potato vines. Apply 21 fl. oz./A (0.38 lb ai/A). Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20 to 100 gpa) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply **GCS Glufosinate 280SL** with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

#### **RESTRICTIONS FOR USE IN POTATO VINE DESICCATION**

- **DO NOT** apply more than 21 fl. oz. of Generic Crop Science Glufosinate 280 SL (0.38 lbs. ai) to potato vines per acre per year.
- **DO NOT** apply more than 21 fl. oz. of Generic Crop Science Glufosinate 280 SL (0.38 lbs. ai) per acre per application.
- **DO NOT** split this application or apply more than one application per year.
- DO NOT harvest potatoes until 9 days or more after application of GCS Glufosinate 280SL.
- **DO NOT** apply to potatoes grown for seed.

#### **Crop Rotation Restrictions:**

- Canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of **GCS Glufosinate 280SL** as a potato vine desiccant.
- **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale until 30 or more days after an application of **GCS Glufosinate 280SL** as a potato vine desiccant.
- **DO NOT** plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of **GCS Glufosinate 280SL** as a potato vine desiccant.

## FALLOW FIELDS OR POST HARVEST

**GCS Glufosinate 280SL** may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **Weed Control for Row Crops** section of this label. Applications may be made in fallow fields or post-harvest of any crop listed on this label.

Apply **GCS Glufosinate 280SL** at 22 or 29 fl. oz./A (0.40 lb - 0.53 lb ai/A) to fallow fields to control specific weeds. **GCS Glufosinate 280SL** must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are specified with **GCS Glufosinate 280SL** to enhance total weed control. When using **GCS Glufosinate 280SL** in tank mix combinations, follow the precautions and directions for use of the most restrictive label. See the **Application and Mixing Procedures** section of this label for additional information on how to apply this product. See the **Information** section of this label for rotational crop restrictions.

### **RESTRICTIONS FOR USE ON FALLOW FIELDS OR POST HARVEST**

- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. ai/A) per application.
- **DO NOT** make more than 3 applications per year.
- **DO NOT** make sequential applications sooner than 14 days apart.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs/A) per year.

## FARMSTEADS, RECREATIONAL, AND PUBLIC AREAS

When applied as listed, **GCS Glufosinate 280SL** controls undesirable plant vegetation in non-crop areas including farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, roadsides, schools, parking lots, tank farms, pumping stations, and parks.

#### **RESTRICTIONS FOR USE ON FARMSTEADS, RECREATIONAL AND PUBLIC AREAS**

- **DO NOT** apply more than 80 fl. oz./A (1.46 lb. ai/A) per application.
- **DO NOT** apply more than 3 applications per year.
- **DO NOT** apply more than 240 fl. oz./A (4.50 lbs. ai/A) per year.
- **DO NOT** make sequential applications sooner than 14 days apart.
- DO NOT apply to home/residential use sites.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. Protect against direct sunlight.

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

#### CONTAINER HANDLING:

#### [NONREFILLABLE CONTAINER]

**[Nonrefillable Plastic Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. ]

**[Nonrefillable Plastic Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.]

#### [REFILLABLE CONTAINER]

[**Refillable plastic 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 percent 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.]

#### CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Generic Crop Science, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and

User, and Buyer and User agree to hold Generic Crop Science, LLC and Seller harmless for any claims relating to such factors.

Generic Crop Science, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Generic Crop Science, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GENERIC CROP SCIENCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Generic Crop Science, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF GENERIC CROP SCIENCE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF GENERIC CROP SCIENCE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.** 

Generic Crop Science, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Generic Crop Science, LLC.

[Liberty and LibertyLink are registered trademarks of Bayer CropScience].

[All trademarks are the property of their respective owners.]

[Farmers First is a trademark of Farmers Business Network, Inc.]

[The sprout logo, "FBN", and "Farmers Business Network" are registered service marks of Farmer's Business Network, Inc.]

[<BRAND><sup>™</sup> or <sup>®</sup> is a trademark of <TRADEMARK HOLDER>.]

{Note to Reviewer: The mention of the product name throughout this Master Label may be updated/replaced with the term "This product" on the Market Label.}

[www.FBN.com][FBN.com]	FARMERS {any co	olor}
[Available at <u>www.FBN.com</u> ]		
[844-200-3276][844-200-FARM]	FARMERS BUSINESS NETWORK"	
[(866)396-0465]		

{Optional graphics to be used on any panel of final market label:}

	SCAN ME	
FARMERS FIRST	E	
<b>FARMERS</b> BUSINESS NETWORK	<b>FBN</b> <sup>°</sup>	<b>FBN</b> <u><i>Direct</i></u>
	[Herbicide]	

## {Sublabel B – Non-Crop}

{Note to reviewer: {text} in braces is for reviewer info only; [text] in brackets denotes optional text.or final label text placement.}

{BOOKLET FRONT PANEL LANGUAGE}

GLUFOSINATE-AMMONIUM GROUP 10

HERBICIDE

# **GCS GLUFOSINATE 280SL**

{ABNs:} [ Farmer's First<sup>™</sup> Glufosinate 2.34SL; Farmer's First<sup>™</sup> Glufosinate 280SL; Willowood Glufosinate 2.34SL]

For Nonselective Weed Control of Emerged Weeds on Labeled Sites

ACTIVE INGREDIENT:	
Glufosinate ammonium*	24.5%**
OTHER INGREDIENTS:	75.5%
TOTAL:	100.0%
*CAS Number 77182-82-2	
**Equivalent to 2.34 pounds of active ingredient per U.S. gallon.	

## KEEP OUT OF REACH OF CHILDREN WARNING – AVISO

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

[See] [inside] [label] [booklet] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

EPA Reg. No. 94730-UO

EPA Est. No.

Manufactured for: Generic Crop Science, LLC 1887 Whitney Mesa Drive #9740 Henderson, NV 89014

**Net Contents:** 

## {LANGUAGE INSIDE BOOKLET}

FIRST AID		
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	• Remove contact lenses, if present, after the first 5 minutes, then continue	
	rinsing eye.	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF ON SKIN OR	Take off contaminated clothing.	
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice.	
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>	
	• Do not induce vomiting unless told to by a poison control center or doctor.	
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
HOT LINE NUMBER		
Have the product container or label with you when calling a poison control center or doctor, or going for		
treatment. For general information on product use, etc., call the National Pesticides Information Center		
(NPIC) at 1-800-858-7378. For emergencies, call the poison control center 1-800-222-1222.		

**NOTE TO PHYSICIAN:** If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible followed by charcoal and sodium sulfate administration.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

Causes substantial but temporary eye injury. **DO NOT** get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. Harmful if swallowed. Wash hands thoroughly with soap before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 14 mils
- Shoes and socks
- Protective eyewear (goggles, face shield or safety glasses)

Mixers/loaders supporting aerial applications must wear a minimum of a NIOSH-approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection. For more information, see <u>www.epa.gov/pesticide-respirators</u>.

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

## USER SAFETY RECOMMENDATIONS

#### Users should:

 Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENGINEERING CONTROL STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (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.

## **ENVIRONMENTAL HAZARDS**

**DO NOT** apply directly to water, or to areas where surface water is present. **DO NOT** apply to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

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

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

## PHYSICAL OR CHEMICAL HAZARDS

**DO NOT** use with or store near oxidizing agents since hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

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

**DO NOT** use this product until you have read the entire label. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### In the State of New York Only: Not For Use In Nassau and Suffolk Counties.

#### AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton<sup>®</sup> ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The application for trimming and edging, industrial, recreational and public areas, and farmsteads are not within the scope of the WPS.

# DO NOT enter treated areas without protective clothing until sprays have dried.

# MANDATORY SPRAY DRIFT MITIGATION

- When making applications via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When making applications via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, do not release spray at a height greater than 10 ft above the target canopy, unless a greater application height is necessary for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or target canopy. Set boom to lowest effective height over the target pest or target canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

# **SPRAY DRIFT ADVISORIES**

# POLLINATOR ADVISORY STATEMENT

This product contains an herbicide. Follow all label directions and precautions to minimize potential offtarget exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

## IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

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

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- 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.

## **Controlling Droplet Size – Aircraft**

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length Longer booms increase drift potential. Therefore, a shorter boom length is recommended.
- Application Height Application more than 10 ft. above the canopy increases the potential for spray drift.

## **BOOM HEIGHT**

Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

## **DRIFT REDUCTION TECHNOLOGY (DRT)**

The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: <u>https://www</u>.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies

## WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator needs to be familiar be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

## **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature 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.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

# **PRODUCT INFORMATION**

This product is a nonselective water-soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds. This product will also control certain woody species. Plants that have not yet emerged at the time of application will not be controlled. THOROUGH SPRAY COVERAGE IS IMPORTANT. Visual effects and control from application of this product occur within 2 to 4 days after application under good growing conditions.

This product is nonselective and will injure or kill all green vegetation contacted by the spray. Avoid all contact with foliage or green tissue of desirable vegetation. Avoid direct spray contact with green, thin, or uncalloused bark of desirable vegetation or plant injury may result. If desirable vegetation is contacted, rinse the sprayed portion with water immediately.

This product works best when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest rate specified. Refer to the How to Apply section of this label.

# USE SITES AND APPLICATION DIRECTIONS

When applied as specified in this label, this product controls undesirable vegetation in the areas listed in the Where to Apply section below. Refer to the How to Apply section of this labeling for specific rates and a list of weeds controlled. Applications may be made on a broadcast, banded or spot treatment (1,000 sq. ft.) basis depending on the situation. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from underground parts or seed.

# **Use Precautions**

- This product is rainfast in a minimum of one-half hour and an average of 4 hours after application depending upon weed species, environmental conditions, and herbicide application rate.
- Plants may be safely planted into areas treated with this product after spray has dried.
- Contact with spray or spray drift of this product may cause severe injury or destruction of certain desirable plants, especially herbaceous species including bedding plants or direct seeded annual and perennial flowers. The use of spray shields that limit the plant exposure to this product is highly advised when applying this product near desirable plants.

# **Use Restrictions**

- DO NOT apply beyond runoff.
- **DO NOT** spray during windy conditions.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation.
- DO NOT allow grazing of vegetation treated with this product.
- **DO NOT** apply this product as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.

- **DO NOT** exceed maximum use rate of 82 fl. oz./A (1.5 lbs. ai/A) for broadcast or boom applications.
- **DO NOT** make more than 3 applications per year.
- DO NOT make more than 2 applications per year on Dormant Bermudagrass.
- For spot applications, **DO NOT** apply more than 2.0 fl. oz. of product (0.036 lb. ai) per gallon of spray solution per 1,000 sq. ft.
- **DO NOT** apply beyond runoff.
- **DO NOT** apply more than 246 fl. oz. (4.50 lbs. ai/A) of this product per acre per year to non-crop areas except on bermudagrass.
- On dormant bermudagrass **DO NOT** apply more than 82 fl. oz. (1.5 lbs. ai) per acre per year.
- For spot applications, **DO NOT** apply more than 5.64 fl. oz. of product (0.10 lb. ai) per 1,000 sq. ft. per year to non-crop areas except on bermudagrass.
- On dormant bermudagrass **DO NOT** apply more than 1.9 fl. oz of product (0.03 lb. a.i.) per 1,000 sq. ft. per year.
- Minimum re-treatment interval is 5 days.

## WHEN TO APPLY

This product is a foliar-active material. Best results are obtained when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest rate listed. Refer to the How to Apply section of this label.

Apply this product at the rate specified in the How to Apply section of this label. Repeat applications of this product or tank mixes of this product plus one or more appropriate residual herbicide(s) listed on this label will be needed to control weeds emerging from underground parts or seeds.

## HOW TO MIX

This product must be mixed with water to make a finished spray solution as follows:

- 1. Fill the spray tank with the required amount of water.
- 2. Add the proper amount of this product, then mix thoroughly.

## HOW TO APPLY

## **Spot or Directed Applications**

Mix 0.5 to 2.0 fl. oz. (0.009 - 0.036 lb. ai) per gallon of spray solution (24 to 82 fl. oz./A (0.44 to 1.5 lbs. ai/A)) and apply 1 gallon of spray solution to 1,000 square feet to actively growing weeds. Determine proper use rate based on weed size in Table 1. Larger weeds will require a higher use rate.

## Table 1: USE RATES

Apply this product at the rates listed below for broadcast applications based on weed size and stage of growth.

		Rate of this product (Per Acre)
Easily Controlled Weeds < 3 in height*	0.5 fl. oz. (0.009 lb. ai)	24 fl. oz./A (0.44 lb. ai)
Weeds < 3 in height	1.0 fl. oz. (0.018 lb. ai)	48 fl. oz./A (0.88 lb. ai)

Weeds < 6 in height pre-tiller grasses	1.25 fl. oz. (0.023 lb. ai)	56 fl. oz./A (1.0 lb. ai)
Weeds > 6 in height and/or grasses that	1.25 to 2.0 fl. oz. (0.023 to 0.036	56-82 fl. oz./A (1.0 to 1.5 lbs.
have tillered	lb. ai)	ai)

\*See Weeds Controlled Table below for details.

For spot or directed spray applications by backpack sprayers, mix this product at 0.5 to 2.0 fl. oz. of product (0.009 to 0.036 lb. ai) per gallon of water. Larger and more difficult to control weeds require a higher use rate. When using the per gallon rate, calibrate sprayers to deliver 1 gallon of spray solution per 500 to 1,000 square feet. Thorough spray coverage of weeds is necessary to maximize weed control. Spray coverage needs to be uniform, but **DO NOT** spray to the point of runoff. Thoroughly clean the sprayer following use. **DO NOT** make spot or directed spray applications to desired plant foliage or stems as injury may occur.

## **Broadcast or Boom Applications**

Apply 24 to 82 fl. oz./A (0.44 to 1.5 lbs. ai/A) depending upon the weed and stage of growth as shown in Table 1. Use a minimum of 40 gallons of water per acre with a minimum of 30-psi spray pressure. Refer to the Weeds Controlled table.

#### **Aerial Applications**

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage.

#### **Tank Mixtures**

This product is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate. Follow the more restrictive label limitations and use precautions for each product. No label dosage rates may be exceeded. 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.

Tank mix applications of this product plus the following herbicides can be used for broad-spectrum postemergence and preemergence weed control.

Imazapyr	Pendimethalin
Prodiamine	Oryzalin
Isoxaben	Dicamba DGA salt
Oxadiazon	

A compatibility test must be conducted with any potential tank mix partner with this product, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below:

- 1. Fill the jar three-quarters full with water.
- Add the appropriate amount of herbicide in the following order: a) dry flowable, b) wettable powder, c) aqueous suspensions, d) flowables, e) liquids and f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.
- 3. After adding all ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oil film on the jar or other signs of incompatibility.
- 4. If the compatibility test shows signs of incompatibility, **DO NOT** tank mix the product tested with this product.

# **Use Notes**

1. Use higher rates within the specified rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions for example drought or when average temperatures are below 50°F.

The addition of 8.5 to 17 pounds of ammonium sulfate (spray grade) per 100 gallons of water (1 to 2% by weight) or 2 to 4 pounds of ammonium sulfate per acre may improve the level of weed control.

# **Use on Woody Species**

When applied as specified, this product will provide control, partial control, or suppression of certain perennial woody weed species. Apply 27 to 82 fl. oz./A (0.5 lbs. ai - 1.5 lb. ai/A). Use the higher listed rates per acre of this product when conditions are not optimum for spray penetration, for example when vegetation growth is heavy or dense. Lower rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

Common Name	Scientific name
blackberry	Rubus spp.
deer brush	Ceanothus integerrimus
Douglas fir	Pseudotsuga menziesii
gallberry	llex spp.
hazel	Corylus spp.
honeysuckle	Lonicera spp.
huckleberry	Gaylussacia spp.
maple	Acer spp.
multiflora rose	Rosa multiflora
oak	Quercus spp.
pine	Pinus spp.
poison ivy	Toxicodendron radicans
poison oak	Toxicodendron toxicarium
roundleaf greenbriar	Smilax rotundifolia
salmonberry	Rubus spectabilis
sweet gum	Liquidambar styraciflua
sumac	Rhus spp.
thimbleberry	Rubus parviflorus
trumpetcreeper	Campsis radicans
vine maple	Acer circinatum
Western red cedar	Thuja plicata

# WHERE TO APPLY

## **Trimming and Edging**

Use this product for trimming and edging landscapes areas including: around individual trees and shrubs, buildings, landscape beds, foundations, fences, in dry ditches and canals, driveways, paths, sidewalks, roads, parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps; around potted plants and other objects in a nursery setting. For control of weeds emerging from seed, use this product in a tank mix with a preemergence herbicide. If spraying in areas adjacent to desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

## Industrial, Recreational and Public Areas

When applied as a spot or directed spray application, this product controls annual and perennial weeds listed on this label in areas including:

Airfields, airports, alleys, lanes, paths, trails, access roads, around commercial or industrial structures or outbuildings, around farm and ranch structures and outbuildings, around ornamental gardens, around ornamental trees and shrubs (including Christmas trees), bare ground, beaches\*, campgrounds, construction sites, ditch banks, drive-in theaters, driveways and ramps, dry ditches and canals, fences and

fencerows, firebreaks, golf courses\*, gravel yards, habitat restoration and management areas, highways and roadsides (including aprons, medians, guardrails and right of ways), industrial plant sites, industrial areas, lumber yards, landscapes and mulched areas, natural areas, parking areas, parks, paved areas, petroleum and other tank farms, pumping installations, pipeline, power, telephone and utility rights-of-way, power stations, preplant to turf and ornamental plants, railroad rights-of way, recreation areas, refineries, resorts, schools, sidewalks, sports areas, storage areas, substations, tennis courts, shelter belts, uncropped farmstead areas, vacant lots, walkways, wastelands, wildlife habitat areas.

### \*Not for use in California

This product may be used to improve line-of-sight at railroad crossings and reduce the need for mowing along rights-of-way, and wayside structures. Refer to the *How to Apply* section of this labeling for appropriate application rates to control specific weeds.

## Dormant Bermudagrass

Use this product to control winter annual weeds in well-established ornamental dormant hybrid or common Bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply this product at a rate of 56 to 82 fl. oz./A (1.0 - 1.5 lbs. ai/A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled section of this label for selecting rates. Applications of this product may also be used to suppress or control undesirable biennial or perennial weeds. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed green-up may occur.

## **Restrictions – Dormant Bermudagrass:**

- **DO NOT** apply more than 82 fl. oz. of this product (1.5 lbs. ai) per application.
- **DO NOT** apply more than 82 fl. oz. of this product (1.5 lbs. ai) per acre per year for this use.
- **DO NOT** make more than 2 applications per year if using a reduced rate.
- DO NOT apply to residential lawns.

## **Ornamentals and Christmas Trees or Greenhouses and Shade Houses**

When applied as specified by this label, this product may be used for the control of undesirable vegetation in site preparation prior to planting, around and within shade and greenhouses, and as a directed spray around containers and field-grown established ornamentals and Christmas trees. Refer to the **Use Restrictions** of this labeling for guidance on application rates.

## **Restrictions – Ornamentals and Christmas Trees:**

- **DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result.
- **DO NOT** apply this product as an over the top broadcast spray in ornamentals and shade or Christmas trees.

**Directed spray application:** Apply this product as a directed spray to control in-row weeds in field-grown woody plants. Refer to the How to Apply section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting.

**Site preparation application:** This product may be used for pre-plant site preparation for the control of annual and perennial weeds listed on this label, in ornamental and Christmas tree plantings. Ornamentals and Christmas trees may be planted into the treated area after the restricted entry interval (REI) of 12 hours has elapsed. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

**Greenhouse and Shade House Applications:** This product may be used to control weeds in greenhouses and shade houses. **Apply as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation.** Refer to the **Use Restrictions** of this labeling for guidance on application rates.

## **Restrictions – Greenhouse and Shade House:**

• **DO NOT** use in greenhouses or shade houses containing edible crops.

• Air circulation fans must be turned off during application.

**Conservation Reserve Program (CRP)\*:** This product can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres. For selective applications with broadcast spray equipment, apply 48 to to 56 fl. oz./A (0.88 to 1.0 lb. ai/A) of this product in early spring before desirable CRP grasses, including crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant. Refer to the **Use Restrictions** of this labeling for guidance on application rates.

\*Not for use in California

**Wildlife Food Plots**\*: This product may be used as a site preparation treatment 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 7 days after applying this product before tilling. Refer to the **Use Restrictions** of this labeling for guidance on application rates.

\*Not for use in California

# FARMSTEADS

When applied as specified, this product controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, and along fences. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

## **Restrictions - Farmsteads:**

• **DO NOT** allow grazing of treated vegetation.

WEEDS CONTROLLED		
Alfalfa+	Gallinsoga, small flower+	Pokeweed+
Alkali sida	Geranium, cutleaf+	Puncturevine
Amaranth, Palmer+	Goosefoot	Purslane, common*1
Ammannia, purple	Goosegrass*1	Pusley, Florida+
Anoda, spurred*1	Goldenrod, gray	Quackgrass
Arrowhead, California	Gromwell, field	Radish, wild
Artichoke, Jerusalem+	Groundcherry, cutleaf	Ragweed, common
Aster, white heath	Groundsell, common	Ragweed, giant
Barley, volunteer*1	Guineagrass	Redmaids
Barnyardgrass*	Hempnettle+	Rocket, yellow
Beggarweed, Florida+	Henbit	Rose, wild
Bermudagrass+	Horsenettle, Carolina*1	Rubus spp.
Bindweed, field	Horsetail	Rice, red+
Bindweed, hedge	Johnsongrass, rhizome+	Rice, volunteer+
Black medic+	Johnsongrass, seedling*1	Rush, toad***
Bluegrass, annual	Jimsonweed	Ryegrass, annual**
Bluegrass, Kentucky	Junglerice*1	Sandbur, field
Blueweed, Texas+	Knotweed*1	Senna coffee+

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Brome, ripgut Bromegrass, downy Bromegrass, smooth Buckwheat, wild Buffalobur Bulrush\*\*\* Burclover, California Burcucumber+ Burdock Bursage, woolyleaf+ Canarygrass Carpetweed Catchweed bedstraw (cleavers)\*1 Chess, soft Chickweed, common Chickweed, mouse-ear+ Chinese thornapple Clover, Alsike Clover, red Clover, white Cocklebur, common Copperleaf, hophornbeam+ Copperleaf, Virginia Corn, volunteer+ Cotton, volunteer+ Crabgrass, large\*1 Crabgrass, smooth\*1 Croton, tropic\*1 Croton, woolly\*1 Cudweed Cupgrass, woolly Cutleaf eveningprimrose Dallisgrass Dandelion Devil's claw\*1 Dock, curly Dock, smooth+ Dodder Dogbane (hemp) Eclipta Fescue Fleabane, annual Fiddleneck

Kochia Ladysthumb+ Lambsquarters, common Lettuce, miners Lettuce, prickly London rocket Lovegrass Mallow, common Mallow, Venice+ Malva (little mallow) Marestail Marshelder, annual+ Mayweed Milkweed, common\*\*\*+ Milkweed, honeyvine\*\*\*+ Millet, wild proso+ Millet, proso volunteer+ Morningglory, entireleaf Morningglory, ivyleaf Morningglory, pitted Morningglory, sharppod\*1 Morningglory, smallflower+ Morningglory, tall+ Muhly, wirestem\*\*\*+ Mullein, common Mullein, turkey Mustard, tansy Mustard. wild Nettle Nightshade, black Nightshade, eastern black Nightshade, hairy Nightshade, silverleaf+ Nutsedge, purple Nutsedge, yellow Oat, wild\*1 Onion, wild Orchardgrass Panicum, fall\*1 Panicum, Texas Paragrass Pennycress Pigweed, redroot\*1

Shattercane Shepherd's Purse Sicklepod (java bean)+ Sida, prickly+ Signalgrass, broadleaf\*1 Smartweed, Pennsylvania Smellmelon+ Sowthistle, annual Sowthistle, perennial+ Soybean, volunteer+ Sprangletop Spurge, prostrate\*1 Spurge, leafy Spurge, spotted\*1 Starbur, bristly+ Starthistle, yellow Stinkgrass Sunflower, common Sunflower, prairie\*1 Sunflower, volunteer Swinecress Thistle, bull Thistle, Canada Thistle, musk Thistle, Russian Timothy+ Torpedograss Turnip, wild Vaseygrass Velvetleaf\*1 Vervain Vetch Waterhemp, common+ Waterhemp, tall+ Wheat, volunteer Willowherb, panicle Windgrass Witchgrass Woodsorrel Wormwood, biennial+ Yarrow, common

Filaree	Pigweed, prostrate*1
Filaree, redstem	Pigweed, spiny*1
Foxtail, bristly+	Pigweed, smooth*1
Foxtail, giant	Pigweed, tumble*1
Foxtail, green	Pineapple weed
Foxtail, robust purple+	Plantain
Foxtail, yellow*1	Pointsettia, wild+
Gallinsoga, hairy+	Poison ivy/oak

+Not for use in CA <sup>1</sup>Use rate in CA 24 fl. oz./A (0.44 lb. ai) \*easily controlled species \*\*apply to annual ryegrass prior to 3 inches in height \*\*\*indicates suppression only

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. Protect against direct sunlight.

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

# **CONTAINER HANDLING:**

## [NONREFILLABLE CONTAINER]

**[Nonrefillable Plastic Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.]

**[Nonrefillable Plastic Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration. ]

# [REFILLABLE CONTAINER]

[**Refillable Plastic 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 percent 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. Then offer for recycling if available or

reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.]

## CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Generic Crop Science, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Generic Crop Science, LLC and Seller harmless for any claims relating to such factors.

Generic Crop Science, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Generic Crop Science, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GENERIC CROP SCIENCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Generic Crop Science, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF GENERIC CROP SCIENCE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF GENERIC CROP SCIENCE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.** 

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[Roundup is a registered trademark of Monsanto.]

[All trademarks are the property of their respective owners.]

[Farmers First is a trademark of Farmers Business Network, Inc.]

[The sprout logo, "FBN", and "Farmers Business Network" are registered service marks of Farmer's Business Network, Inc.]

[<BRAND><sup>™</sup> or <sup>®</sup> is a trademark of <TRADEMARK HOLDER>.]

{Note to Reviewer: The mention of the product name throughout this Master Label may be updated/replaced with the term "This product" on the Market Label.}

{Optional graphics to be used on any panel of final market label:}

