



U.S. ENVIRONMENTAL PROTECTION AGENCY

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

EPA Reg. Number:

33270-35

Date of Issuance:

4/29/15

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Glufosinate 280 Herbicide

Name and Address of Registrant (include ZIP Code):

United Suppliers, Inc  
30473 260<sup>th</sup> Street  
PO Box 538  
Eldora, IA 50627

Mail To

Ms. Jane M. Miller, Agent  
Biologic Consulting, Inc.  
115 Obtuse Hill Road  
Brookfield, CT 06804

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

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

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

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

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Heather A. Garvie, Product Manager 24  
Fungicide Herbicide Branch, Registration Division (7505P)

Date:

4/29/15

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 33270-35.”
3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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

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

- Basic CSF dated 12/3/14
- Alternate CSF#1 dated 12/3/14

If you have any questions, please contact Banza Djapao at 703-305-7269 or by email at [djapao.banza@epa.gov](mailto:djapao.banza@epa.gov).

Enclosure: Stamped label; Product Chemistry Reviews DP# 425498 & 426261 dated 3/16/15 & 3/26/15 respectively; Similarity Clinic Review dated 1/2/15

**GROUP 10 HERBICIDE**

**GLUFOSINATE 280 Herbicide**

A non-selective herbicide for post emergence weed control in listed tree, vine and berry crops. Glufosinate 280 Herbicide may be used for weed control in non-LibertyLink cotton when applied with a hooded sprayer. Glufosinate 280 Herbicide may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional variety of sweet corn cotton. Glufosinate 280 Herbicide may also be applied for potato vine desiccation.

**ACTIVE INGREDIENT:**

Glufosinate-ammonium (CAS No. 77182-82-2)..... 24.5%\*\*  
OTHER INGREDIENTS..... 75.5%  
TOTAL ..... 100.0%

\*\*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.)

FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Inside Booklet.

**Manufactured for:**  
**United Suppliers, Inc.**  
**30473 260<sup>th</sup> St.**  
**Eldora, IA 50627**

**EPA Reg. No. 33270-GL**  
**EPA Est. No.**

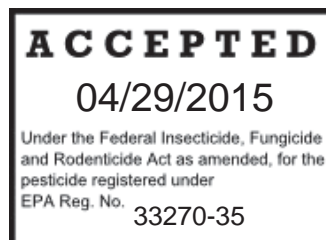
**Net Contents:**

**FIRST AID**

<b>IF SWALLOWED:</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact the National Poison Control Center, 1-800-222-1222, day or night, for emergency medical treatment information.



**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING**

May be fatal if absorbed through skin. Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield, safety glasses), coveralls over short sleeved shirt and short pants, chemical resistant footwear, socks, and chemical resistant gloves (barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton, selection category C). Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical resistant headgear. When cleaning equipment add a chemical resistant apron.

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are listed below.

**Applicators and other handlers must wear:**

- Coveralls worn over short-sleeved shirt and short pants;
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Chemical resistant footwear plus socks;
- Protective eyewear (goggles, face shield or safety glasses).
- Wear a chemical resistant apron when mixing/loading and cleaning equipment.

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.

Mixers/loaders supporting aerial applications must wear a particulate respirator with an N,R, or P filter, NIOSH approval prefix TC 84-A or a powdered air purifying respirator (NIOSH approval number prefix TC-21C).

When mixing and loading wear a chemical-resistant apron. For overhead exposure wear chemical-resistant headgear. When cleaning equipment wear a chemical-resistant apron.

**Engineering Control Statement:**

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

## **USER SAFETY RECOMMENDATIONS**

### **Users should:**

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.
- 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.

## **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 wash waters.

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

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

## **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 exception of

sweet corn irrigation activities which have a 4 day REI. 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 such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils; chemical resistant footwear plus socks; protective eyewear (goggles, face shield or safety glasses).

### **IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT**

Glufosinate 280 may be applied as a burndown treatment prior to planting or prior to emergence of any conventional variety of sweet corn or cotton. Glufosinate 280 may be applied to conventional cotton not tolerant to the active ingredient in Glufosinate 280 using a hooded sprayer.

**Applications to trees, vines and berries** should avoid contact of Glufosinate 280 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 brown bark should be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Glufosinate 280 with parts of trees, berries or vines other than mature brown bark can result in serious damage.

### **PRODUCT INFORMATION**

Glufosinate 280 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 trees, vines and berries. Glufosinate 280 may also be applied for potato vine desiccation. Glufosinate® 280 may also be applied as a broadcast burndown application before planting or prior to emergence of any conventional variety of sweet corn or cotton.

Glufosinate 280 is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply Glufosinate 280 to actively growing weeds as described in the Weed Control Recommendations 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.

- Glufosinate 280 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.

- Applications should be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.

- 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 such as 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 Glufosinate 280 are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

<b>Rotational Crop</b>	<b>Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)</b>
Sweet Corn, Cotton	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 Glufosinate 280 applications to potatoes.

### **Integrated Weed Management**

The active ingredient in Glufosinate 280 is glufosinate-ammonium, which is a glutamine synthetase inhibitor (Group 10). Integrated weed management guidelines promote an economically viable, environmentally sustainable and socially acceptable weed control program regardless of the herbicide(s) used. The highlights of a successful integrated weed management program include:

1. Correctly identify weeds and look for trouble areas within field to identify resistance indicators.
2. Rotate crops.
3. Start the growing season with clean fields.
4. Rotate herbicide modes of action by using multiple modes of action during the growing season and apply no more than two applications of a single herbicide mode of action to the same field in a two-year period. One method to accomplish this is to rotate herbicide tolerant trait systems.
5. Apply listed rates of herbicides to actively growing weeds at the correct time with the right application techniques.
6. Control any weeds that may have escaped the herbicide application.

7. Thoroughly clean field equipment between fields.

Contact your local agronomic advisor for more specific information on integrated weed management for your area.

### 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.

Broadleaf Weed Control					
Weed Species	Maximum Weed Height or Diameter (Inches)		Weed Species	Maximum Weed Height or Diameter (Inches)	
	22 fl oz/A	29 fl oz/A		22 fl oz/A	29 fl oz/A
Amaranth, Palmer	NR	4	Morningglory, sharppod	2	4
Anoda, spurred	3	5	Morningglory, smallflower	4	6
Beggarweed, Florida	4	5	Morningglory, tall	6	8
Black medic	5	7	Mustard, wild	4	6
Blueweed, Texas	5	7	Nightshade, black	4	6
Buckwheat, wild	6	7	Nightshade, eastern black	6	8
Buffalobur	6	7	Nightshade, hairy	6	8
Burcucumber	6	10	Pennycress (stinkweed)	4	6
Catchweed bedstraw (cleavers)	2	4	Pigweed, redroot	3	4
Carpetweed	4	6	Pigweed, prostrate	3	4
Chickweed, common	6	8	Pigweed, spiny	3	4
Cocklebur, common	6	14	Pigweed, smooth	3	4
Copperleaf, hophornbean	4	6	Pigweed, tumble	3	4
Cotton, volunteer <sup>1</sup>	6	8	Puncturevine	4	6
Croton, tropic	3	5	Purslane, common	2	4
Croton, woolly	2	4	Pusley, Florida	<b>S</b>	3
Eclipta	4	6	Ragweed, common	6	10
Devil's claw	2	4	Ragweed, giant	6	12
Fleabane, annual	6	8	Senna coffee	4	6
Galinsoga, hairy	6	8	Sesbania, hemp	6	8
Galinsoga, smallflower	6	7	Shepherd's-purse	6	8
Groundcherry, cutleaf	4	5	Sicklepod (java bean)	4	6
Geranium, cutleaf	4	6	Sida, prickly	4	5
Hempnettle	4	6	Smartweed,	6	14



			Pennsylvania		
Horsenettle, Carolina <sup>2</sup>	2	4	Smellmelon	4	6
Jimsonweed	6	10	Sowthistle, annual	6	8
Knotweed	3	5	Soybeans, volunteer <sup>1</sup>	6	8
Kochia	4	6	Spurge, prostrate	2	4
Ladysthumb	6	14	Spurge, spotted	2	4
Lambsquarters, common	4	6	Starbur, bristly	4	6
Mallow, common	4	6	Sunflower, common	6	14
Mallow, Venice	6	8	Sunflower, prairie	3	5
Marestail	<b>S</b>	6-12	Sunflower, volunteer	6	10
Marshelder, annual	4	6	Thistle, Russian <sup>2</sup>	<b>S</b>	6-12
Morningglory, entireleaf	6	8	Velvetleaf	3	4
Morningglory, ivyleaf	6	8	Waterhemp, common	NR	5
Morningglory, pitted	6	8	Waterhemp, tall	NR	5

**S** Indicates suppression

<sup>1</sup> Volunteer LibertyLink crops from the previous season will not be controlled.

<sup>2</sup> May require sequential applications for control.

NR Not Recommended

Grass Weed Control					
Weed Species	Maximum Weed Height or Diameter (Inches)		Weed Species	Maximum Weed Height or Diameter (Inches)	
	22 fl oz/A	29 fl oz/A		22 fl oz/A	29 fl oz/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>	<b>S</b>	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

**S** Indicates suppression

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

- 2 For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to tiller initiation.
- 3 A sequential application may be necessary for control.

<b>Biennial and Perennial Weeds</b>			
For control of the biennial and perennial weeds listed below, apply tank mix partners or sequential applications of Glufosinate 280 (22 fl oz/A followed by 22 fl oz/A).			
Alfalfa	Burdock	Goldenrod, gray*	Orchardgrass
Artichoke, Jerusalem	Bursage, woolyleaf	Johnsongrass, rhizome	Poinsettia, wild
Bermudagrass	Chickweed, mouse-ear	Milkweed, common*	Pokeweed
Bindweed, field	Clover, Alsike	Milkweed, honeyvine*	Quackgrass*
Bindweed, hedge	Clover, red	Muhly, wirestem*	Sowthistle, perennial
Bluegrass, Kentucky	Dandelion	Nightshade, silverleaf	Thistle, bull
Blueweed, Texas	Dock, smooth	Nutsedge, purple*	Thistle, Canada
Bromegrass, smooth	Dogbane, hemp*	Nutsedge, yellow*	Timothy*
			Wormwood, biennial

\*Suppression Only

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

#### **APPLICATION AND MIXING PROCEDURES**

**Ground Application:** Glufosinate 280 should be applied broadcast in a minimum of 15 gallons of water per acre. Under dense weed/crop canopies, 20 to 40 gallons of water per acre should be used so that thorough spray coverage will be obtained. Apply Glufosinate 280 using nozzles and pressures that generate MEDIUM (about 250 to 350 microns) spray droplets category as reported by the nozzle manufacturer and in accordance to ASABE S 572. Do not use nozzles and pressures that result in COARSE sprays. FINE sprays should also be avoided to minimize spray drift risk. Boom height should be based on nozzle manufacturer recommendations. See the Spray Drift Management section of this label for additional information on proper application of Glufosinate 280.

**Aerial Application:** Poor coverage will result in reduced weed control. For optimal weed control, apply Glufosinate 280 in a minimum of 10 gallons per acre. Apply Glufosinate 280 using nozzles and pressures that generate MEDIUM (about 300 to 400 microns) spray droplets category as reported by the nozzle manufacturer and in accordance to ASABE S 572 based upon the selected air speed. Do not use nozzles and pressures that result in COARSE sprays. FINE sprays should also be avoided to minimize spray drift risk. See the Spray Drift Management section of this label for additional information on proper application of Glufosinate 280.

## COMPATIBILITY TESTING

If Glufosinate 280 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 a 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 Glufosinate® 280 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.
6. Let the mixture stand for 15 minutes, and evaluate the solution for 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:** Glufosinate 280 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. Glufosinate 280 cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rate recommendations and other restrictions.

Glufosinate 280 must be applied with properly calibrated and clean equipment. Glufosinate 280 is formulated to mix readily in water. Prior to adding Glufosinate 280 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 Glufosinate 280 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 Glufosinate 280 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 recommended 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 resuspend 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 Glufosinate 280, 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 should be thoroughly rinsed using a commercial tank cleaner.

After using Glufosinate 280, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink. 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.

### **SPRAY DRIFT MANAGEMENT**

Spray drift may result in injury to non target crops or vegetation. To avoid spray drift, do not apply when wind speed is greater than 10 MPH or during periods of temperature inversions. Do not apply when weather conditions, wind speed, or wind direction may cause spray drift to non-target areas. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

**Sensitive Areas:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

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

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

### **AERIAL DRIFT REDUCTION ADVISORY INFORMATION**

**Information on 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. 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 on next page). AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

#### **Controlling Droplet Size:**

**Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

**Pressure:** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Number of Nozzles:** Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation:** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

**Nozzle Type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length:** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height:** Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

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

**Wind:** Drift potential is lowest between wind speeds of 2 -10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Applications should be avoided below 2 miles per hour due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

**Temperature Inversions:** Do not make aerial or ground applications into areas of temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **APPLICATION DIRECTIONS FOR BURNDOWN USE**

Glufosinate 280 may be applied as a burndown treatment prior to planting or prior to emergence of any conventional variety of sweet corn or cotton. Apply a minimum of 29 fl oz/A of Glufosinate 280 for burndown of existing weeds just prior to planting or prior to emergence of sweet corn or cotton. For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. In cotton, if environmental conditions prevent timely application, a single application may be made of up to 43 fl oz/A of Glufosinate 280.

### Grass Weeds Controlled by Glufosinate 280

Weed Species	Growth Stage of Weed* (Maximum Height)		Comments on Weed Growth Stages/Application Timing/Number of Applications
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/A)	
Barley, volunteer	1 – 2 leaf (2")	3 leaf (3")	Multiple applications may be required
Barnyardgrass	1 – 3 leaf (2")	4 – 5 leaf (3")	Maximum of 1 tiller
Corn, volunteer	1 – 2 leaf (2")	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 (4")	5 – 6 leaf (4")	Maximum of 2 tillers
Foxtail, green	1 – 4 leaf (4")	5 – 6 leaf (4")	Maximum of 2 tillers
Foxtail, yellow	1 – 3 leaf (2")	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")		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 (1.88 pt/A) if weeds exceed the growth stage shown in the table.**

For improved control of heavy populations or larger than recommended volunteer wheat, volunteer barley, yellow foxtail and wild oats, Glufosinate 280 can be tank mixed with Assure® II Herbicide, Poast® Herbicide, Prism® Herbicide or Select® 2EC Herbicide.

### Perennial Weeds Controlled by Glufosinate 280

Weed Species	Growth Stage of Weed* (Maximum Height/Diameter)		Comments on Weed Growth Stages/Application Timing/Number of Applications
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/A)	
Quackgrass	---	1 – 3 leaf (3")	Multiple applications required
Sowthistle, perennial	---	1 – 4 leaf (3")	Multiple applications required
Thistle, Canada	---	1 – 4 leaf (3")	Multiple applications required

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

### Broadleaf Weeds Controlled by Glufosinate 280

Weed Species	Growth Stage of Weed* (Maximum Diameter)	
	15 fl oz/A (0.9 pt/A)	20 fl oz/A (1.25 pt/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")
Purslane, common	(1")	(2")
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 (1.88 pt/A) if weeds exceed the growth stage shown in the table.**

### **APPLICATION DIRECTIONS FOR USE ON SWEET CORN**

#### **Application Timing for Sweet Corn:**

Applications of Glufosinate 280 on sweet corn may be made from emergence until sweet corn is 24" tall or the V-7 stage of growth; i.e., 7 developed collars, whichever comes first. Apply at a rate of 20 fl. oz./A. Glufosinate 280 must be applied with ammonium sulfate (AMS) for use on sweet corn. Two applications of Glufosinate 280 can be made to sweet corn in a growing season.

#### **Restrictions to the Directions for Use on Sweet Corn:**

- DO NOT apply Glufosinate 280 within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- DO NOT apply more than 40 fl. oz./A of Glufosinate 280 on sweet corn per growing season.
- DO NOT apply more than two applications of Glufosinate 280 to the sweet corn crop. Sequential applications should be at least 10 days apart.
- If Glufosinate 280 was used in a burndown application, no postemergence applications may be made to the crop.
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- DO NOT apply Glufosinate 280 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 **Product Information** heading of this label for the appropriate rotational crop plantback intervals.

See the **Application Methods for Broadcast Application, Mixing Instructions and Weed Control for Row Crops** tables on this label for further instruction.

#### **Tank Mix Instructions for Use on Sweet Corn:**

Glufosinate 280 may be tankmixed with Laudis® Herbicide, Callisto® Herbicide, Atrazine or Permit®. When using Glufosinate 280 in tankmix combinations, carefully follow the Directions for Use labeling of the selected partner.

### **APPLICATION DIRECTIONS FOR USE ON COTTON**

Uniform, thorough spray coverage is necessary to achieve consistent weed control. This product may be applied post-emergence to non-LibertyLink cotton varieties or cultivars by using equipment designed to minimize contact of the spray with the cotton foliage. See the Application Methods on Non-LibertyLink Cotton section for selection of shielding

equipment. Severe injury or death may result if the Glufosinate 280 contacts the foliage or stems of cotton NOT labeled as LibertyLink.

### **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 Glufosinate 280. Refer to the Weed Control for Row Crops section of this label for selection of the proper rate dependent upon weed species present and size. For optimal yield, early season weed removal is important.

Refer to the Weed Control 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 crop plants from the previous season will not be controlled by applications of Glufosinate 280. A repeat application of Glufosinate 280 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 section for Use on Cotton of this label to select suitable tank mix partners.

### **RESTRICTIONS TO THE DIRECTIONS FOR USE ON COTTON**

- **DO NOT** apply Glufosinate 280 to cotton in Florida south of Tampa (Florida Route 60), or in Hawaii.
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the ***Rotational Crop Restrictions*** section under the ***Product Information*** heading of this label for the appropriate rotational crop plant back intervals.

### **APPLICATION METHODS TO NON-LIBERTYLINK COTTON**

Application of Glufosinate 280 to cotton varieties not labeled as LibertyLink 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 volumes 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:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per acre} = \text{Amount of banded product needed per acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per acre} = \text{Amount of banded product needed per acre}$$

### POST-HARVEST

Glufosinate 280 may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fl oz/A of Glufosinate 280 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 is used in a single application, the seasonal total may not exceed 72 fl oz/A, including all application timings. Refer to the Rotational Crop Restrictions section of this label for appropriate rotational crop information.

### COTTON TANK MIX INSTRUCTIONS

Certain tank mixes may aid in the performance of Glufosinate 280. No additional surfactant is needed with any tank mix partner. Glufosinate 280 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 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. Glufosinate 280 cannot be mixed with any product containing a label prohibition against such mixing.

The following herbicides may be mixed with Glufosinate 280 for hooded-spray application to enhance weed control and/or provide residual weed control:

Aim™	Cotoran® DF	Dual Magnum®	Pendimax™ 3.3	Staple®
Caparol® 4L	Direx® 4L	Glyphosate	Prowl® 3.3EC	
Cotoran® 4L	Direx® 80DF	Karmex® DF	Select Max™	

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

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

### REGISTERED CROPS

- Bushberries: blueberry, currant, elderberry, gooseberry and huckleberry
- Other Berries: Lingonberry, juneberry and salal
- Citrus: lemon, orange, grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, citron and tanger; cultivars, varieties and/or hybrids of these
- Olives
- Pome Fruits: apples, pears, crabapple, loquat, mayhaw, quince, azarole, medlar and tejocote; cultivars, varieties and/or hybrids of these

- Stone Fruits: apricot, cherry, peach, nectarine, plum, capulin, jujube and sloe; cultivars, varieties and/or hybrids of these
- Tree Nuts: almonds, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachios, and walnuts
- Vineyards: 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 Glufosinate 280. Refer to the Weed Control for Row Crops section of this label for selection of the proper rate dependent upon weed species present and size. 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 Glufosinate 280 until sufficient regrowth has occurred.

Apply Glufosinate 280 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 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 Glufosinate 280 may be necessary to control plants generating from underground parts or seed.

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

**Application Methods for Broadcast Applications**

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

<b>Weed Size and Stage</b>	<b>Glufosinate 280 Rate</b>
Weeds < 3” in height	48 fl oz/A
Weeds < 6” in height pre-tiller grasses	56 fl oz/A
Weeds > 6” in height and/or grasses that have tillered	56-82 fl oz/A

**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:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Rate per acre broadcast} = \text{Amount of herbicide needed for treatment}$$

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

For spot or directed spray application, mix Glufosinate 280 at 1.7 fl oz of product 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, entireleaf	Redmaids
Ammannia, purple	Goosefoot	Morningglory, ivyleaf	Shepherd's-Purse
Arrowhead, California	Gromwell, field	Morningglory, pitted	Smartweed, Pennsylvania
Buckwheat, wild	Groundcherry, cutleaf	Mullein, turkey	Sowthistle, annual
Buffalobur	Groundsel, common	Mustard, wild	Spurge, prostrate
Burclover, California	Henbit	Nettle	Starthistle, yellow
Carpetweed	Jimsonweed	Nightshade, black	Sunflower, common
Chickweed, common	Knotweed	Nightshade, eastern black	Sunflower, prairie
Chinese thornapple	Kochia	Nightshade, hairy	Sunflower, volunteer
Cocklebur, common	Lambsquarters, common	Pennycress	Swinecress
Cudweed	Lettuce, miner's	Pigweed, redroot	Thistle, Russian
Cutleaf eveningprimrose	Lettuce, prickly	Pineapple-weed	Turnip, wild
Dodder	London rocket	Puncturevine	Velvetleaf
Eclipta	Mallow, common	Purslane, common	Vervain
Fiddleneck	Malva (little mallow)	Radish, wild	Vetch
Filaree	Marestail	Ragweed, common	Virginia copperleaf
Filaree, redstem	Mayweed	Ragweed, giant	Willowherb, panicle

#### 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	Mullein, common	Rocket, yellow
Bindweed, field	Dandelion	Mustard, tansy	Rose, wild
Bindweed, hedge	Dock, curly	Nutsedge, purple	<i>Rubus</i> spp.
Bluegrass, Kentucky	Dogbank (hemp)	Nutsedge, yellow	Spurge, leafy
Bromegrass, smooth	Fescue	Onion, wild	Thistle, bull
Bulrush**	Goldenrod, gray	Orchardgrass	Thistle, musk
Burdock	Guineagrass	Paragrass	Torpedograss
Canada thistle	Horsetail	Plantain	Vaseygrass
Clover, Alsike	Lovegrass	Poison ivy/oak	Woodsorrel
Clover, red	Mugwort	Quackgrass	Yarrow, common
Clover, white			

\*\*indicates suppression

### RESTRICTIONS TO THE DIRECTIONS FOR USE ON TREE, VINE, AND BERRY CROPS

1. **DO NOT** apply more than 164 fl oz of Glufosinate 280 per acre (3 lbs ai/A) to berry bushes in a 12-month period.
2. **DO NOT** apply more than 246 fl oz of this product per acre to tree nuts, vines, and tree fruits in any calendar year.
3. **DO NOT** graze, harvest, and/or feed treated orchard cover crops to livestock.
4. **DO NOT** apply this product through any type of irrigation system.
5. **DO NOT** apply this product aerially to tree, berry, or vine crops.
6. **DO NOT** apply this product within 14 days of nut, apple, berry or grape harvest.
7. **DO NOT** make spot spray applications to apple suckers, as tree injury may occur.

### SUCKER CONTROL WITH GLUFOSINATE 280 HERBICIDE

Glufosinate 280 will reduce or eliminate sucker growth when applied to suckers that are young, green and uncalled. For sucker control, apply a split application approximately 4 weeks apart at 56 fl oz/A. Coverage of all sucker foliage is necessary for optimum control. Suckers should not exceed 12 inches in length.

### TANK MIX PARTNER

Glufosinate 280 does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of Glufosinate 280 or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. Glufosinate 280 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. Glufosinate 280 cannot be mixed with any product containing a label prohibition against such mixing.

Chateau	Karmex® DF	Simazine 80W	Solicam® DF
Devrinol® 50WP	Princep® 4L	Simazine 90	Surflan® A.S.
Goal® 1.6E	Simazine 4L	Sinbar® 80W	

## APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

### APPLICATION RATE AND TIMING

Apply Glufosinate 280 at the beginning of natural senescence of potato vines. Apply 21 fl oz/A. Do not split this application or apply more than one application per harvest. 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 Glufosinate 280 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 TO THE DIRECTIONS FOR USE IN POTATO VINE DESICCATION

1. **DO NOT** apply more than 21 fl oz/A to potato vines per season.
2. **DO NOT** harvest potatoes until 9 days or more after application of Glufosinate® 280.
3. **DO NOT** apply to potatoes grown for seed.
4. Sweet corn and cotton may be planted at any time after the application of Glufosinate 280 as a potato vine desiccant.
5. **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale until 30 or more days after an application of Glufosinate 280 as a potato vine desiccant.
6. **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 Glufosinate® 280 as a potato vine desiccant.

### FALLOW FIELDS OR POSTHARVEST

Glufosinate 280 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, post-harvest, prior to planting or emergence of any crop listed on this label.

Apply Glufosinate 280 at 22 to 29 fl oz/A to fallow fields to control specific weeds. Glufosinate 280 must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are recommended with Glufosinate 280 to enhance total weed

control. When using Glufosinate 280 in tank mix combinations, follow the precautions and directions of 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 **Product Information** section of this label for rotational crop restrictions.

### **FARMSTEADS, RECREATIONAL AND PUBLIC AREAS**

When applied as listed, Glufosinate 280 controls undesirable plant vegetation in non-crop areas around 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, parks, other public areas and general nonselective farmstead weed control. Refer to the **Application Directions for Use on Listed Tree, Vine, and Berry Crops** section of this label for appropriate application broadcast and spot spray application rates and lists of weeds controlled.

### **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 should not exceed 125° F. If storage temperature for bulk Glufosinate 280 is below 32° F, the material should not be pumped until its temperature exceeds 32° 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:**

**[Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)]**

Non-refillable 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. Once container is rinsed, then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**[All refillable container types (containers with capacities greater than 50 lbs)]**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. This is a sealed returnable container to be used only for Glufosinate 280. When this container is



empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

**[Bottom discharge Intermediate Bulk Container (IBC) (containers with capacities greater than 50 lbs)]**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Empty the remaining contents from the Intermediate Bulk Container (IBC) into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inch on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve. Contact your Ag retailer or United Suppliers, Inc. for container return, disposal and recycling recommendations.

**CONDITIONS OF SALE AND LIMITED WARRANTY**

The Directions for Use are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of United Suppliers, Inc. or the SELLER. To the extent consistent with applicable law, all such risks shall be assumed by the buyer.

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