UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 11, 2016

Ms. P. Leanne Pruett
Agent for Summit Agro North America Holding Corp.
Summit Agro North America Holding Corp.
c/o Pyxis Regulatory Consulting
4110 136th St. NW
Gig Harbor, WA 98332

Subject: PRIA Label Amendment – Updating precautionary and PPE language based on an Acute Dermal Toxicity Category of III
Product Name: Glufosinate 280 SL Herbicide
EPA Registration Number: 82534-4
Application Date: 01/28/2016
Decision Number: 513569

Dear Ms. Pruett:

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,

Heather Garvie, Product Manager 24
Fungicide and Herbicide
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

[Note to reviewer: Text in brackets [ ] is optional text and may appear on the final label]

ACCEPTED
04/11/2016
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 82534-4

GROUP	10	HERBICIDE

Glufosinate 280 SL

Herbicide

Glufosinate 280 SL is a non-selective herbicide. Apply Glufosinate 280 SL for post emergence control of listed weed species in in listed berry, tree and vine crops. Glufosinate 280 SL Herbicide may also be applied for potato vine desiccation. Glufosinate 280 SL Herbicide is also a non-selective herbicide for hooded spray applications in conventional cotton and post emergence broadcast use on canola, field corn, sweet corn[*] cotton, soybean and sugar beets[*] designated as LibertyLink. Glufosinate 280 SL Herbicide may be applied as a broadcast burndown application before planting or prior to emergence of any conventional or transgenic variety of canola, field corn, cotton, soybean or sugar beet[*]. Glufosinate 280 SL herbicide may also be applied for canola, corn, cotton and soybean seed propagation.
***Not for use in California.**

ACTIVE INGREDIENT:
Glufosinate-ammonium ………………………………………………………………………… 24.5%
OTHER INGREDIENTS...……………………………………………………………………… 75.5%
TOTAL………………………………………………………………………………………… 100.0%
2.34 pounds of active ingredient per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)
FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Inside Booklet.
For MEDICAL and TRANSPORTATION emergencies call 1-800-334-7577

FIRST AID	
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	•Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	• Rinse mouth thoroughly with plenty of water. • Do not give anything to an unconscious person • Do not induce vomiting. • Call a poison control center or doctor immediately for treatment advice.
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.	
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact **Chemtrec** at **1-800-424-9300** for emergency medical treatment	

information 24 hrs. per day.

Manufactured For:
Summit Agro North America Holding Corporation
600 Third Avenue
New York, NY 10016-2001

EPA Reg. No. 82534-4
EPA Est. No. XXXXXXXX
NET CONTENTS: 2.5 Gal

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING

Causes substantial but temporary eye injury. Harmful if absorbed through skin. Harmful if swallowed. Do not get in eyes. Avoid contact with skin or clothing. 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)

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

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves such as barrier laminate, butyl rubber $\geq$ 14 mils, nitrile rubber $\geq$ 14 mils, neoprene rubber $\geq$ 14 mils, polyvinyl chloride (PVC) $\geq$ 14 mils, or Viton® $\geq$ 14 mils
- Shoes plus socks;
- Protective eyewear (goggles, face shield or safety glasses)
- Wear a chemical resistant apron when mixing/loading and cleaning equipment

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Mixers/loaders supporting aerial applications must wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

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

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

USER SAFETY RECOMMENDATIONS

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

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

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present. Do not apply to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters or rinsate.

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

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

Weed Resistance Management

Glufosinate-ammonium, the active ingredient in this product, is a Group 10 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 10 herbicides. Such resistant weed plants may not be effectively managed using Group 10 herbicides but may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, a herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your local company representative, state cooperative extension service, professional consultants or other qualified authorities to determine appropriate actions for treating specific resistant weeds

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification of weed shifts and/or weed resistance and thus provide direction on future weed management practices. One of the best ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

DIRECTIONS FOR USE

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

Do not use this product until you have read the entire label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. In the State of New York Only: Not For Use In Nassau and Suffolk Counties.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses; and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry-interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls worn over short-sleeved shirt and short pants; chemical resistant gloves 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; shoes plus socks; protective eyewear (goggles, face shield or safety glasses).

PRODUCT INFORMATION

Glufosinate 280 SL is a water soluble herbicide for use as a foliar spray in berries, trees (citrus, olive, pome, stone, tree nut), vines(grapes); also for foliar spray in LibertyLink® canola, corn[*], cotton, soybean and sugar beet[*], as well as hooded spray in non-LibertyLink cotton; and for use in potato desiccation, burndown, farmsteads and fallow fields. Glufosinate 280 SL exhibits foliar activity to a wide spectrum of broadleaf, grass, annual and perennial weeds.
[***Not for use on sweet corn or sugar beet in California**]

When making application to berries, trees (citrus, olives, pome fruits, stone fruits and tree nuts) and vines (grapes), keep Glufosinate 280 SL solution from contacting green bark, branches or vegetation, to prevent injury to plants. Trunks with callused, established brown bark, or shielded by nonporous wraps, grow tubes or waxed containers can be sprayed with Glufosinate 280SL.

When making post emergent foliar application to canola, corn, cotton, soybean and sugar beet, be sure to make application only to crops tolerant to Glufosinate methyl (or 'LibertyLink crops). If used on row crops not designated as LibertyLink, Summit Agro North America Holding Corporation does not warrant that they will tolerate the use of this product without harm.

LibertyLink crops contain a gene which results in a plant that is tolerant to Glufosinate methyl, whereas other crops do not contain this gene and will suffer serious crop injury or death. When applying Glufosinate 280 SL, take care that spray does not contact desirable vegetation, foliage or green tissue of plants not tolerant to Glufosinate-methyl.

When making application to conventional or other non LibertyLink cotton, use a hooded sprayer, to avoid exposure of cotton plants to Glufosinate 280 SL. If Glufosinate 280 SL comes in contact with non-LibertyLink cotton plants (foliage or stems), serious injury or loss of plant could occur.

Glufosinate 280SL can be applied broadcast prior to planting or emergence of conventional or transgenic canola, corn, cotton, soybean or sugar beet, to act as a burndown agent for existing weed species.

IMPORTANT

- Glufosinate 280SL has foliar activity, but little to no activity in soil. Apply product to actively growing weeds for best control. Little to no control of weeds that emerge after application will be achieved.
- For optimum weed control:
    - Make sure uniform, thorough spray coverage is obtained
    - Avoid cultivation from 5 days prior to application to 7 days following application
    - If possible, avoid application in heavy dew, fog, mist or rain
    - Apply Glufosinate 280 SL between dawn and 2 hours before sunset (to optimize lambsquarters and velvetleaf control)
- Under good growing conditions, leaves and young shoots will exhibit leaf necrosis within 2 to 4 days of application
- When applying to most weed species, Glufosinate 280 SL will be rainfast four hours after treatment (if weeds are exposed to rain prior to four hours after application, may need retreatment, or may give decreased weed control)
- Decreased weed control may be observed if weeds are under stress due to such environmental conditions as cloudy weather, cool temperatures or drought.

MIXING DIRECTIONS

Before adding Glufosinate 280 SL to the spray tank, make sure the tank has been thoroughly cleaned and free of any product residue. See CLEANING section for instructions. The spray tank must also be properly calibrated prior to use.

Glufosinate 280 SL dilutes quickly and easily in water. For proper mixing fill the spray tank with water and begin agitation. Add Glufosinate 280 SL and continue agitation. Prior to applying Glufosinate 280 SL to crops or use sites, flush out the spray system lines. This will guarantee that the complete system contains and is applying the correct concentration of Glufosinate 280 SL.

Tank Mixtures - Compatibility

If applying Glufosinate 280 SL in a tank mix or with other mixing products, test compatibility prior to mixing in application equipment.

Compatibility test: In a lidded jar (~1 quart size), add all mix partners, in their relative proportions. Invert, shake or mix the jar thoroughly. If mixture forms precipitates (flakes or sludge), gels, balls up or forms oily film or layers, this indicates incompatibility. Let the mixture stand for 15 minutes before determining compatibility.

Tank Mixtures – Mixing

Glufosinate 280 SL can be applied on its own or in combination with other herbicides to provide additional residual control or to support product performance. Make certain that any tank mix partners are registered for use on the same crops or use sites on this product label, and follow

all label instructions, restrictions and precautions on both labels. Consult specific crop use directions for additional information regarding rates and restrictions.

Mix Glufosinate 280 SL using the following procedure:

1. Fill a clean spray tank with ½ of water required for treatment
2. Begin agitation
3. If mixing with a flowable/wettable powder tank mix partner, use a clean container to make a slurry of the powder and a small amount of water. Add the slurry to the spray tank; rinse slurry mix container; add rinsate to spray tank
4. If required, add appropriate amount of ammonium sulfate (AMS) to the spray tank
5. If mixing with a liquid tank mix partner, add to spray tank next
6. Add the rest of the water to the spray tank
7. Continue agitation and add measured amount of Glufosinate 280 SL to spray tank.
8. A silicone antifoam agent can be added, if needed to deter foaming.

Maintain agitation until the product is used. If spray mixture settles, be sure to thoroughly agitate to remix the solution prior to continuing application. Foaming can be minimized by positioning bypass line near or on the bottom of the tank. Use screen size of 50 mesh or greater in line strainers and nozzles.

APPLICATION DIRECTIONS

Apply Glufosinate 280 SL to weeds in a manner that results in good coverage of the weed foliage, otherwise diminished weed control will result.

Ground Application
Glufosinate 280 SL can be applied as a broadcast treatment. To ensure complete spray coverage, mix product in at least 15 gallons of water per acre, and up to 20 – 40 gallons of water per acre if weed or crop canopy is heavy, unless otherwise indicated in specific crop use directions. Apply spray with nozzles and pressure that generate MEDIUM size spray droplets (250 – 350 microns), as per ASABE S 572, and per nozzle manufacturer instructions. Avoid nozzles and pressure that result in COARSE sprays. Also avoid nozzles and pressure that result in FINE sprays, to reduce the possibility of spray drift. Consult nozzle manufacturer recommendations for boom height placement. For additional information concerning product application, consult the Spray Drift Management portion of this label.

Aerial Application
Unless otherwise specified in specific crop use directions, Glufosinate 280 SL can be applied aerially. Mix product in a minimum of 10 gallons of water per acre. Apply spray with nozzles and pressure that generate MEDIUM size spray droplets (300 - 400 microns), as per ASABE S 572 (based on air speed), and per nozzle manufacturer instructions. Avoid nozzles and pressure that result in COARSE sprays. Also avoid nozzles and pressure that result in FINE sprays, to reduce the possibility of spray drift. Consult nozzle manufacturer recommendations for boom height placement. For additional information concerning product application, consult the Spray Drift Management portion of this label.

CLEANING

Before storing, mixing or applying Glufosinate 280 SL, ensure that all tanks or storage containers have been thoroughly cleaned, including all lines and filters. Thoroughly clean and rinse any containers with a commercial tank cleaner, and consult labeling for any product previously contained or used for additional specific cleaning directions.

After storing, mixing or applying Glufosinate 280 SL, clean the equipment or containers thoroughly:

- Triple rinse spray equipment
- Use a commercial tank cleaner following rinses
- Completely remove any foam or rinsate from the boom and spray tank
- Consult pesticide disposal directions for disposing of rinsate

CROP ROTATION

Do not plant crops in previously treated areas unless in compliance with the Rotational Restrictions found below, or in the specific crop use directions. Illegal residues may result if Rotational Restrictions are not followed.

Consult Potato Vine Desiccation Use Directions for Rotational Restrictions specifically following Glufosinate 280 SL application to potatoes as a vine desiccant.

Crop	**Minimum Rotational Interval**
Canola Corn Cotton Rice Soybeans Sugarbeets	0 days (may be planted at any time after Glufosinate 280 SL application)
Root and Tuber Vegetables Leafy Vegetables Brassica Leafy Vegetables Small Grains (Barley, Buckwheat, Oats, Rye, Teosinte, Triticale, Wheat)	70 days
Other Crops*	180 days

*For all crops not listed in the table above, there must be a minimum rotation interval of 180 days.

SPRAY DRIFT MANAGEMENT

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

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

- For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

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

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

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

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

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

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions on next page). AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

Controlling Droplet Size:

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

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

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

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

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

Boom Length: For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

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

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

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

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

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

LISTED BERRY, TREE AND VINE CROPS USE DIRECTIONS

Glufosinate 280 SL can be applied to the following Berry, Tree and Vine Crops:

- Berries (bush): blueberry, currant, elderberry, gooseberry, huckleberry
- Berries (other): lingonberry, juneberry, salal
- Citrus: lemon, orange, grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, citron, citrus hybrids, Tangor, and cultivars, varieties and/or hybrids of these
- Olives
- Pome Fruits: apples, pear, crabapple, loquat, mayhaw, quince, azarole, Medlar, Tejocote, cultivars, varieties and/or hybrids of these
- Stone Fruit: apricot, cherry, peach, nectarine, plum, capulin, jujube, Sloe and cultivars, varieties and/or hybrids of these
- Tree nuts: almond, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachio, walnut
- Vine: all grape varieties (table, wine, raisin)

Application of Glufosinate 280 SL can be made via broadcast, spot or directed spray or banded spray applications

USE RATE AND TIMING

Broadcast Application: Make broadcast application at the following use rates, depending on height of weeds or growth phase of grasses:

48 fl. oz. product/A – weeds <3" in height
56 fl. oz. product/A – weeds < 6" in height, pre-tiller grasses
56 – 82 fl. oz. / A – Weeds > 6" in height and/or grasses that have tillered

Spot or Directed Spray: Make application to weeds until foliage is wet, but not to the point of runoff. Use 1.7 fl. oz. Glufosinate 280 SL per gallon of water.

Banded Application: Rates indicated above are for broadcast use. The equivalents must be adjusted to reflect the actual treated area. The following formulas indicate accurate rate and volume for banded uses:

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

Sucker Control: Apply 56 oz. product/A in a split application to young, green uncallused suckers that are no more than 12" in length. Wait approximately 4 weeks between applications. Sucker foliage must be thoroughly covered with product.

IMPORTANT

- Glufosinate 280SL can be applied as a directed broadcast spray, banded or spot treatment, to control weeds and undesirable vegetation in tree, vine and berries listed above
- Consult Weed Chart A for weeds controlled

- For best results, use appropriate rates for size of weeds, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather, and high humidity
- Lower use rate, unfavorable environment, or weed growth stage at time of treatment could result in regrowth of weeds. Additional application of Glufosinate 280SL may be needed for control of weeds growing from seeds or in-ground portions of weeds
- Use highest labeled application rate for weeds in thick populations or under stress (including prior treatments with other herbicides). Do not retreat after previous herbicide application until weeds have reached adequate height for effective treatment
- Glufosinate 280 SL solution can injure or severely damage green bark, branches or vegetation, or desirable nontarget plants. Avoid contact with mixture, spray, drift or mist. Trunks with callused, established brown bark, or shielded by nonporous wraps, grow tubes or waxed containers can be sprayed with Glufosinate 280SL
- Thoroughly clean application equipment following use.

Tank Mixes: Unexposed plant parts or residual weed growth is not controlled by Glufosinate 280 SL. For residual control or control of a broader spectrum of weeds, or to support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on berries, trees and vine crops. Follow all label instructions, restrictions and precautions on both labels. When using Glufosinate 280SL in a tank mix, additional surfactant is not required.

Crop Restrictions: Within a 1 year period, do not apply more than 3 lbs. ai/A (164 fl. oz. Glufosinate 280 SL) to berry bushes or stone fruit, or more than 4.5 lbs. ai/A (246 fl. oz. Glufosinate 280 SL) to tree nuts and vines, pome fruit, citrus and olives. Pre Harvest interval is 14 days. Additionally:

- Orchard cover crops are not to be grazed or harvested and/or fed to livestock
- Do not make directed spray or spot applications to vine trunk or tree trunk, or spot applications to suckers (to avoid injury)
- Glufosinate 280 SL is not to be applied through any type of irrigation system
- Glufosinate 280 SL is not to be applied aerially to tree, berry or vine crops
- Observe an application interval of 14 days for citrus fruits, pome fruits and olives, and 28 days for stone fruits.

FARMSTEADS USE DIRECTIONS

Glufosinate 280 SL can be used around non-crop areas of farmsteads, including building foundations, shelter belts, and along fences to provide general nonselective weed control.

USE RATES AND TIMING

Application can be made by application or spot spray. Consult these directions in the 'Tree, Vine and Berry' crops section of this label for these use directions.

Consult Weed List A for list of weeds controlled

WEED LIST A

For **Berry, Tree and Vine Crops** and **Farmsteads**

Broadleaf Weeds

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

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	Fescue	Onion, wild	Thistle, bull
Bulrush*	Goldenrod, gray	Orchardgrass	Thistle, musk
Burdock	Guineagrass	Paragrass	Torpedograss
Canada thistle	Horsetail	Plantain	Vaseygrass
Clover, Alsike	Lovegrass	Poison ivy/oak	Woodsorrel
Clover, red	Mugwort	Quackgrass	Yarrow, common
Clover, white			

*suppression only

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	

*suppression only

CANOLA USE DIRECTIONS

Glufosinate 280 SL can be applied to transgenic (LibertyLink) canola to control weeds.

USE RATE AND TIMING

Apply 22 fl. oz. / A product to canola in cotyledon to early bolt stage. A second application of 22 fl. oz. may be used for control of later emerging weeds. Consult Weed List B (20-22 fl. oz. rate) for weed species controlled and weed height for optimum control.

IMPORTANT

- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather and high humidity
- For best results, use on weeds that have not exceeded height indicated in Weed Chart B; make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- Use of Glufosinate 280 SL may result in a temporary slight discoloration of canola after application, which will not influence yield, growth or maturity of the crop.
- Early season weed control is necessary for best harvest
- Glufosinate 280 SL will not control any volunteer LibertyLink plants (corn, cotton, rice, soybean or sugarbeets) that are left from the previous season.
- If canola is injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide application, do not apply Glufosinate 280 SL

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on canola. Follow all label instructions, restrictions and precautions on both labels. When using Glufosinate 280 SL in a tank mix with a grass herbicide used at a reduced rate (such as a herbicide containing the active ingredients quizalofop, sethoxydim or clethodim) the AMS rate may be reduced to 1.5 lb./A

Spray Additive: Ammonium Sulfate (AMS) at 3 lbs./A must be mixed with Glufosinate 280 SL for application to canola. Use only spray grade or fine feed grade AMS. If necessary, other additives, such as drift control agents or antifoams can be used. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

CROP RESTRICTIONS

Do not make more than 2 applications of Glufosinate 280 SL to canola per year, and do not exceed the max yearly application rate of 44 fl. oz. / A. Wait at least 10 days between applications. When Glufosinate 280 SL is used as a burndown, no additional (post emergent) applications can be made to canola. Preharvest interval is 65 days. Additionally:

- Glufosinate 280 SL is not to be applied through any type of irrigation system.
- Canola treated with Glufosinate 280 SL cannot be cut for hay or grazed
- Do not apply Glufosinate 280 SL in the following states: AL, DE, GA,KY, MD, NJ, NC, SC, TN, VA, WV

SWEET CORN[*], FIELD CORN AND SILAGE CORN USE DIRECTIONS

Glufosinate 280 SL can be applied to transgenic (LibertyLink) corn to control weeds.
[*Not for use on sweet corn in California]

USE RATE AND TIMING

Apply 22 fl. oz. / A product to field and silage corn, or 20 fl. oz./ A product to sweet corn. A second application of 22 fl. oz. (field and silage corn) or 20 fl. oz. (sweet corn), or tank mix with a residual herbicide may be used for control of later emerging weeds. Consult weed list B (20 – 22 fl. oz. rate) for weed species controlled and optimum weed height for control.

Timing

- Corn up to 24" tall or V7 stage of growth (7 developed collars), whichever comes first – apply over the top or ground application with drop nozzle
- Corn 24" to 36" tall – ground application with drop nozzle (avoid spraying corn stalk leaf axis or whorls)

IMPORTANT

- For best results use on weeds that have not exceed height indicated in Weed List B, make sure spray consistently and fully covers weeds and apply to emerged weeds that are young and actively growing.
- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather and high humidity
- Early season weed control is necessary for best harvest
- If corn is injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide applications, do not apply Glufosinate 280 SL

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on corn (sweet, field or silage). Follow all instructions, restrictions and precautions on both labels. Additional surfactant is not needed when tank mixing. If tank mixing with products containing the active ingredients carfentrazone-ethyl, metolachlor, s-metolachlor, and products with a combination of s-metolachlor, mezotrione and atrazine, use ½ rate with Glufosinate 280 SL, to reduce the risk for adverse crop response. If tank mixing with products containing pendimethalin, be aware that reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail and volunteer corn can occur.

Spray Additive: Ammonium Sulfate (AMS) at 3 lbs./A must be mixed with Glufosinate 280 SL for application to corn. Use only spray grade or fine feed grade AMS. At temperatures above 85˚F, potential leaf burn can occur, so reduce AMS to 1.5 lbs./A. If necessary, a silicone-based antifoam agent can be used. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

CROP RESTRICTIONS

Do not make more than 2 applications of Glufosinate 280 SL to corn per year, and do not exceed the maximum yearly application rate of 44 fl. oz. / A for field and silage corn or 40 fl. oz. / A for sweet corn. Wait at least 10 – 14 days between applications. When Glufosinate 280 SL is used as a burndown, no additional (post emergent) applications can be made to corn. Preharvest intervals are 50 days for sweet corn ears, 55 days for sweet corn stover, 60 days for field and silage corn forage and 70 days for field and silage corn grain and fodder. Additionally:

- Glufosinate 280 SL is not to be applied through any type of irrigation system.
- Nitrogen solutions are not to be used as spray carriers

COTTON USE DIRECTIONS

Glufosinate 280 SL can be applied to transgenic (LibertyLink) cotton (broadcast, over-the-top postemergence or directed spray) to control weeds, or conventional (non LibertyLink) cotton (postemergence hooded/shielded spray) to control weeds. If Glufosinate 280 SL comes in contact with non LibertyLink cotton plants (foliage or stems), serious injury or loss of plant could occur. Glufosinate 280 SL can also be used for post-harvest applications.

USE RATE AND TIMING

Glufosinate 280 SL can be applied to cotton via two different use patterns. TIMING 1 use pattern is used for low to medium weed pressure. Consult Weed List B for specific rates depending on weed height. TIMING 2 use pattern is used if weeds are particularly large, or weed pressure is high due to environmental conditions preventing timely use of Glufosinate 280 SL.

Use Pattern	Use Rate Application 1	Use Rate Application 2	Use Rate Application 3	Cumulative Maximum use rate per year
TIMING 1	22 – 29 fl. oz./A	22 – 29 fl. oz./A	22 – 29 fl. oz./A	87 fl. oz. / A
TIMING 2	30 – 43 fl. oz./A	22 – 29 fl. oz./A	None	72 fl. oz./A

Consult Weed List B for appropriate application rate based on weed type and size. Yearly maximum use rate is 72 fl oz/A (including all application timings) when a single application higher than 29 fl oz/A is made.

Banded Application: Rates indicated above are for broadcast use. The equivalents must be adjusted to reflect the actual treated area. The following formulas indicate accurate rate and volume for banded uses:

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

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast spray VOLUME per acre} = \text{Banded spray volume needed per acre}$$

Post Harvest Application: When using Glufosinate 280 SL as a post harvest burndown treatment to cotton fields, a single application not to exceed 43 fl. oz./A can be applied. Adjust use rate to correspond with size of weeds. If the single application rate exceeds 29 fl. oz./A, then the yearly maximum use rate is 72 fl. oz./A (including all application timings).

LibertyLink Cotton: Apply product foliarly over the top or directed spray to the lower 1/3 of the cotton stand.

Non LibertyLink Cotton - Hooded Spray Application:
Apply Glufosinate 280SL via a hooded sprayer that is designed to direct product spray to the weeds and minimize exposure to cotton plants. When using this method of application, take all

possible steps to avoid exposing cotton plants to product spray. Key points for using hooded sprayer are:

- A hooded sprayer operates so that the top and sides are enclosed by a hood, protecting cotton from product spray
- Set up hooded sprayer so that it is run on or skims across the field, and operate the sprayer in a manner and speed that keeps the hood from bouncing or raising off the ground (NOTE – if hood becomes raised, it can allow spray particles to escape, which could cause damage or loss of cotton plant)
- Adjust hoods to protect desirable plants and use nozzles that deliver uniform exposure
- Avoid applying where ground is sloped or uneven, and could allow spray hoods to be raised off the ground

IMPORTANT

- For best results, use appropriate rates for size of weeds (as indicated in Weed Chart B), make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather, and high humidity
- Consult Weed Chart B for weed control, and if a mixed population of weeds are present, use the rate necessary to control all weed species.
- Additional application of Glufosinate 280SL or tank mix with other herbicide may be needed for control of weeds growing from seeds or in-ground portions of weeds
- Early season weed control is necessary for best harvest
- Glufosinate 280SL will not control any volunteer LibertyLink plants (corn, cotton, rice, soybean, sugarbeet) that are left from the previous season

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on cotton. Follow all label instructions, restrictions and precautions on both labels. When using Glufosinate 280SL in a tank mix, additional surfactant is not required.

Crop Restrictions: Within a 1 year period, up to 3 applications of Glufosinate 280SL may be made at a maximum rate of 29 fl. oz./A. If applying a maximum application rate of 29 fl. oz./A, the maximum yearly application rate is not to exceed 87 fl. oz./A, including all application timings. Observe an application interval of at least 10 – 14 days. If large weeds or dense infestation is present, because timely application was not possible (due to environmental conditions), an application not to exceed 43 fl. oz./A can be made, and a second application may be made at a maximum rate of 29 fl. oz./A. If applying a maximum application rate of greater than 29 fl. oz./A, the maximum yearly application rate is not to exceed 72 fl. oz./A, including all application timings. Observe an application interval of at least 10 – 14 days. Preharvest interval is 70 days. Additionally:

- Glufosinate 280 SL is not to be applied through any type of irrigation system
- Glufosinate 280 SL cannot be applied to cotton south of Tampa in Florida (Route 60) or in Hawaii (except for application to breeding nurseries or test plots)

SOYBEANS USE DIRECTIONS

Glufosinate 280 SL can be applied to transgenic (LibertyLink) soybeans to control weeds.

USE RATE AND TIMING

Apply 22 – 29 fl. oz. /A product to soybeans, from emergence up to just before bloom. If weed pressure is high, due to environmental conditions, preventing a timely use of Glufosinate 280 SL, a single application of up to 36 fl. oz./A can be made to soybeans beyond the V3-V4 vegetative growth phase. A second application of 29 fl. oz. /A can be used for later emerging weeds. Consult Weed List B for appropriate application rate based on weed type and size. Yearly maximum use rate is 65 fl. oz. product per acre.

IMPORTANT

- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather and high humidity
- For best results, use on weeds that have not exceeded height indicated in Weed Chart B, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- Early season weed control is necessary for best harvest
- If soybeans are injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide application, do not apply Glufosinate 280 SL.
- Glufosinate 280 SL can provide complete weed control when applied in a timely manner, however tank mixing or use of Glufosinate 280 SL in conjunction with residual herbicides can help with reduction of early season weed competition, and control of later emerging weeds (particularly if environmental conditions prevented timely application of Glufosinate 280 SL)

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on soybeans. Follow all label instructions, restrictions and precautions on the labels of all tank mix partners. Additional surfactant is not necessary when tank mixing.

Spray Additives: If weeds are under stress, addition of Ammonium Sulfate (AMS) to Glufosinate 280 SL can enhance results. If necessary, a silicone antifoam can be used with Glufosinate 280 SL.

CROP RESTRICTIONS

Do not make more than 2 applications of Glufosinate 280 SL to soybeans per year (including burndown), and do not exceed the max yearly application rate of 65 fl. oz. / A, and do not apply more than 36 fl. oz. / A in a single application. Wait at least 10 – 14 days between applications. Preharvest interval is 70 days. Additionally:

- Glufosinate 280 SL is not to be applied through any type of irrigation system
- Soybeans treated with Glufosinate 280 SL cannot be cut for hay or grazed
- Nitrogen solutions are not to be used as spray carriers.

FALLOW FIELDS USE DIRECTIONS

Glufosinate 280 SL can be applied to fallow fields to control or suppress weeds, as a substitute for tillage in fallow fields. See Weed List B for a list of target weed species.

USE RATE AND TIMING

Consult Weed List B for appropriate application rate based on weed type and size.
Use 22 or 29 fl. oz./A on fallow fields for control of target weed species.
Mix Glufosinate 280 SL with ammonium sulfate for application to fallow fields.

IMPORTANT

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use in fallow fields. 2.4-D, atrazine or glyphosate are recommended tank mix partners. Follow all label instructions, restrictions and precautions on both labels. When using Glufosinate 280SL in a tank mix, additional surfactant is not required.

WEED LIST B
For Canola; Cotton; Sweet,Field and Popcorn; Soybeans; Fallow Fields

The weed table indicates rates of product to be used for control of weeds based on weed height.

Broadleaf Weeds					
	Maximum Weed Height or Diameter (Inches)			Maximum Weed Height or Diameter (Inches)	
Weed Species	**20-22 fl. oz./A**	**29 fl. oz./A[1, 4]**	**Weed Species**	**20-22 fl. oz./A**	**29 fl. oz./A[1, 4]**
Amaranth, Palmer	3	4	Morningglory, sharppod	2	4
Anoda, spurred	3	5	Morningglory, smallflower	4	6
Beggarweed, Florida	4	5	Morningglory, tall	6	8
Black medic	5	7	Mustard, wild	4	6
Blueweed, Texas	5	7	Nightshade, black	4	6
Buckwheat, wild	6	7	Nightshade, eastern black	6	8
Buffalobur	6	7	Nightshade, hairy	6	8
Burcucumber	6	10	Pennycress (stinkweed)	4	6
Catchweed bedstraw (cleavers)	2	4	Pigweed, redroot	3	4
Carpetweed	4	6	Pigweed, prostrate	3	4
Chickweed, common	6	8	Pigweed, spiny	3	4
Cocklebur, common	6	14	Pigweed, smooth	3	4
Copperleaf, hophornbeam	4	6	Pigweed, tumble	3	4
Cotton, volunteer[2]	6	8	Puncturevine	4	6
Croton, tropic	3	5	Purslane, common	2	4
Croton, woolly	2	4	Pusley, Florida	*	3
Eclipta	4	6	Ragweed, common	6	10
Devil's claw	2	4	Ragweed, giant	6	12
Fleabane, annual	6	8	Senna coffee	4	6
Galinsoga, hairy	6	8	Sesbania, hemp	6	8
Galinsoga, small flower	6	7	Shepherd's Purse	6	8
Groundcherry, cutleaf	4	5	Sicklepod (java bean)	4	6
Geranium, cutleaf	4	6	Sida, prickly	4	5
Hempnettle	4	6	Smartweed, Pennsylvania	6	14
Horsenettle, Carolina[3]	2	4	Smellmelon	4	6
Jimsonweed	6	10	Sowthistle, annual	6	8
Knotweed	3	5	Soybeans, volunteer[2]	6	8
Kochia	4	6	Spurge, prostrate	2	4
Ladysthumb	6	14	Spurge, spotted	2	4
Lambsquarters, common	4	6	Starbur, bristly	4	6
Mallow, common	4	6	Sunflower, common	6	14
Mallow, Venice	6	8	Sunflower, prairie	3	5
Marestail[3]	*	6-12	Sunflower, volunteer	6	10
Marshelder, annual	4	6	Thistle, Russian[3]	S	6-12

Morningglory, entireleaf	6	8	Velvetleaf	3	4
Morningglory, ivyleaf	6	8	Waterhemp, common	4	5
Morningglory, pitted	6	8	Waterhemp, tall	4	5

*****Suppression only.

[1]In cotton, Glufosinate 280SL can be applied 3 times per year at a rate of 29 fl oz/A

[2]If volunteer crops are LibertyLink from the previous season, Glufosinate 280SL will not control them

[3]For control, a sequential application may be needed

[4] A use rate of 30 – 43 fl. oz./A can be used if weeds are particularly large, or if weed pressure is high due to environmental conditions preventing timely use of Glufosinate 280 SL. If applying a maximum application rate greater than 29 fl. oz./A, the maximum yearly application rate is not to exceed 72 fl. oz./A.

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

*Suppression Only

** A use rate of 30 – 43 fl. oz./A can be used if weeds are particularly large, or if weed pressure is high due to environmental conditions preventing timely use of Glufosinate 280 SL. If applying a maximum application rate greater than 29 fl. oz./A, the maximum yearly application rate is not to exceed 72 fl. oz./A.

Grass Weeds					
	Maximum Weed Height or Diameter (Inches)			**Maximum Weed Height or Diameter (Inches)**	
Weed Species	**20-22 fl. oz./A**	**29 fl. oz./A[1,5]**	**Weed Species**	**20-22 fl. oz./A**	**29 fl. oz./A[1,5]**
Barley, volunteer[4]	3	4	Millet, wild-proso	6	7
Barnyardgrass	3	5	Millet, proso volunteer	6	7
Bluegrass, annual	3	5	Oat, wild[3]	3	4

Corn, volunteer[2]	10	12	Panicum, fall	3	5
Crabgrass, large[3]	3	5	Panicum, Texas	4	6
Crabgrass, smooth[3]	3	5	Rice, red	4	6
Cupgrass, woolly	6	12	Rice, volunteer[2]	4	6
Foxtail, bristly	6	8	Sandbur, field[3]	*	2
Foxtail, giant	6	12	Shattercane	6	8
Foxtail, green	6	12	Signalgrass, broadleaf	3	5
Foxtail, robust purple	6	8	Sprangletop	4	6
Foxtail, yellow[3]	3	4	Sorghum, volunteer	6	8
Goosegrass[4]	2	3	Stinkgrass	4	6
Johnsongrass, seedling	3	5	Wheat, volunteer[3]	4	5
Junglerice	3	5	Witchgrass	4	6

*****Suppression only.

[1]In cotton, Glufosinate 280SL can be applied 3 times per year at a rate of 29 fl. oz./A

[2]Volunteer corn or rice will be best controlled with a timeline cultivation 7-10 days following application, and/or an additional treatment 10 – 21 days after initial application. If volunteer crops are LibertyLink from the previous season, Glufosinate 280SL will not control them

[3]Treat before tiller initiation for optimum control of crabgrass, field sandbur, wild oats or yellow foxtail

[4]For control, a sequential application may be needed

[5]A use rate of 30 – 43 fl. oz./A can be used if weeds are particularly large, or if weed pressure is high due to environmental conditions preventing timely use of Glufosinate 280 SL. If applying a maximum application rate greater than 29 fl. oz./A, the maximum yearly application rate is not to exceed 72 fl. oz./A.

SUGARBEETS USE DIRECTIONS
[(Not for use in California)]

Glufosinate 280 SL can be applied to transgenic (LibertyLink) sugarbeets to control weeds.

USE RATE AND TIMING

Apply up to 30 fl. oz. /A product to sugarbeets, from cotyledon stage up to 10 leaf stage. A second application of up to 30 fl. oz. /A will be needed to control later emerging weeds. Consult Weed List C for appropriate application rate based on weed type and size. Optimum control is obtained when weeds are 1 inch or less in height or diameter. Yearly maximum use rate is 60 fl. oz. product per acre.

IMPORTANT

- To avoid reduced performance of Glufosinate 280 SL, do not apply when heavy dew, fog, or mist/rain are present
- For best results, use on weeds that have not exceeded height indicated in Weed Chart C, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- Make a cultivation 5 days before or 5 days after application of Glufosinate 280 SL
- Early season weed control is necessary for best harvest
- If soybeans are injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide application, do not apply Glufosinate 280 SL. Applying under these conditions will result in reduced weed control
- Weeds that emerge after Glufosinate 280 SL has been applied will not be controlled, as Glufosinate 280SL does not exhibit residual activity. If crop experiences a rain event within 4 hours of application, retreatment may be necessary, however after 4 hours, Glufosinate 280 SL is rainfast.

Tank Mixes: To support product performance, Glufosinate 280 SL can be mixed with other herbicides registered for use on soybeans. Follow all label instructions, restrictions and precautions on the labels of all tank mix partners.

Spray Additives: If necessary, antifoam or drift control agents can be used with Glufosinate 280 SL. Do not use surfactants.

CROP RESTRICTIONS

Do not exceed the max yearly application rate of 60 fl. oz. / A, and do not apply more than 30 fl. oz. / A in a single application. Preharvest interval is 60 days. Additionally:

- Glufosinate 280 SL is not to be applied through any type of irrigation system
- Sugarbeets treated with Glufosinate 280 SL cannot be cut for hay or grazed
- Rotation crop plantback in sugarbeet field treated with Glufosinate 280 SL is 120 days after last application for all crops except wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale (70 day plantback restriction) or corn, cotton, soybeans, canola and sugar beets tolerant to the active ingredient in Glufosinate 280 SL (0 day plantback restriction)

WEED LIST C
For Sugar Beets

The weed table indicates rates of product to be used for control of weeds based on weed height. If weed population consists of mixed species, apply rate indicated that will be efficacious for all species.

Grass Weeds

Weed Species	Maximum Weed Height*		Use Notes
	15 fl. oz. A (0.9 pt./A)	20 fl. oz. A (1.25 pt./A)	
Barley, volunteer	1-2 leaf (2”)	3 leaf (3”)	Multiple applications may be required
Barnyard grass	1-3 leaf (2”)	4-5 leaf (3”)	Maximum of 1 tiller
Corn, volunteer	1-2 leaf (3”)	3-4 leaf (6”)	--
Crabgrass, large	1-3 leaf (2”)	4-5 leaf (3”)	Maximum of 1 tiller
Crabgrass, smooth	1-3 leaf (2”)	4-5 leaf (3”)	Maximum of 1 tiller
Crabgrass, wooly	1-5 leaf (4”)	(8”)	- -
Foxtail, giant	1-4 leaf (3”)	5-6 leaf (4”)	Maximum of 2 tillers
Foxtail, green	1-4 leaf (3”)	5-6 leaf (4”)	Maximum of 2 tillers
Foxtail, yellow	1-3 leaf (1”)	4 leaf (2”)	Apply prior to tillering
Millet, volunteer proso	1-3 leaf (2”)	4-5 leaf (3”)	Max of 1 tiller
Millet, wild proso	1-3 leaf (2”)	4-5 leaf (3”)	Max of 1 tiller
Oat, wild	1-2 leaf (2”)	3 leaf (3”)	Max of 1 tiller
Panicum, fall	1-3 leaf (2”)	4-5 leaf (3”)	Max of 1 tiller
Panicum, Texas	1-3 leaf (2”)	4-5 leaf (3”)	Max of 1 tiller
Sandbur, field	--	1-4 leaf (2”)	Apply prior to tillering
Wheat, volunteer	1-2 leaf (2”)	3 leaf (3”)	Maximum of 1 tiller

*Up to 30 fl. oz./A can be applied if weeds are taller than indicated in table.
Tank mix with herbicides containing clethodim, quizalofop, rimsulfuron or sethoxydim to enhance control of heavy populations or taller growth stages of volunteer barely, yellow foxtail, wild oats or volunteer wheat

Perennial Weeds

Weed Species	Maximum Weed Height*		Use Notes
	15 fl. oz./A (0.9 pt./A)	20 fl. oz./A (1.25 pt./A)	
Quackgrass	--	1-3 leaf (3”)	Multiple applications required
Sowthistle, perennial	--	1-4 leaf (3”)	Multiple apps reqd
Thistle, Canada	--	1-4 leaf (3”)	Multiple apps reqd

*Up to 30 fl. oz./A can be applied if weeds are taller than indicated in table.

Broadleaf Weeds

Weed Species	Maximum Weed Diameter*	
	15 fl oz/A (0.9 pt./A)	20 fl oz/A (1.25 pt./A)
Buckwheat, wild	1-4 leaf (2”)	5-6 leaf (3”)
Buffalobur	1-4 leaf (2”)	5-6 leaf (3”)
Carpetweed	--	1-4 leaf (2”)
Chickweed, common	1-4 leaf (2”)	5-6 leaf (3”)
Cocklebur, common	1-6 leaf (3”)	7-8 leaf (5”)
Kochia	(1”)	(2”)
Ladysthumb	1-2 leaf (1”)	3-4 leaf (3”)
Lambsquarter, common	1-2 leaf (1”)	4-5 leaf (3”)
Mallow, venice	1-4 leaf (2”)	5-6 leaf (3”)
Marshelder	1-2 leaf (1”)	3-4 leaf (2”)
Mustard, wild	1-4 leaf (2”)	5-6 leaf (3”)
Nightshade, eastern black	1-4 leaf (2”)	5-6 leaf (3”)
Pigweed, prostrate	(1”)	(3”)
Pigweed, redroot	1-2 leaf (1”)	3-4 leaf (3”)
Pigweed, spiny	1-2 leaf (1”)	3-4 leaf (3”)
Purslane, common	(1”)	(2”)
Ragweed, common	1-6 leaf (3”)	7-8 leaf (5”)
Ragweed, giant	1-4 leaf (2”)	5-6 leaf (3”)
Shepherds purse	1-4 leaf (2”)	5-6 leaf (3”)
Smartweed, Pennsylvania	1-2 leaf (1”)	3-4 leaf (3”)
Sowthistle, annual	1-4 leaf (2”)	5-6 leaf (3”)
Sunflower, common	1-6 leaf (3”)	7-8 leaf (5”)
Thistle, Russian	(1”)	(2”)
Velvetleaf	1-2 leaf (1”)	3-4 leaf (3”)

*Up to 30 fl. oz./A can be applied if weeds are taller than indicated in table.

BURNDOWN USE DIRECTIONS

Glufosinate 280SL can be applied prior to planting or emergence of conventional or transgenic canola, corn, cotton, soybean or sugarbeet, to act as a burndown agent for existing weed species.

USE RATE AND TIMING

Glufosinate 280 SL can be applied via two different use patterns. TIMING 1 use pattern is used for low to medium weed pressure , and when weeds are small and actively growing. TIMING 2 use pattern is used if weed pressure is high and weeds are larger and actively growing.

Burndown in Canola, Corn, Sugarbeets

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
TIMING 1	29 fl. oz./A	None	36 fl. oz./A
TIMING 2	Up to 36 fl. oz./A	None	36 fl. oz./A

Apply at least 29 fl. oz. A of Glufosinate 280SL just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Glufosinate 280 SL., a single application of up to 36 fl. oz./A can be made.

Burndown in Soybeans

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
TIMING 1	29 fl. oz./A	22 – 29 fl. oz./A	65 fl. oz./A
TIMING 2	Up to 36 fl. oz./A	22 – 29 fl. oz./A	65 fl. oz./A

Apply at least 29 fl. oz./A of Glufosinate 280SL just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Glufosinate 280 SL., a single application of up to 36 fl. oz./A can be made. For soybeans, an additional in-season application up to 29 fl. oz./A can be made

Burndown in Cotton

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum Use Rate per Year
TIMING 1	29 fl. oz./A	22 – 29 fl. oz./A (2 applications)*	87 fl. oz./A
TIMING 2	30 – 43 fl. oz./A	22-29 fl. oz./A (1 application)*	72 fl. oz./A

* In season application is made via hooded sprayer in non-LibertyLink cotton. Apply at least 29 fl. oz./ of Glufosinate 280SL just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Glufosinate 280 SL., a single application of up to 43 fl. oz./A can be made. Yearly maximum use rate is 72 fl. oz./A (including all application timings) when a single application higher than 29 fl. oz./A is made.

IMPORTANT

- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing
- For enhanced performance of Glufosinate 280 SL, apply during warm and sunny weather, and high humidity

POTATO VINE DESICCATION USE DIRECTIONS

Glufosinate 280 SL can be used to desiccate potato vines once the vines reach senescence.

USE RATE AND TIMING

Apply Glufosinate 280 SL at the rate of 21 fl. oz./A. Make only one application once the potato vine enters its natural senescence period. Do not split the application. If a particular potato variety has a heavy or dense vine, an application of another desiccation product may be necessary for total desiccation of the potato vine.

Apply the indicated amount of Glufosinate 280 SL in enough water (20 to 100 gallons per acre) to thoroughly cover the potato vines. Take into account the density of the potato vine and increase or decrease spray volume as necessary to achieve complete coverage.

IMPORTANT:

- It is essential to obtain thorough coverage of the potato vine for adequate desiccation. Make sure the spray boom is operated as low as possible to achieve thorough coverage (this also minimizes any potential for drift)
- If climate conditions are cool and dry, or if potato vine canopy is heavy, make sure to use a spray volume of at least 30 gallons of water per acre

Crop Restrictions: Per year, do not apply more than 21 fl. oz./A of Glufosinate 280 SL to potato vines. Preharvest interval is 9 days. This product cannot be applied to potatoes grown for seed. Additionally, crop rotation and plantback intervals after application of Glufosinate 280 SL for potato vine desiccation are as follows:

Crop	Minimum Rotation Interval
All crops other than those listed in this table	120 Days
Barley, Buckwheat, Millet, Oats, Rye, Sorghum, Triticale, Wheat	30 Days
Canola, Corn, Cotton, Rice, Soybean, Sugar Beets	May be planted at any time

CANOLA SEED PROPAGATION USE DIRECTIONS

During canola seed propagation, to eliminate vulnerable canola segregates that are not tolerant to Glufosinate ammonium, apply Glufosinate 280 SL as a foliar spray, as indicated in the chart below. Up to three applications can be made. If canola is injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide application, do not apply Glufosinate 280 SL. If canola is injured or adversely affected by environmental stress (such as excessive rainfall, drought, pest pressure, etc.) or prior herbicide application, do not apply Glufosinate 280 SL

	Glufosinate 280 SL Use Rate	**Canola Growth Stage**
APPLICATION 1	22 fl. oz. / A	Cotyledon stage up to early bolt stage (BBCH 18-30; just prior to stem elongation / bolting (8 or more leaves) through beginning of stem elongation (no internode))
APPLICATION 2	22 fl. oz. / A	
APPLICATION 3	22 fl. oz. / A	

CANOLA SEED PROPAGATION USE RESTRICTIONS

Do not make more than 3 applications of Glufosinate 280 SL to canola per year, and do not exceed the use rate of 22 fl. oz. / A or the max yearly application rate of 66 fl. oz. / A. Preharvest interval is 65 days. Additionally:

- Glufosinate 280 SL is not to be applied through any type if irrigation system.
- Treated canola seed cannot be used for food, feed or oil purposes.

CORN, COTTON, AND SOYBEAN SEED PROPAGATION USE DIRECTIONS

During seed propagation, vulnerable "segregates" (plants not tolerant to Glufosinate-ammonium) of corn, cotton and soybean can be selected out by application of Glufosinate 280 SL.

CORN

To pick out tolerant segregates, apply Glufosinate 280 SL as indicated in the chart below. A second application, at least 10 – 14 days later, can be used, if needed. Corn plants not tolerant to Glufosinate ammonium will be seriously injured or killed. To protect plants from Glufosinate 280 SL, apply herbicide with a hooded sprayer.

	Glufosinate 280 SL Use Rate	**Additive***	**Corn Growth Stage**
APPLICATION 1	22 fl. oz. / A	AMS – 3 lb./A	V3 – V4 (3 to 4 developed collars)
APPLICATION 2	22 fl. oz./A	AMS – 3 lb. /A	V6 to V7

*AMS – Ammonium Sulfate; Reduce rate of AMS to 1.5 lbs. /A when temperatures exceed 85˚F, to limit possibility of leaf burn

COTTON
During cotton seed propagation, to eliminate vulnerable cotton segregates that are not tolerant to Glufosinate ammonium, apply Glufosinate 280 SL as a foliar spray, as indicated in the chart below. Two or three applications can be made, at least 10 days apart. Use Timing 1 when making a timely application, under normal pest pressure. Timing 2 can be used if weeds are particularly large or weed pressure is high due to environmental conditions preventing timely use of Glufosinate 280 SL.

TIMING 1

	Glufosinate 280 SL Use Rate	**Cotton Growth Stage**
APPLICATION 1	22 – 29 fl. oz. / A	Emergence, up to early bloom
APPLICATION 2	22 – 29 fl. oz. / A	
APPLICATION 3	22 – 29 fl. oz.. / A	

TIMING 2

	Glufosinate 280 SL Use Rate	**Cotton Growth Stage**
APPLICATION 1	30 - 43 fl. oz. / A	Emergence, up to early bloom
APPLICATION 2	22 – 29 fl. oz. / A	

SOYBEANS
To pick out tolerant soybean segregates, apply Glufosinate 280 SL as indicated in the chart below. A second application, at least 10 – 14 days later, may be used, if needed.

	Glufosinate 280 SL Use Rate	**Soybean Growth Stage**
APPLICATION 1	22 fl. oz. / A	Third trifoliate stage
APPLICATION 2	22 fl. oz. / A	Up to (but not including) bloom

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 SL is below 32° F, the material should not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

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

CONTAINER HANDLING:
[*Nonrefillable plastic containers less than or equal to 5 gallons*]
Nonrefillable container. Do not reuse or refill this container. 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a

mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or 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.

[*Nonrefillable plastic containers greater than 5 gallons*]
Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or 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.

[*Refillable containers*]
Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Return to the point of sale or offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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 SUMMIT AGRO NORTH AMERICA HOLDING CORPORATION or the SELLER. To the extent consistent with applicable law, all such risks shall be assumed by the buyer. Summit Agro North America 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. SUMMIT AGRO NORTH AMERICA HOLDING CORPORATION 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, SUMMIT AGRO NORTH AMERICA HOLDING CORPORATION AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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EPA [*Approval Date*]