UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 10, 2018

Rebecca Hargadine
Registration Specialist
Orion GFS, LLC
12230 E. Del Norte
Yuma, AZ 85367

Subject: Label Amendment – Increase rates on soybean, canola, and corn; Glufosinate interim decision updates
Product Name: Glufosinate 280 Herbicide
EPA Registration Number: 88685-2
Application Date: 06/06/2018
Decision Number: 541926

Dear Ms. Hargadine:

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

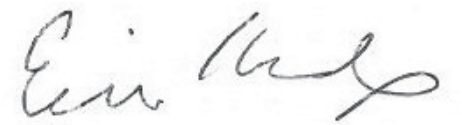
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or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

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

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

with FIFRA section 6. If you have any questions, please contact Lisa Pahel by phone at (703) 347-0459, or via email at pahel.lisa@epa.gov.

Sincerely,



Erik Kraft, Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

ACCEPTED
07/10/2018
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 88685-2

GLUFOSINATE-AMMONIUM	GROUP	10	HERBICIDE

GLUFOSINATE 280 HERBICIDE

A non-selective herbicide for post emergence broadcast use on canola, corn, cotton and soybean designated as LibertyLink®. 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 variety of canola, corn, sweet corn*, cotton, olive, soybean or sugar beet. Glufosinate 280 Herbicide may be used for post emergence weed control in listed tree, vine and berry crops. Glufosinate 280 Herbicide may also be applied for potato vine desiccation.
*Not for use in CA

ACTIVE INGREDIENT:
Glufosinate-ammonium (CAS No. 77182-82-2) 24.5%**
OTHER INGREDIENT 75.5%
TOTAL 100.0%

**Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Inside Booklet**. For MEDICAL emergencies call the National Poison Control Center at 1-800-222-1222 and for TRANSPORTATION emergencies call Chemtrec at 1-800-424-9300.**

FIRST AID

IF SWALLOWED	– 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.
HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For MEDICAL emergencies call the National Poison Control Center at 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.	

Orion GFS, LLC
12230 E. Del Norte
Yuma, AZ 85367-7355
tel. 928-342-3489

EPA Reg. No. 88685-2
EPA Est. No.
Net Contents:
Product of China

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)

- All handlers must wear long-sleeved shirts, long pants, shoes and socks.
- Applicators using groundboom equipment with open cabs to treat cotton must wear long-sleeve shirts, long pants, shoes, and socks plus chemical-resistant gloves.
- Mixer/loaders supporting ground boom applications to com, canola, soybean, cotton, citrus fruit, pome fruit, stone fruit, and olives must wear long-sleeve shirts, long pants, shoes, and socks plus chemical-resistant gloves.

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

Engineering Control Statement:
When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirement of 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.

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 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 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 following exceptions:

- REI for workers engaged in scouting activities in com, 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 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 variety of canola, corn, sweet corn*, cotton, olive, soybean or sugar beet. Glufosinate 280 may be applied to cotton not sensitive to the active ingredient in Glufosinate 280 using a hooded sprayer.

*Not for use in CA

Post emergence row crop applications of Glufosinate 280 may be made only to crops not sensitive to the active ingredient in this product. Orion GFS, LLC does not warrant the use of this product on crops other than those designated as LibertyLink® to safely withstand the application of Glufosinate 280.

The basis of selectivity of Glufosinate 280 in crops is the presence of a gene in LibertyLink® crops which results in a plant that is not sensitive to the active ingredient in Glufosinate 280. Crops not containing this gene will be sensitive to Glufosinate 280, 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 not sensitive to the active ingredient in this product.

Applications to trees, vines and berries must 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 may 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.

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 feet above the crop canopy, unless a greater application height is required for pilot safety.

Mandatory Spray Drift Mitigation continued on next page…

Mandatory Spray Drift Mitigation continued from previous page…

- 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.

Advisory Spray Drift Language

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

Spray Drift Management:

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.

Techniques for 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** - 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 10ft. 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: https: //www.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 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

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 LibertyLink® canola, corn, cotton and soybean, and 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 variety of canola, corn, sweet corn*, cotton, olive, soybean or sugar beet.

*Not for use in CA

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 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 must be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters palmer amaranth and velvetleaf control.
- Consult your local Cooperative Extension Service or Orion GFS Representative for guidelines on the optimum application timing for Glufosinate 280 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 such as drought, cool temperatures or extended periods of cloudiness.
- Warm temperatures, high humidity and bright sunlight improve the performance of Glufosinate 280.
- Glufosinate 280 is a foliar-active material with little or no soil-residual activity.
- 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.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Corn, Sweet Corn, Cotton, Rice, Soybean and Sugar Beet	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.

WEED RESISTANCE MANAGEMENT

For resistance management, Glufosinate 280 Herbicide is a Group 10 herbicide (glutamine synthetase inhibitor). Any weed population may contain or develop plants naturally resistant to Glufosinate 280 and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

Contact your local sales representative, crop advisor or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

Fields should be scouted prior to application to identify the weed species present and their growth to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

Report any incidence of non-performance of this product against a particular weed species to your Orion GFS, LLC retailer, representative or call 928-503-1518 or at www.solerasd.com. If resistance is suspected, treat weed escapes with an herbicide having a different mode of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

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

- **Start with clean fields.** Plant into weed-free fields and keep fields as weed free as possible. Effective tillage or the use of a burndown herbicide program can control emerged weeds prior to planting.
- **Scout fields.**
- **Diversified approach.** To the extent possible, use a diversified approach towards weed management. Whenever possible, incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- **Rotate crops.** Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative modes of action or different management practices.
- **Control weed escapes.** To the extent possible, do not allow weed escapes to produce seeds, roots or tubers. Manage weeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- **Clean equipment.** Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- **Manage borders.** Prevent an influx of weeds into the field by managing borders.

- **Know your weeds, know your fields**. Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- **Rotate mechanisms of action.** Difficult to control weeds ma require sequential applications of herbicides with differing mechanisms of action. Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds. If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- **Apply herbicide correctly.** Apply this herbicide at the correct timing and rate to control the most difficult weed in the field.

Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes. For more information on Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) on the web at http://www.hracglobal.com.

WEED CONTROL FOR ROW CROPS

Rates in ounces of formulated product per acre for the control of weeds as shown in the weed control tables. In weed populations with mixed species, apply at a rate needed for the species targeting less than three inch weeds.

Broadleaf Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
		22 fl oz/A *(0.40 lbs ai/A)*	**29 - 43 fl oz/A** *(0.53 – 0.79 lbs ai/A)*
Common Name	**Scientific Name**	**C = Control NR = Not Recommended S = Suppression**	**C = Control NR = Not Recommended S = Suppression**
Amaranth, Palmer	*Amaranthus palmeri*	NR	C
Anoda, spurred	*Anoda cristata*	C	C
Beggarweed, Florida	*Desmodium tortuosum*	C	C
Black medic	*Medicago lupulina L.*	C	C
Blueweed, Texas	*Helianthus ciliaris DC.*	C	C
Buckwheat, wild	*Polygonum convolvulus*	C	C
Buffalobur	*Solanum cornutum*	C	C
Burcucumber	*Sicyos angulatus*	C	C
Canola, volunteer[1]	*Brassica spp.*	C_1	C_1
Catchweed bedstraw (cleavers)	*Galium aparine L.*	C	C
Carpetweed	*Mollugo verticillata*	C	C
Chickweed, common	*Stellaria media*	C	C
Cocklebur, common	*Xanthium strumarium*	C	C
Copperleaf, hophornbeam	*Acalypha ostryaefolia*	C	C
Cotton, volunteer[1]	*Gossypium sp.*	C_1	C_1
Croton, tropic	*Croton glandulosus*	C	C
Croton, woolly	*Croton capitatus*	C	C
Eclipta	*Eclipta alba*	C	C
Devil's claw	*Proboscidea Louisiana*	C	C
Fleabane, annual	*Erigeron annuus*	C	C
Galinsoga, hairy	*Galinsoga ciliate*	C	C
Galinsoga, small flower	*Galinsoga parviflora*	C	C
Groundcherry, cutleaf	*Physalis angulate*	C	C
Geranium, cutleaf	*Geranium dissectrum L.*	C	C
Hempnettle	*Galeopsis sp.*	C	C
Horsenettle, Carolina[2]	*Solanum carolinense*	C_2	C_2
Jimsonweed	*Datura stramonium*	C	C

Broadleaf Weeds Controlled Table continued on next page.

Broadleaf Weeds Controlled *Continued* (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
		22 fl oz/A (0.40 lbs ai/A)	**29 - 43 fl oz/A** *(0.53 – 0.79 lbs ai/A)*
Common Name	**Scientific Name**	**C = Control NR = Not Recommended S = Suppression**	**C = Control NR = Not Recommended S = Suppression**
Knotweed	*Polygonum spec.*	C	C
Ladysthumb	*Polygonum persicaria*	C	C
Kochia	*Kochia scoparia*	C	C
Lambsquarters, common	*Chenopodium album*	C	C
Mallow, common	*Malva spec.*	C	C
Mallow, Venice	*Hibiscus trionum*	C	C
Marestail[3]	*Conyza Canadensis*	S	C
Marsh-elder, annual	*Iva annua*	C	C
Morningglory, entireleaf	*Ipomoea hederacea var. intergriuscula*	C	C
Morningglory, ivyleaf	*Ipomoea hederacea*	C	C
Morningglory, pitted	*Ipomoea lacunose*	C	C
Morningglory, sharppod	*Ipomoea cordatotriloba*	C	C
Morningglory, smallflower	*Jacquemontia tamnifolia*	C	C
Morningglory, tall	*Lpomoea purppurea*	C	C
Mustard, wild	*Sinapis arvensis*	C	C
Nightshade, black	*Solanum nigrum*	C	C
Nightshade, eastern black	*Solanum ptycanthum*	C	C
Nightshade, hairy	*Solanum sarrachoides*	C	C
Pennycress	*Thlaspi arvense*	C	C
Pigweed, redroot	*Amaranthus retroflexus*	C	C
Pigweed, prostrate	*Amaranthus blitoides*	C	C
Pigweed, spiny	*Amaranthus spinosus*	C	C
Pigweed, smooth	*Amaranthus hybridus*	C	C
Pigweed, tumble	*Amaranthus albus*	C	C
Puncturevine	*Tribulus terrestris*	C	C
Purslane, common	*Portulaca oleracea*	C	C
Pusley, Florida	*Richardia scabra*	S	C
Ragweed, common	*Ambrosia artemisiifolia*	C	C
Ragweed, giant	*Ambrosia trifida*	C	C
Senna coffee	*Cassia occidentalis*	C	C
Sesbania, hemp	*Sesbania herbacea*	C	C
Shepherd's-Purse	*Capsella bursa-pastoris*	C	C
Sicklepod (java bean)	*Senna obtusifolia*	C	C
Sida, prickly	*Sida spinosa L.*	C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C	C
Smell melon	*Cucumis melo L. var. Dudaim*	C	C
Sowthistle, annual	*Sonchus oleraceus L.*	C	C
Soybeans, volunteer[1]	*Glycine max*	C_1	C_1
Spurge, prostrate	*Euphorbia humifusa*	C	C
Spurge, spotted	*Euphorbia maculate L.*	C	C
Starbur, bristly	*Acanthospermum hispidum*	C	C
Sunflower, common	*Helianthus annuus*	C	C

Broadcleaf Weeds Controlled table is continued on the next page.

Broadleaf Weeds Controlled *Continued* (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
		22 fl oz/A (0.40 lbs ai/A)	**29 - 43 fl oz/A** *(0.53 – 0.79 lbs ai/A)*
Common Name	**Scientific Name**	**C = Control NR = Not Recommended S = Suppression**	**C = Control NR = Not Recommended S = Suppression**
Sunflower, prairie	*Corythucha pura*	C	C
Sunflower, volunteer	*Girassol*	C	C
Thistle, Russian[2]	*Salsola kali*	S_2	C_2
Velvetleaf	*Abutilon theophrasti*	C	C
Waterhemp, common	*Amaranthus rudis*	NR	C
Waterhemp, tall	*Amaranthus tuberculatos*	NR	C

[1] Volunteer LibertyLink crops from the previous season will not be controlled.
[2] May require sequential applications for control.
[3] For optimum control apply Glufosinate 280 on 6” marestail.

Grass Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
		22 fl oz/A *(0.40 lbs ai/A)*	**29 - 43 fl oz/A** *(0.53 – 0.79 lbs ai/A)*
Common Name	**Scientific Name**	**C = Control NR = Not Recommended S = Suppression**	**C = Control NR = Not Recommended S = Suppression**
Barley, volunteer[3]	*Hordeum vulgare*	C_3	C_3
Barnyardgrass	*Echinochloa spec.*	C	C
Bluegrass, annual	*Poa annua L.*	C	C
Corn, volunteer[i]	*Zea mays L.*	C_1	C_1
Crabgrass, large[ii]	*Digitaria sanguinalis*	C_2	C_2
Crabgrass, smooth[2]	*Digitaria ischaemum*	C_2	C_2
Cupgrass, woolly	*Eriochloa villosa*	C	C
Foxtail, bristly	*Setaria verticillata*	C	C
Foxtail, giant	*Setaria faberi*	C	C
Foxtail, green	*Setaria viridis*	C	C
Foxtail, robust purple	*Setaria viridis*	C	C
Foxtail, yellow[2]	*Pennisetum glaucum*	C_2	C_2
Goosegrass[3]	*Eleusine indica*	C_3	C_3
Johnsongrass, seedling	*Sorghum halepense*	C	C
Junglerice	*Echinochloa colonum*	C	C
Millet, wild-proso	*Panicum miliaceum L.*	C	C
Millet, proso volunteer	*Milium vernale*	C	C
Oat, wild[2]	*Avena fatua*	C	C
Panicum, fall	*Panicum dichotomiflorum*	C	C
Panicum, Texas	*Panicum texanum*	C	C
Rice, red	*Oryza sativa L.*	C	C
Rice, volunteer[1]	*Oryza sativa*	C_1	C_1
Sandbur, field[2]	*Cenchrus pauciflorus*	S_2	C_2
Shattercane	*Sorghum vulgare PERS.*	C	C
Signalgrass, broadleaf	*Brachiaria platyphylla*	C	C
Sprangletop	*Leptochloa spec.*	C	C
Sorghum, volunteer	*Sorghum sp.*	C	C
Stinkgrass	*Eragrostis cilianensis*	C	C
Wheat, volunteer[2]	*Triticum spec.*	C_2	C_2
Witchgrass	*Panicum virgatum L.*	C	C

[1] Volunteer LibertyLink crops from the previous season will not be controlled. A timely cultivation 7 to 10 days after an application and/or retreatment 1021 days after the first application is advised for controlling dense clumps of volunteer corn or rice.
[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.

Biennial and Perennial Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and AuxinResistant Biotypes)		
For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications Glufosinate 280 are advised by crop (see crop sections)		
		29 - 43 fl oz/A *(0.53 – 0.79 lbs ai/A)*
Common Name	**Scientific Name**	**C = Control NR = Not Recommended S = Suppression**
Alfalfa	*Medicago sativa L.*	C
Bermudagrass	*Cynodon dactylon*	C
Bindweed, field	*Convolvulus arvensis L.*	C
Bindweed, hedge	*Calystegia sepium*	C
Bluegrass, Kentucky	*Poa pratensis L.*	C
Blueweed, Texas	*Helianthus ciliaris DC.*	C
Bromegrass, smooth	*Bromus inermis*	C
Burdock	*Arctium sp.*	C
Bursage, woolyleaf	*Ambrosia grayi*	C
Chickweed, Mouse-ear	*Cerastium vulgatum L.*	C
Clover, red	*Trifolium pretense L.*	C
Dandelion	*Taraxacum officinale*	S
Dock, smooth	*Rumex spec.*	S
Dogbane, hemp	*Apocynum cannabinum*	C
Goldenrod, gray	*Solidago nemoralis*	S
Johnsongrass, rhizome	*Sorghum halepense*	S
Milkweed, common	*Asclepias syriaca*	S
Milkweed, honeyvine	*Ampelamus albidus*	C
Muhly, wirestem	*Muhlenbergia frondosa*	S
Nightshade, sliverleaf	*Solanum elaeagnifoium*	S
Nutsedge, purple	*Cyperus rotundus*	C
Nutsedge, yellow	*Cyperus ferax*	C
Orchardgrass	*Dactylis glomerata L.*	C
Poinsettia, wild	*Euphorbia heterophylla L.*	S
Pokeweed	*Phytolaccaceae*	C
Quackgrass	*Agropyron repens*	C
Sowthistle, perennial	*Sonchus arvensis L.*	C
Thistle, bull	*Cirsium vulgare*	S
Thistle, Canada	*Cirsium arvense*	C
Timothy	*Phleum pretense L.*	S
Wormwood, biennial	*Artemisia biennis*	C

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.

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 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. 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. Glufosinate 280 cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rate directions 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 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 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 must 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.

APPLICATION DIRECTIONS FOR BURNDOWN USE

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

APPLICATION TIMING

Apply to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES

Apply 29 to 43 fl oz/A *(0.53 to 0.79 lbs ai/A) depending* on crop, weed species and intention of post application use. Please see application charts below.

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

- **Cotton**, if environmental conditions prevent timely applications, a single application may be made of up to 43 fluid ounces per acre *(0.79 lb ai/A)* of Glufosinate 280. **If more than 29 fluid ounces per acre *(0.53 lb ai/A)* are used in any single application, the annual total may not exceed 72 fluid ounces per acre *(1.32 lbs ai/A),* including all application timings.**
- In **canola, corn (sweet and field) and soybean**, if environmental conditions prevent timely applications, a single application may be made of up to 43 fluid ounces per acre *(0.79 lb ai/A)* of Glufosinate 280. The year total may not exceed 43.0 fluid ounces per acre *(0.79 lb ai/A)* including all application timings.
- In **sugar beets**, if environmental conditions prevent timely applications, a single application may be made of up to 36 fluid ounces per acre *(0.66 lb ai/A)* of Glufosinate 280. No additional applications of Glufosinate 280 may be made post emergence to the crop during the year.

ADJUVANTS

Ammonium sulfate (AMS) can be used at 1.5 lb/A to 3 lb/A. Rates are dependent on tankmix partners, environmental conditions, temperatures and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like velvetleaf and lambsquarters, under difficult environmental conditions (low relative humidity) or hard water. An anti-foam agent is advised.

SURFACTANTS/OILS

The use of surfactants may be included. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY

Use Medium to Coarse nozzles. Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See nozzle section for more detailed information.

APPLICATION DIRECTIONS FOR CROPS

Crop	Burndown	In-Season Applications	Yearly Maximum
Canola, Soybean, Sweet Corn, Field Corn	29 - 43 fl oz/A *(0.53 – 0.79 lb ai/A)*	None	43 fl oz/A *(0.53 lb ai/A)*
Sugar beets	29 - 36 fl oz/A *(0.53 – 0.66 lb ai/A)*	None	36 fl oz/A *(0.66 lb ai/A)*
Cotton Use Pattern 1	29 fl oz/A *(0.53 lb ai/A)*	2 applications at 29 fl oz/A* *(0.53 lb ai/A)* Make second application 10-14 days after the first application.	87 fl oz/A *(1.59 lbs ai/A)*
Cotton Use Pattern 2	32 - 43 fl oz/A *(0.58 – 0.79 lb ai/A)*	1 application at 29 fl oz/A* *(0.53 lb ai/A)*	72 fl oz/A *(1.32 lbs ai/A)*

* Cotton containing the LibertyLink® trait OR with hooded sprayer for all varieties (see **COTTON** use directions).

APPLICATION DIRECTIONS FOR CROPS CONTAINING LIBERTYLINK® TRAIT

Crop	Burndown	In-Season Applications (LibertyLink® Varieties Only)	Yearly Maximum
Soybean, Field Corn	29 - 43 fl oz/A *(0.53 – 0.79 lb ai/A)*	1 to 2 applications at 29 – 43 fl oz/A *(0.53 – 0.79 lb ai/A)* For soybeans, make second application at least 5 days after the first application. For field corn, make second application at least 7 days after first application.	87 fl oz/A *(1.59 lbs ai/A)*
Sweet Corn	22 fl oz/A *(0.40 lb ai/A)*	1 to 2 applications at 22 fl oz/A *(0.40 lb ai/A)* Make second application at least 7 days after the first application.	44 fl oz/A *(0.80 lb ai/A)*
Canola	29 - 43 fl oz/A *(0.53 – 0.79 lb ai/A)*	1 to 2 applications at 29 fl oz/A *(0.53 ai/A)* Make second application at least 10 days after the first application	87 fl oz/A *(1.59 lbs ai/A)*
Cotton Use Pattern 1	29 fl oz/A *(0.53 lb ai/A)*	1 to 2 applications at 29 fl oz/A *(0.53 lb ai/A)* Make second application 10-14 days after the first application.	87 fl oz/A *(1.59 lb ai/A)*
Cotton Use Pattern 2	30 - 43 fl oz/A *(0.55 – 0.79 lb ai/A)*	1 application at 29 fl oz/A *(0.53 lb ai/A)*	72 fl oz/A *(1.32 lbs ai/A)*
Sugar Beets	29 - 36 fl oz *(0.53 – 0.66 lb ai/A)*	1 application at 29 fl oz/A *(0.53 lb ai/A)*	60 fl oz/A *(1.10 lbs ai/A)*

APPLICATION DIRECTIONS FOR USE ON SUGAR BEETS

Apply Glufosinate 280 only to sugar beets labeled as LibertyLink. Glufosinate 280 is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

APPLICATION TIMING

Applications of Glufosinate 280 on sugar beets containing the LibertyLink trait may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet.

Apply to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application,

therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES
Apply 29 - 36 fluid ounces per acre *(0.53 – 0.66 lb ai/A)* depending on weed species, size and density per weed chart. If a second application is needed, make the second application in a minimum of 10 days after the first application. The maximum annual rate of Glufosinate 280 on sugar beets is 60 fl oz/A *(1.10 lbs ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

ADJUVANTS
Ammonium sulfate (AMS) may be used at 1.5 to 3.5 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.
AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS/OILS
The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY
Use medium to coarse nozzles. Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SUGAR BEETS
- **DO NOT** apply more than 60 fl oz/A *(1.10 lbs ai/A)* of Glufosinate 280 per year.
- **DO NOT** apply Glufosinate 280 within 60 days of harvesting sugar beets.
- If a second application is needed, make the second application a minimum of 10 days after the first application.
- **DO NOT** exceed the single application rate maximum of 36 fl oz/A *(0.66 lb ai/A).*
- **DO NOT** make more than 2 applications per year.
- **DO NOT** plant rotation crops in a field treated with Glufosinate 280 within 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale, which may be planted 70 days after the last application of this product. Corn, soybeans, canola, and sugar beets containing the LibertyLink trait may be planted at any time.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply Glufosinate 280 if sugar beets show 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 CANOLA

Apply Glufosinate 280 only to canola labeled as LibertyLink®. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION TIMING
Applications of Glufosinate 280 on 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 to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES

Apply Glufosinate 280 at 22 to 29 fl oz/A *(0.40 – 0.53 lb ai/A)* per application. If a second application of Glufosinate 280 is needed, make the second application in a minimum of 7 days after the first application. The maximum annual rate of Glufosinate 280 on canola is 87 fl oz/A *(1.59. lbs ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations, use a minimum spray volume of 20 gallons per acre.

APPLICATION RATES WITH TANK MIX PARTNERS

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.

Apply Glufosinate 280 at 22 to 29 fl oz *(0.40 – 0.53 lb ai)* per acre per application, depending on weed species, size and density per weed chart.

Tank mix partners advised to enhance grass control, including products containing quizalofop p-ethyl, sethoxydim and clethodim.

If a second application is needed, make the second application in a minimum of 7 days after the first application. Tank mixes may aid in the performance of Glufosinate 280. Please refer to weed chart tables for a listing of weed species controlled at this rate. No additional surfactant is needed with any tank mix 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. Do not mix Glufosinate 280 mix with any product containing a label prohibition against such mixing.

ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS/OILS

The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY

Use medium to coarse nozzles.

Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON CANOLA

1. **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.
2. **DO NOT** apply more than two applications of Glufosinate 280 per year. Sequential applications must be at least 10 days apart.
3. **DO NOT** apply Glufosinate 280 within 65 days of harvesting canola.
4. **DO NOT** exceed the maximum single application rate of 43 fl oz/A (0.79 lb ai/A).
5. **DO NOT** apply more than 87 fl oz/A *(1.59 lbs ai/A)* of Glufosinate 280 per year.
6. **DO NOT** graze the treated crop or cut for hay.

7. **DO NOT** apply Glufosinate 280 if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
8. **DO NOT** apply this product through any type of irrigation system.
9. Refer to the **"Rotational Crop Restrictions"** section under the **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR CANOLA FOR LIBERTY LINK SEED PROPOGATION

Up to three applications of Glufosinate 280 at up to 29 fl oz/A *(0.53 lb ai/A)* per application may be made to canola for LibertyLink seed propagation. 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 TO THE DIRECTIONS FOR CANOLA FOR LIBERTYLINK SEED PROPAGATION

- **DO NOT** apply than three applications of Glufosinate 280 at up to 29 fl oz/A *(0.53 lb ai/A)* per application per year.
- Sequential applications must be made more than 10 days apart.
- **DO NOT** apply more than 87 fl oz/A *(1.59 lbs ai/A)* of Glufosinate 280 per year.
- **DO NOT** apply Glufosinate 280 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 Glufosinate 280 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 SWEET CORN* *Not for use in CA

Apply Glufosinate 280 only to sweet corn containing the LibertyLink® trait. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION TIMING

Applications of Glufosinate 280 on sweet corn may be made from emergence until the V-6 stage of growth; i.e., 6 developed collars, whichever comes first.

Apply to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES

Apply at a rate of 22 fl oz/A *(0.40 lb ai/A),* depending on weed species, size and density per weed chart. If required, a second application of 22 fl oz/A *(0.40 lb ai/A)* can be applied. The second application must be made a minimum 7 days after the first application. The maximum annual rate of Glufosinate 280 on sweet corn is 44 fl oz/A *(0.80 lb ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations, use a minimum spray volume of 20 gallons per acre.

APPLICATION RATES WITH TANK MIX PARTNERS

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.

Apply Glufosinate 280 at 22 fl oz/A *(0.40 lb ai/A)* per application, depending on weed species, size and density per weed chart. Advised tank mix partners, including products containing atrazine, tembotrione, thiencarbazone-methyl, and dicamba DGA salt.

If a second application is needed, make the second application in a minimum of 7 days after the first application. Tank mixes may aid in the performance of Glufosinate 280. Please refer to weed chart tables for a listing of weed species controlled at this rate.

No additional surfactant is needed with any tank mix partner. The tank mix partner must be used in accordance with the label limitations, restrictions and precautions. Do not exceed any labeled dosage rates. Do not mix Glufosinate 280 mix with any product containing a label prohibition against such mixing.

ADJUVANTS
Ammonium sulfate (AMS) may be used at 1.5 to 3.5 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.
AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS/OILS
The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY
Use medium to coarse nozzles. Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SWEET CORN
1. **DO NOT** apply Glufosinate 280 within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
2. **DO NOT** apply more than 44 fl oz/A *(0.80 lb ai/A)* of Glufosinate 280 on sweet corn per year.
3. **DO NOT** apply more than two applications of Glufosinate 280 to sweet corn per year. Sequential applications must be at least 7 days apart.
4. **DO NOT** exceed the the maximum single application rate of 22 fl oz/A *(0.40 lb ai/A).*
5. If Glufosinate 280 was used in a burndown application, no postemergence applications may be made to the crop.
6. **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
7. **DO NOT** apply Glufosinate 280 if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall etc.).
8. **DO NOT** apply this product through any type of irrigation system.
9. 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.

APPLICATION DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN

Apply Glufosinate 280 only to corn labeled as LibertyLink®. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION TIMING
Applications of Glufosinate 280 on corn may be made from emergence until the V-6 stage of growth, i.e., 6 developed collars, whichever comes first.

Apply to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf make applications of Glufosinate 280 between dawn and 2 hours before sunset

APPLICATION RATES
Apply Glufosinate 280 at 29 to 43 fl oz/A *(0.53 – 0.79 lb ai/A)* per application depending on weed species, size and density per weed chart. If a second application is needed, make the second application at up to 29 fl oz/A (0.53 lb ai/A) with a minimum of 7 days after the first application. The maximum rate of Glufosinate 280 on field corn and silage corn is 87 fl oz/A *(1.59 lb ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

APPLICATION RATES WITH TANK MIX PARTNERS
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.

Apply Glufosinate 280 at 29 to 43 fl oz/A *(0.53 – 0.79 lb ai/A)*, depending on weed species, size and density per weed chart. Advised tank mix partners, including products containing atrazine, tembotrione, thiencarbazone-methyl and dicamba, DGA salt. If a second application is needed, make the second application in a minimum of 7 days after the first application. Tank mixes may aid in the performance of Glufosinate 280.

Please refer to weed chart tables for a listing of weed species controlled at this rate. No additional surfactant is needed with any tank mix partner. The tank mix partner must be used in accordance with the label limitations, restrictions and precautions.

Do not exceed any labeled dosage rates. Do not mix Glufosinate 280 mix with any product containing a label prohibition against such mixing.

ADJUVANTS
Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.
AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS / OILS:
The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY
Use medium to coarse nozzles.
Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

APPLICATION DROP NOZZLE EQUIPMENT
Applications of Glufosinate 280 Field corn and Corn Silage may be made with drop nozzles from emergence until corn is 36 inches tall. Avoid spraying into the whorl or leaf axils of the corn stalks

RESTRICTIONS TO THE DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN

- **DO NOT** apply Glufosinate 280 within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- **DO NOT** apply more than two applications per year. Sequential applications must be at least 10 days apart.
- **DO NOT** apply more than 87 fl oz/A *(1.59 lb ai/A)* of Glufosinate 280 on corn per year.
- **DO NOT** exceed the maximum single application rate of 43 fl oz/A *(0.79 lb ai/A).*
- **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 **"Information"** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR USE ON COTTON

Uniform, thorough spray coverage is necessary to achieve consistent weed control. Glufosinate 280 may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to LibertyLink® cotton. 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 TIMING

Apply to small actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights, refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES

Apply Glufosinate 280 to cotton from emergence up to the early bloom stage at 29 fl oz/A *(0.53 lb ai/A)* if environmental conditions prevent a timely herbicide application, a single application of up to 43 fl oz/A of Glufosinate 280 may be made to cotton. If more than 29 fl oz/A *(0.53 lb ai/A)* are used in any single application, the yearly total may not exceed 72 fl oz/A *(1.32 lb ai/A),* including all application timings. See **Restrictions to the Directions for Use on Cotton** below for additional information.

Option 1: 3 post applications

Apply 29 fl oz/A *(0.53 lb ai/A)* per application depending on weed species, size and density per weed chart. If required a second application of 29 fl oz/A *(0.53 lb ai/A)* may be made 10-14 days after the first application. If required, a third application of 29 fl oz/A *(0.53 lb ai/A)* may be made 10-14 days after the second application. The yearly maximum rate of Glufosinate 280 on cotton is 87 fl oz/A *(1.59 lb ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Option 2: 2 post applications

Apply 32 to 43 fl oz/A *(0.58 -0.79 lb ai/A)* per application depending on weed species, size and density per weed chart. If required a second application of 29 fl oz/A *(0.53 lb ai/A)* can be applied. The sequential applications must be made minimum 10 days and may be made 14 days after each other. The maximum annual rate of Glufosinate 280 on cotton is 72 fl oz/A *(1.32 lb ai/A)* per acre.

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Use Pattern	**1st Application**	**2nd Application** *Minimum 10 days up to 14 days after 1st application*	**3rd Application** *Minimum 10 days up to 14 days after 2nd application*	**Yearly Maximum**
Option 1	29 fl oz/A *(0.53 lb ai/A)*	29 fl oz/A *(0.53 lb ai/A)*	29 fl oz/A *(0.53 lb ai/A)*	87 fl oz/A *(1.59 lbs ai/A)*
Option 2	32 - 43 fl oz/ A *(0.58-0.79 lb ai/A)*	29 fl oz/A *(0.53 lb ai/A)*	None	72 fl oz/A *(1.32 lbs ai/A)*

TANK MIX ON COTTON

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.

Certain herbicide tank mixes may aid in the performance of Glufosinate 280. 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.

ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.
AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS / OILS

The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY

Use medium to coarse nozzles. Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

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, except for test plots or breeding nurseries.
- **DO NOT** apply Glufosinate 280 within 70 days prior to cotton harvest.
- Up to 3 applications of Glufosinate 280 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 lb ai/A)* (including all application timings) to cotton per year under this application scenario. Sequential applications must be at least 10 days apart.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of Glufosinate 280 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/A *(0.79 lb ai/A*) of Glufosinate 280 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 annual total use rate under this scenario may not exceed 72 fl oz/A *(1.32 lb ai)* of Glufosinate 280. Sequential applications must be 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 **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION METHODS FOR 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 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:

$\frac{\text{Band width in inches}}{\text{Row width in inches}}$	X	Broadcast RATE per acre	=	Amount of banded product needed per acre
$\frac{\text{Band width in inches}}{\text{Row width in inches}}$	X	Broadcast spray VOLUME per acre	=	Banded Spray Volume needed per acre

TANK MIX ON COTTON

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.

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.

POST-HARVEST / FALL BURNDOWN ON COTTON

Glufosinate 280 may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fl oz/A *(0.79 lb ai/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 *(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.

TANK MIX ON COTTON

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.

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 SOYBEANS

Apply Glufosinate 280 only to soybeans designated as LibertyLink®. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

APPLICATION TIMING

Applications of Glufosinate 280 on soybeans may be made from emergence up to but not including the R1 bloom growth stage.

Apply to small actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Warm temperatures, high humidity, and bright sunlight improve the performance of Glufosinate 280. Weed control may be reduced when applications are 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. Glufosinate 280 is a foliar-active material with little or no soil-residual activity. Glufosinate 280 is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf, make applications of Glufosinate between dawn and 2 hours before sunset.

APPLICATION RATES

Apply Glufosinate 280 at 29 to 43 fl oz/A *(0.53 – 0.79lb ai/A)* depending on weed species, size and density per weed chart.

If a second application is needed, make the second application of 29 to 43 fl oz/A *(0.53 - 0.79 lb ai/A)*, can be applied up to a yearly maximum of 87 fl oz/A *(1.59 lbs ai/A).*

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Use Pattern Rate Ranges		
1st Application	2nd Application Minimum of 5 days after 1st Application	Yearly Maximum
29-48 fl oz/A (0.53 – 0.79 lb ai/A	29-43 fl oz/A (0.53 -0.79 lb ai/A	87 fl oz/A (1.59 lbs ai/A

SOYBEAN TANK MIX INSTRUCTIONS

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.

Certain herbicide tank mixes may complement 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 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. Glufosinate 280 cannot be mixed with any product containing a label prohibition against such mixing.

ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.
AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (such as low relative humidity) or hard water. The use of an anti-foam agent is advised.

SURFACTANTS / OILS

The use of additional surfactants or crop oils in tank mixes with Glufosinate 280 may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

NOZZLE SPRAY QUALITY
Use medium to coarse nozzles. Glufosinate 280 is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SOYBEANS

- **DO NOT** apply Glufosinate 280 within 70 days of harvesting soybean seed.
- **DO NOT** apply more than 87 fl oz/A *(1.59 lbs ai/A).* of Glufosinate 280 on soybeans per year.
- **DO NOT** apply more than 43 fl oz/A *(0.79 lb ai/A).* of Glufosinate 280 in a single application.
- **DO NOT** make more than 3 applications per year.
- **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 Glufosinate 280 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 **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.
- Sequential applications must be at least 5 days apart

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

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

- **Canola:** Glufosinate 280 may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry the LibertyLink trait and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the LibertyLink 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.
- **Corn:** Inbred lines, plants not possessing the LibertyLink 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", Glufosinate 280 may be applied at 22 fl oz/A *(0.40 lb ai/A)* plus AMS at 3 lb/A (17 lb/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 lb/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall. Sequential applications need to be at least 10 days apart. When temperatures exceed 85ºF, the rate of AMS can be reduced to 1.5 lbs/A *(*8.5 lb/100 gallons) to reduce potential leaf burn.
- **Cotton:** Glufosinate 280 may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry the LibertyLink trait and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the LibertyLink 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.
- **Soybean**: For the selection of non-sensitive soybean "segregates", Glufosinate 280 may be applied at up to 22 - 36 fl oz/A *(0.40 – 0.66 lb ai/A)* when soybean is in the third trifoliate stage. A second treatment of 22 - 29 fl oz/A *(0.40 - 0.53 lb ai/A)* may be applied up to but not including the bloom growth stage of soybean. Sequential applications must be at least 5 days apart.

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

BERRIES:

Crop Subgroup 13-B: Bushberry subgroup

Blueberry, highbush; blueberry, lowbush; currant; elderberry; gooseberry; huckleberry

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 (mandarin); 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):

Crop Group 11. Pome Fruits Group

Apple; crabapple; loquat; mayhaw; pear; pear, oriental; quince; azarole; hook; medlar; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these

STONE FRUIT (CROP GROUP 12-12):

Crop Group 12. Stone Fruits Group

Apricot; cherry, sweet; cherry, tart; nectarine, peach; plum; plum, chicksaw; damson; plum, Japanese; plumcot; prune; capulin; jujube and sloe; cultivars, varieties and/or hybrids of these.

TREE NUTS (CROP GROUP 14 INCLUDING PISTACHIOS):

Crop Group 14. Tree Nuts Group

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

GRAPES: all grape varieties (table, wine, and raisins)

APPLICATION TIMING

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. 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 may 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.

Weed Size and Stage	Glufosinate 280 Rate	
	fl oz/A	***lb ai/A***
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 lb ai/A*
Weeds > 6" in height and/or grasses that have tillered	56 - 82 fl oz/A	*1.02 – 1.50 lbs ai/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 *(0.03 lb ai)* 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, 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	Sunflower, volunteer
Chickweed, common	Knotweed	black	Swinecress
Chinese thornapple	Kochia	Nightshade, hairy	Thistle, Russian
Cocklebur, common	Lambsquarters, common	Pennycress	Turnip, wild
Copperleaf, Virginia	Lettuce, miner's	Pigweed, redroot	Velvetleaf
Cudweed	Lettuce, prickly	Pineapple-weed	Vervain
Cutleaf eveningprimrose	London rocket	Puncturevine	Vetch
Dodder	Mallow, common	Purslane, common	Virginia copperleaf
Eclipta	Malva (little mallow)	Radish, wild	Willowherb, panicle
Fiddleneck	Marestail	Ragweed, common	
Filaree	Mayweed	Ragweed, giant	
Filaree, redstem	Morningglory, entireleaf	Redmaids	
		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	Mullein, common	Rocket, yellow
Bindweed, field	Dandelion	Mustard, tansy	Rose, wild
Bindweed, hedge	Dock, curly	Nutsedge, purple	*Rubus* spp.
Bluegrass, Kentucky	Dogbank (hemp)	Nutsedge, yellow	Spurge, leafy
Bromegrass, smooth Bulrush**	Fescue	Onion, wild	Thistle, bull
Burdock	Goldenrod, gray	Orchardgrass	Thistle, musk
Canada thistle	Guineagrass	Paragrass	Torpedograss
Clover, Alsike	Horsetail	Plantain	Vaseygrass
Clover, red	Lovegrass	Poison ivy/oak	Woodsorrel
Clover, white	Mugwort	Quackgrass	Yarrow, common

* apply to annual ryegrass prior to 3 inches in height

** indicates suppression

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

- **DO NOT** apply more than 164 fl oz of Glufosinate 280 per acre *(3.0 lbs ai/A)* to berry bushes and stone fruit in a 12-month period.
- **DO NOT** exceed the maximum single application rate of 82 fl oz/A *(1.50 lb ai/A*)
- **DO NOT** make more than 2 applications per year at a maximum rate or 82 fl oz/A *(1.50 lb ai/A*) per application to berry bushes and stone fruit.
- **DO NOT** apply more than 246 fl oz *(4.50 lbs ai/A)* of this product per acre to tree nuts, vines, pome fruits, citrus and olives in any calendar year.
- **DO NOT** make more than 3 applications at a maximum rate of 82 fl oz/A *(1.50 lb ai/A)* per application to tree nuts, vines, pome fruits, citrus and olives.
- **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 to tree, berry, or vine crops.
- **DO NOT** apply this product within 14 days of nut, fruit, berry or grape harvest.
- Applications to citrus fruits, pome fruits and olives must be a minimum of 14 days apart.
- Applications to stone fruit must be a minimum of 28 days apart.
- Applications to berry bushes must be a minimum of 14 days apart.
- **DO NOT** make spot spray applications to 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 uncallused. For sucker control, apply a split application approximately 4 weeks apart at 56 fl oz/A *(1.02 lb ai/A).* Coverage of all sucker foliage is necessary for optimum control. Suckers should not exceed 12 inches in length.

TANK MIX 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.

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.

diuron	napropamide	oryzalin	terbacil
flumioxazin	norfluazon	simazine	

APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

APPLICATION RATES AND TIMING

Apply Glufosinate 280 at the beginning of natural senescence of potato vines. Apply 21 fl oz/A *(0.38 lb ai/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

- **DO NOT** apply more than 21 fl oz/A *(0.38 lb ai/A*) to potato vines per year or per single application..
- **DO NOT** harvest potatoes until 9 days or more after application of Glufosinate 280.
- **DO NOT** apply to potatoes grown for seed.
- Potatoes, canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of Glufosinate 280 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 Glufosinate 280 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 Glufosinate 280 as a potato vine desiccant.
- **DO NOT** split this application or apply more than one application per harvest.

FALLOW FIELDS OR POST HARVEST

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 or 29 fl oz/A *(0.40 - 0.53 lb ai/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 advised 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.

RESTRICTIONS TO THE DIRCTIONS FOR USE ON FALLOW FIELDS OR POST HARVEST

- **DO NOT** apply more than 29 fl oz/A (0.53 lbs ai/A) in a single 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 ai/A) per year.

NON-CROP USES

Glufosinate 280 controls annual and perennial weeds in non-crop areas defined below in the “Where to Apply Section”. Applications may be made on a broadcast, banded or spot treatment 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.

WHEN TO APPLY

Glufosinate 280 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 directed.
Glufosinate 280 must be applied at the labeled rate in the **HOW TO APPLY** section. Repeat applications of Glufosinate 280 or tank mixes of Glufosinate 280 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

Glufosinate 280 must be mixed with water to make finished spray solution as follows:

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

HOW TO APPLY

Spot or Directed Applications

This product may be used as a spot or directed spray application using 0.4 to 0.75 fl oz/gal of water *(0.007 - 0.014 lbs ai/gal of water)* of water depending upon the weed and stage of growth as shown in the following sections. Spray undesirable vegetation foliage on a spray-to-wet basis. Do not apply beyond runoff. Ensure uniform and complete coverage. Use a coarse spray. Do not spray during windy conditions. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

Broadcast or Boom Applications

Apply 12 - 38 fl oz/A *(0.22 – 0.69 lb ai/A)* depending upon the weed and stage of growth as shown in the following sections. Use a minimum of 40 gallons of water per acre with a minimum of 30-psi spray pressure.

Aerial Applications

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage. Do not apply when winds are gusty or under conditions which favor drift on to desirable vegetation. Applications under conditions which cause drift of this product will result in damage to any vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

Tank Mix Directions for Non-crop Uses

Glufosinate 280 is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate.

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 Glufosinate 280 plus the following herbicides are advised for broad-spectrum postemergence and preemergence weed control:

Isopropylamine salt of imazapyr	butroxydim	norflurazon
prodiamine	isoxaben	Diglycolamine salt of 3,6-dichloro-o-anisic Acid
oryzalin	pendimethalin	oxadiazon

A compatibility test must be conducted with any potential tank mix partner with Glufosinate 280, 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.
2. 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 ail ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oilyfilm 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 Glufosinate 280.

For the Following Weeds Controlled by Glufosinate 280 Apply:

Spot application:

Apply 0.75 fl oz/gal of water *(0.014 lb ai/gal of water)* when the weed height or diameter is less than 6 inches. Apply 1.25 fl oz/ gal of water *(0.023 ib ai/gal of water)* when the weed height or diameter is 6 inches or greater.

Broadcast application:

Apply 40 fl oz/A *(0.73 lb ai/A)* when the weed height or diameter is less than 6 inches.

Apply 56 fl oz/A *(1.02 lb ai/A)* when the weed height or diameter is 6 inches or greater.

Broadleaf Weeds

Chickweed	Jimsonweed	Marestail
Clover	Kochia	Purslane
Common	London rocket	Shepherdspurse
Cocklebur	Malva(little mallow)	Smartweed
Filaree		

Grasses and Sedges

Barnyardgrass	Green Foxtail	(Signalgrass)
Cupgrass	Johnsongrass	Stinkgrass
Fall Panicum	(rhizome) Lovegrass	Windgrass,
Giant	Shattercane	yellow
Foxtail	Smallflower Alexandergrass	Foxtail
Goosegrass		

For the Following Weeds Controlled by Glufosinate 280 Apply:

Spot application:

Apply 1.25 fl oz/gal of water *(0.023 lb ai/gal of water)* when the weed height or diameter is less than 6 inches.
Apply 1.75 fl oz/gal of water *(0.032 lb ai/gal of water)* when the weed height or diameter is 6 inches or greater.

Broadcast application:

Apply 56 fl oz/A *(1.02 lbs ai/A)* when the weed height or diameter is less than inches tall. Apply 80 fl oz/A *(1.46 lbs ai/A)* when the weed height or diameter is 8 inches or greater.

Broadleaf weeds

Annual sowthistle	Lambsquarter	Tansy mustard
Bindweed	Leafy spurge	Velvetleaf
Buffalorbur	Mugwort	Vervain
Burdock	Musk thistle	Virginia copperleaf
Canada thistle	Nettle	White heath aster
Curly dock	Nightshade	Wild buckwheat
Dandelion	Pennycress	Wild mustard
Dogbane (hemp)	Pigweed, redroot	Wild onion
Field growwell	Plantain	Wild rose
Fleabane	Prickly lettuce	Wild turnip
Goldenrod	Ragweed	Wood sorrel
Horsetail	Russian thistle	Yellow rocket

Grasses and Sedges

Annual bluegrass	Downy bromegrass	Ryegrass
Bahiagrass	Fescue	Sandbur
Barley	Guineagrass	Smooth bromegrass
Bermudagrass	Kentucky bluegrass	Torpedograss
Carpetgrass	Nutsedge	Vaseygrass
Crabgrass	Paragrass	Wheat
Dallisgrass	Quackgrass	Wild oat

Additional Use Directions

1. Use higher rates within the directed rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions such as drought or when average temperatures are below 50°F.
2. 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 (Not For Use in California)

When applied as labeled, Glufosinate 280 will provide control, partial control, or suppression of certain perennial woody weed species. Apply 64 -192 fl oz/A *(1.19 - 3.51 lb ai/A).* Use the higher specified rates per acre of this product when conditions are not optimum for spray penetration, such as when vegetation growth is heavy or

dense. Lower specified rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

Blackberry	*Rubus* spp
Deer brush	*Ceanothus integerrimus*
Douglas fir	*Pseudosuga menziesii*
Gallberry	*Ilex* 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	*Toxicdendron radicans*
Poison oak	*Toxicdendron toxicarium*
Roundleaf greenbrier	*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

Glufosinate 280 may be used for trimming and edging landscape areas including: around individual trees and shrubs, landscape beds, foundations, fences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. For control of weeds emerging from seed, the use of Glufosinate 280 in a tank mix with preemergence herbicides is advised. 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.

Farmsteads, 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: 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, and parks. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

Dormant Bermudagrass (Not for use on Residential Turf/Turfgrass/Lawns)

Glufosinate 280 may be used 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 Glufosinate 280 at a rate of 40 – 80 fl oz/A (0.73 – 1.46 lb ai/A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by Glufosinate 280 section of this label for selecting specified rates. Applications of Glufosinate 280 may also be used to suppress or control undesirable biennial or perennial weeds. Do not apply more than 80 fl oz (1.46 lbs ai) of Glufosinate 280 per acre per year for this use. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed greenup may occur.

Ornamentals and Christmas Trees

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.

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 Glufosinate 280 as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.

Directed spray application:
Glufosinate 280 may be applied 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:
Glufosinate 280 may be used to control weeds in greenhouses and shade- houses. Air circulation fans must be turned off during application. Apply Glufosinate 280 as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation. Do not use in greenhouses or shade houses containing edible crops.

USE RESTRICTIONS FOR NON-CROP USE

- **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** exceed maximum use rate of 80 fl oz/A *(1.46 lb ai/A)* for broadcast or boom applications.
- **DO NOT** make more than 3 applications per year for broadcast or boom applications but no more than 2 applications per year on Dormant bermudagrass.
- **DO NOT** exceed maximum use rate of 1.75 fl oz/gal of water *(0.032 lbs ai/gal of water)* for spot or directed applications and do not apply beyond runoff.
- **DO NOT** apply more than 240 fl oz *(4.50 lbs ai/A)* of this product per acre per year to non-crop areas except on Dormant Bermudagrass do not apply more than 80 fl oz per acre per year.
- Applications must be made at least 14 days apart in non-crop areas.

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 must 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 Orion GFS for container return, disposal and recycling recommendations.

SEED DISPOSAL: To dispose of out-of-date or otherwise unmarketable seed from plants which have been treated with Glufosinate 280, 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.

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 Orion GFS, LLC or the SELLER. To the extent consistent with applicable law, all such risks shall be assumed by the buyer.

Orion GFS, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. ORION GFS, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ORION GFS, LLC AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

ORION GFS, LLC and the SELLER offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of ORION GFS, LLC.

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