

Helena

Glufosinate

280 SL Herbicide

Helena Glufosinate 280 SL Herbicide is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds.

Helena Glufosinate 280 SL Herbicide is registered for use as a:

- burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet
- postemergence weed control herbicide to be applied on LibertyLink® or glufosinate-resistant crops including LibertyLink canola, LibertyLink corn, LibertyLink sweet corn, LibertyLink cotton, and LibertyLink soybeans
- postemergence weed control herbicide to be applied on cotton with a hooded sprayer only

Active Ingredient:

glufosinate-ammonium* 24.5%**

Other Ingredients: 75.5%

Total: 100.0%

* CAS Number 77182-82-2

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

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

See inside for complete **First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

EPA Reg. No. 7969-448-5905

AD 112519HAE

EPA Est. No. is indicated by the letter(s) immediately following the first five numbers of the lot code printed on the container.

Net Contents: 2.5 gallons

5905-IA-001 (N); 70989-IA-001 (U); 11773-IA-001 (FF)

Manufactured for
Helena Agri-Enterprises, LLC
225 Schilling Boulevard, Suite 300
Collierville, TN 38017

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes. • Get medical attention if irritation develops or persists.
If on skin	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • 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 by a poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
HOTLINE 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 Helena Agri-Enterprises, LLC for emergency medical treatment information: 1-800-424-9300.	
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. Additionally, call 1-800-424-9300 immediately for further information.	

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, on skin, or on 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. Remove and wash contaminated clothing before use.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeve shirt and long pants
- Chemical-resistant gloves including 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 and socks
- Protective eyewear (goggles, face shield or safety glasses)

Mixers/loaders supporting aerial applications to canola, corn, cotton, and soybean must use closed mixing/loading systems.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

DO NOT reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS
Users should: <ul style="list-style-type: none"> • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering Control Statement

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

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 washwater or rinsate.

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

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

Directions For Use

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

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

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

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

AGRICULTURAL USE REQUIREMENTS

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

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

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

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

- Coveralls worn over short-sleeve shirt and short pants
- Chemical-resistant gloves including 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
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

IMPORTANT CROP SAFETY INFORMATION

READ BEFORE USING THIS PRODUCT

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

Postemergence row crop applications of **Helena Glufosinate 280 SL Herbicide** may be made only to crops resistant to the active ingredient in this product. BASF does not warrant the use of this product on crops other than those designated as LibertyLink® to safely withstand the application of **Helena Glufosinate 280 SL Herbicide** to the extent consistent with applicable law.

The basis of selectivity of **Helena Glufosinate 280 SL Herbicide** in crops is the presence of a gene in LibertyLink crops which results in a plant that is resistant to the active ingredient of **Helena Glufosinate 280 SL Herbicide**. Crops not

containing this gene will not be resistant to **Helena Glufosinate 280 SL Herbicide** 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 resistant to the active ingredient in this product.

Helena Glufosinate 280 SL Herbicide may be applied to conventional or other transgenic cotton not resistant to the active ingredient in **Helena Glufosinate 280 SL Herbicide** using a hooded sprayer.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage

DO NOT use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature must not exceed 125° F. If storage temperature for bulk **Helena Glufosinate 280 SL Herbicide** 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 nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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 if available or reconditioning if appropriate; 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 **Helena Glufosinate 280 SL Herbicide**. 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 inches 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 BASF 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 **Helena Glufosinate 280 SL Herbicide**, 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.

Product Information

Helena Glufosinate 280 SL Herbicide is a water-soluble nonselective herbicide for application as a foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds.

Helena Glufosinate 280 SL Herbicide is registered for use as a:

- burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet
- postemergence weed control herbicide to be applied on **LibertyLink®** or glufosinate-resistant crops including **LibertyLink** canola, **LibertyLink** corn, **LibertyLink** sweet corn, **LibertyLink** cotton, and **LibertyLink** soybeans
- postemergence weed control herbicide to be applied on cotton with a hooded sprayer only

Helena Glufosinate 280 SL Herbicide is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled.

Helena Glufosinate 280 SL Herbicide:

- Apply to actively growing small weeds as specified in the **Weed Control for Row Crops** section.
- **Helena Glufosinate 280 SL Herbicide** is a contact herbicide and requires uniform, thorough spray coverage.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **Helena Glufosinate 280 SL Herbicide**.
- Necrosis of leaves and young shoots occurs within 2 to 4 days after application under good growing conditions.
- **Helena Glufosinate 280 SL Herbicide** 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.
- To avoid the possibility of reduced lambsquarters and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
- 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 including drought, cool temperatures, or extended periods of cloudiness.
- To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application.
- Consult your local Cooperative Extension Service or Helena Agri-Enterprises, LLC representative for guidelines on the optimum application timing for **Helena Glufosinate 280 SL Herbicide** in your region.

Rotational Crop Restrictions

Rotational crop planting intervals following application of **Helena Glufosinate 280 SL Herbicide** 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, Soybean, and Sugar Beets	May be planted at any time
Brassica Leafy Vegetables, Leafy Vegetables, Root and Tuber Vegetables, and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 days
Other Crops	180 days

Resistance Management

Helena Glufosinate 280 SL Herbicide is a Group 10 herbicide, i.e., a glutamine synthetase inhibitor. A given weed population may contain or develop resistance to a herbicide after repeated use. Appropriate resistance management strategies should be followed to mitigate or delay resistance. The following integrated weed management techniques are effective in reducing problems with herbicide resistant weed biotypes. It is best to use multiple practices to manage or delay resistance, as no single strategy is likely to be totally effective.

Contact your local Helena Agri-Enterprises, LLC 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.

Fields should be scouted prior to application to identify the weed species present and the 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 an incidence of non-performance of this product against a particular weed species to your local extension specialists, certified crop advisor and/or Helena Agri-Enterprises, LLC representative.

- **Rotate crops** - Crop rotation diversifies weed management.
- **Rotate herbicide-resistant traits** – Alternate herbicide- resistant (HR) traits and/or use HR trait stacks for more efficient rotation.
- **Use multiple herbicide sites of action** - Use tank mix partners and multiple sites of action during both the growing season and from year to year to reduce the selection pressure of a single site of action.
- **Know your weeds. Know your fields** - Closely monitor problematic areas with difficult-to-control weeds or dense weed populations.
- **Start with clean fields** - Effective tillage or the use of a burndown herbicide program can control emerged weeds prior to planting.
- **Stay clean. Use residual herbicides** - Regardless of tillage system, preemergence or early postemergence soil-applied residual herbicides should be used when possible.
- **Apply herbicides correctly** - Ensure proper application, including timing, full use rates and appropriate spray volumes.
- **Control weed escapes** - Consider spot herbicide applications, row wicking, cultivation or hand removal of weeds or other techniques to stop weed seed production and improve weed management.
- **Zero tolerance. Reduce the seed bank** - **DO NOT** allow surviving weeds to set seed, which will help decrease weed populations from year to year and prevent major weed shifts.
- **Clean equipment** - Prevent the spread of herbicide-resistant weeds and their seeds.
- **Manage borders.** Prevent an influx of weeds into the field by managing borders.
- **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.

Contact your local extension specialist, certified crop advisory and/or Helena Agri-Enterprises, LLC representative for additional resistance management or IPM recommendation. Also 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.

**Table 1. Broadleaf Weeds Controlled
(including glyphosate-, triazine-, PPO-, ALS-, HPPD-, and auxin-resistant biotypes)**

Common Name	Scientific Name	22 fl ozs/A	32 to 43 fl ozs/A
		C = Control S = Suppression	
Amaranth, Palmer	<i>Amaranthus palmeri</i>		C
Anoda, spurred	<i>Anoda cristata</i>	C	C
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	C
Black medic	<i>Medicago lupulina</i> L.	C	C
Blueweed, Texas	<i>Helianthus ciliaris</i> DC.	C	C
Buckwheat, wild	<i>Polygonum convolvulus</i>	C	C
Buffalobur	<i>Solanum cornutum</i>	C	C
Burcucumber	<i>Sicyos angulatus</i>	C	C

Canola, volunteer ¹	<i>Brassica</i> spp.	C ¹	C ¹
Carpetweed	<i>Mollugo verticillata</i>	C	C
Catchweed bedstraw (cleavers)	<i>Galium aparine</i> L.	C	C
Chickweed, common	<i>Stellaria media</i>	C	C
Cocklebur, common	<i>Xanthium strumarium</i>	C	C
Copperleaf, hophornbeam	<i>Acalypha ostryaefolia</i>	C	C
Cotton, volunteer ¹	<i>Gossypium</i> spp.	C ¹	C ¹
Croton, tropic	<i>Croton glandulosus</i>	C	C
Croton, woolly	<i>Croton capitatus</i>	C	C
Devil's claw	<i>Proboscidea louisiana</i>	C	C
Eclipta	<i>Eclipta alba</i>	C	C
Fleabane, annual	<i>Erigeron annuus</i>	C	C
Galinsoga, hairy	<i>Galinsoga ciliate</i>	C	C
Galinsoga, smallflower	<i>Galinsoga parviflora</i>	C	C
Geranium, cutleaf	<i>Geranium dissectum</i> L.	C	C
Groundcherry, cutleaf	<i>Physalis angulata</i>	C	C
Hempnettle	<i>Galeopsis</i> spp.	C	C
Horsenettle, Carolina ²	<i>Solanum carolinense</i>	C ²	C ²
Jimsonweed	<i>Datura stramonium</i>	C	C
Knotweed	<i>Polygonum</i> spp.	C	C
Kochia	<i>Kochia scoparia</i>	C	C
Ladysthumb	<i>Polygonum persicaria</i>	C	C
Lambsquarters, common	<i>Chenopodium album</i>	C	C
Mallow, common	<i>Malva</i> spp.	C	C
Mallow, Venice	<i>Hibiscus trionum</i>	C	C
Marestail ³	<i>Conyza canadensis</i>	S	C
Marsh elder, annual	<i>Iva annua</i>	C	C
Morningglory, entireleaf	<i>Ipomoea hederacea</i> var. <i>integruscula</i>	C	C
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	C	C
Morningglory, pitted	<i>Ipomoea lacunosa</i>	C	C
Morningglory, sharppod	<i>Ipomoea cordatotriloba</i>	C	C
Morningglory, smallflower	<i>Jacquemontia tamnifolia</i>	C	C
Morningglory, tall	<i>Ipomoea purpurea</i>	C	C
Mustard, wild	<i>Sinapis arvensis</i>	C	C
Nightshade, black	<i>Solanum nigrum</i>	C	C
Nightshade, eastern black	<i>Solanum ptycanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C
Pennycress	<i>Thlaspi arvense</i>	C	C
Pigweed, prostrate	<i>Amaranthus blitoides</i>	C	C
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C
Pigweed, spiny	<i>Amaranthus spinosus</i>	C	C
Pigweed, tumble	<i>Amaranthus albus</i>	C	C
Puncturevine	<i>Tribulus terrestris</i>	C	C
Purslane, common	<i>Portulaca oleracea</i>	C	C
Pusley, Florida	<i>Richardia scabra</i>	S	C
Ragweed, common	<i>Ambrosia artemisiifolia</i>	C	C
Ragweed, giant	<i>Ambrosia trifida</i>	C	C
Senna, coffee	<i>Cassia occidentalis</i>	C	C
Sesbania, hemp	<i>Sesbania herbacea</i>	C	C
Shepherd's purse	<i>Capsella bursa-pastoris</i>	C	C
Sicklepod (java bean)	<i>Senna obtusifolia</i>	C	C
Sida, prickly	<i>Sida spinosa</i> L.	C	C
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>	C	C

Smell melon	<i>Cucumis melo</i> L. var. <i>dudaim</i>	C	C
Sowthistle, annual	<i>Sonchus oleraceus</i> L.	C	C
Soybeans, volunteer ¹	<i>Glycine max</i>	C ¹	C ¹
Spurge, prostrate	<i>Euphorbia humifusa</i>	C	C
Spurge, spotted	<i>Euphorbia maculata</i> L.	C	C
Starbur, bristly	<i>Acanthospermum hispidum</i>	C	C
Sunflower, common	<i>Helianthus annuus</i>	C	C
Sunflower, prairie	<i>Corythucha pura</i>	C	C
Sunflower, volunteer	<i>Helianthus annuus</i>	C	C
Thistle, Russian ²	<i>Salsola kali</i>	S ²	C ²
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>		C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>		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 **Helena Glufosinate 280 SL Herbicide** on 6-inch marestail.

Table 2. Grass Weeds Controlled
(including glyphosate-, triazine-, PPO-, ALS-, HPPD-, and auxin-resistant biotypes)

Common Name	Scientific Name	22 fl ozs/A	32 to 43 fl ozs/A
		C = Control S = Suppression	
Barley, volunteer ³	<i>Hordeum vulgare</i>	C ³	C ³
Barnyardgrass	<i>Echinochloa</i> spp.	C	C
Bluegrass, annual	<i>Poa annua</i> L.	C	C
Corn, volunteer ¹	<i>Zea mays</i> L.	C ¹	C ¹
Crabgrass, large ²	<i>Digitaria sanguinalis</i>	C ²	C ²
Crabgrass, smooth ²	<i>Digitaria ischaemum</i>	C ²	C ²
Cupgrass, woolly	<i>Eriochloa villosa</i>	C	C
Foxtail, bristly	<i>Setaria verticillata</i>	C	C
Foxtail, giant	<i>Setaria faberi</i>	C	C
Foxtail, green	<i>Setaria viridis</i>	C	C
Foxtail, robust purple	<i>Setaria viridis</i>	C	C
Foxtail, yellow ²	<i>Setaria pumila</i>	C ²	C ²
Goosegrass ³	<i>Eleusine indica</i>	C ³	C ³
Johnsongrass, seedling	<i>Sorghum halepense</i>	C	C
Junglerice	<i>Echinochloa colonum</i>	C	C
Millet, proso volunteer	<i>Milium vernale</i>	C	C
Millet, wild proso	<i>Panicum miliaceum</i> L.	C	C
Oat, wild ²	<i>Avena fatua</i>	C ²	C ²
Panicum, fall	<i>Panicum dichotomiflorum</i>	C	C
Panicum, Texas	<i>Panicum texanum</i>	C	C
Rice, red	<i>Oryza sativa</i> L.	C	C
Rice, volunteer ¹	<i>Oryza sativa</i>	C ¹	C ¹
Sandbur, field ²	<i>Cenchrus pauciflorus</i>	S ²	C ²
Shattercane	<i>Sorghum vulgare</i> Pers.	C	C
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>	C	C
Sorghum, volunteer	<i>Sorghum</i> spp.	C	C
Sprangletop	<i>Leptochloa</i> spp.	C	C
Stinkgrass	<i>Eragrostis cilianensis</i>	C	C
Wheat, volunteer ²	<i>Triticum</i> spp.	C ²	C ²
Witchgrass	<i>Panicum virgatum</i> 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 10 to 21 days after the first application can be made for controlling dense clumps of volunteer corn or rice.

² For best control of yellow foxtail, field sandbur, crabgrass, wild oats, and volunteer wheat, treat prior to tiller initiation.

³ A sequential application may be necessary for control.

Table 3. Biennial and Perennial Weeds Controlled
(including glyphosate-, triazine-, PPO-, ALS-, HPPD-, and auxin-resistant biotypes)

For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of Helena Glufosinate 280 SL Herbicide can be made by crop (see crop sections).

Common Name	Scientific Name	32 to 43 fl ozs/A
		C = Control S = Suppression
Alfalfa	<i>Medicago sativa</i> L.	C
Bermudagrass	<i>Cynodon dactylon</i>	C
Bindweed, field	<i>Convolvulus arvensis</i> L.	C
Bindweed, hedge	<i>Calystegia sepium</i>	C
Bluegrass, Kentucky	<i>Poa pratensis</i> L.	C
Blueweed, Texas	<i>Helianthus ciliaris</i> DC.	C
Bromegrass, smooth	<i>Bromus inermis</i>	C
Burdock	<i>Arctium</i> spp.	C
Bursage, woollyleaf	<i>Ambrosia grayi</i>	C
Chickweed, mouse-ear	<i>Cerastium vulgatum</i> L.	C
Clover, red	<i>Trifolium pratense</i> L.	C
Dandelion	<i>Taraxacum officinale</i>	C
Dock, smooth	<i>Rumex</i> spp.	S
Dogbane, hemp	<i>Apocynum cannabinum</i>	S
Goldenrod, gray	<i>Solidago nemoralis</i>	C
Johnsongrass, rhizome	<i>Sorghum halepense</i>	C
Milkweed, common	<i>Asclepias syriaca</i>	S
Milkweed, honeyvine	<i>Ampelamus albidus</i>	S
Muhly, wirestem	<i>Muhlenbergia frondosa</i>	S
Nightshade, silverleaf	<i>Solanum elaeagnifolium</i>	C
Nutsedge, purple	<i>Cyperus rotundus</i>	S
Nutsedge, yellow	<i>Cyperus ferax</i>	S
Orchardgrass	<i>Dactylis glomerata</i> L.	C
Poinsettia, wild	<i>Euphorbia heterophylla</i> L.	S
Pokeweed	<i>Phytolacca</i> L.	C
Quackgrass	<i>Agropyron repens</i>	C
Sowthistle, perennial	<i>Sonchus arvensis</i> L.	C
Thistle, bull	<i>Cirsium vulgare</i>	S
Thistle, Canada	<i>Cirsium arvense</i>	C
Timothy	<i>Phleum pratense</i> L.	S
Wormwood, biennial	<i>Artemisia biennis</i>	C

Use the **Use Rate Equivalency** table to determine the corresponding amounts of active ingredient (glufosinate) from **Helena Glufosinate 280 SL Herbicide** product use rates.

Use Rate Equivalency for Helena Glufosinate 280 SL Herbicide (2.34 lbs ai/A)

Amount of Helena Glufosinate 280 SL Herbicide (fl ozs/A)	Amount of glufosinate (lbs ai/A)
22	0.40
29	0.53
32	0.59
36	0.66
43	0.79
72	1.32
82	1.50
87	1.59
246	4.50

Application and Mixing Procedures

Uniform, thorough spray coverage is important to achieve consistent weed control with Helena Glufosinate 280 SL Herbicide.

Ground Application

- Apply early when weeds are small with directed rates as identified in the rate tables for each crop.
- Apply **Helena Glufosinate 280 SL Herbicide** in a minimum of 15 gallons of water per acre. Increase to 20 gallons of water per acre if dense weed canopy exists.

Aerial Application

- Apply early when weeds are small with directed rates as identified in the rate tables.
- Apply **Helena Glufosinate 280 SL Herbicide** in a minimum of 10 gallons of water per acre.
- See the Spray Drift Management section of this label for additional information on proper application of **Helena Glufosinate 280 SL Herbicide**.

Application and Mixing Restrictions

- **DO NOT** apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target. See the Spray Drift Management section of this label for additional information on proper application of **Helena Glufosinate 280 SL Herbicide**.
- **DO NOT** use flood jet nozzles, controlled droplet application equipment, or air-assisted spray equipment.

Compatibility Testing

If **Helena Glufosinate 280 SL Herbicide** 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 ozs of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
4. For each 16 fl ozs of **Helena Glufosinate 280 SL Herbicide** 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 Instructions. **Helena Glufosinate 280 SL Herbicide** 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.

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

Helena Glufosinate 280 SL Herbicide is formulated to mix readily in water. Prior to adding **Helena Glufosinate 280 SL Herbicide** 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). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Mixing Instructions for Helena Glufosinate 280 SL Herbicide

1. Start with properly calibrated and clean equipment.
2. Fill the spray tank half full with water.
3. Start agitation.
4. 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.
5. Add ammonium sulfate (AMS) to the spray tank if needed.
6. If mixing with a liquid tank mix partner, add the liquid mix partner next.
7. Complete filling the spray tank with water **before adding Helena Glufosinate 280 SL Herbicide, as foaming may occur.**
8. Add **Helena Glufosinate 280 SL Herbicide** when tank is full and continue agitation.
9. If foaming occurs, use a silicone-based **anti-foam 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 listed 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

Prior To Helena Glufosinate 280 SL Herbicide Use

Before using **Helena Glufosinate 280 SL Herbicide**, 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 and as instructed on the prior herbicide label.

After Helena Glufosinate 280 SL Herbicide Use

After using **Helena Glufosinate 280 SL Herbicide**, triple rinse the spray equipment and clean with a commercial tank cleaner before using the equipment for a new application. 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.

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 1/2 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.
- 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.

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 10 ft above the canopy increases the potential for spray drift.

Boom Height. Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind.

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

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

<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.

Application Directions for Burndown Use

Helena Glufosinate 280 SL Herbicide may be applied as a **burndown treatment prior to planting or prior to emergence** of canola, corn, sweet corn, cotton, soybean, sugar beet, **LibertyLink®** or glufosinate-resistant canola, **LibertyLink** or glufosinate-resistant corn, **LibertyLink** or glufosinate-resistant sweet corn, **LibertyLink** or glufosinate-resistant soybean.

Application Directions

Application Timing	<ul style="list-style-type: none"> Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. 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 including drought, cool temperatures, or extended periods of cloudiness. To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
Application Use Rate	<ul style="list-style-type: none"> Apply 32 to 43 fl ozs/A depending on crop, weed species and intention of post application use. Please see application charts below.
Adjuvant	<ul style="list-style-type: none"> Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. Anti-foam agent is advised.
Surfactants/Oils	<ul style="list-style-type: none"> The use of surfactants may be included. Please refer to the surfactant label for more detailed information.
Spray Volume	<ul style="list-style-type: none"> 15 GPA minimum If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> 4 hours

Table 4. Application Directions for Conventional and non Glufosinate-resistant Crops

Crop	Burndown (fl ozs/A)	In-crop Applications	Per Year (fl ozs/A)
Canola, Corn, Sweet Corn, Soybean	32 to 43	None	43
Sugar Beet	32 to 36	None	36
Cotton Use Pattern 1	29	2 applications at 29 fl ozs/A*	87

Cotton Use Pattern 2	32 to 43	1 application at 29 fl ozs/A*	72
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* Post application in **non-LibertyLink®** or non glufosinate resistant cotton can ONLY be applied with a hooded sprayer. See application directions for cotton for more information.

Table 5. Application Directions for LibertyLink or Glufosinate-resistant Crops

LibertyLink or Glufosinate-resistant Crop	Burndown (fl ozs/A)	In-crop Applications (LibertyLink or Glufosinate-resistant varieties only)	Per Year (fl ozs/A)
LibertyLink or glufosinate-resistant Corn, LibertyLink or glufosinate-resistant Soybean	32 to 43	Up to 2 applications at 29 to 43 fl ozs/A	87
LibertyLink or glufosinate-resistant Canola	32 to 43	Up to 2 applications at 29 fl ozs/A	87
LibertyLink or glufosinate-resistant Cotton Use Pattern 1	29	2 applications at 29 fl ozs/A	87
LibertyLink or glufosinate-resistant Cotton Use Pattern 2	32 to 43	1 application at 29 fl ozs/A	72

Restrictions to the Directions for Burndown Use

- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application for burndown in **LibertyLink** or glufosinate-resistant corn, soybean or cotton.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application for in-crop use in **LibertyLink** or glufosinate-resistant corn, soybean or cotton.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) per year for **LibertyLink** or glufosinate-resistant corn, soybean or cotton.
- **DO NOT** make more than 1 burndown application and 2 in-crop applications in **LibertyLink** or glufosinate-resistant corn, soybean or cotton per year.
- Retreatment interval for in-crop use in **LibertyLink** or glufosinate-resistant corn or soybean is a minimum of 7 days.
- Retreatment interval for in-crop use in **LibertyLink** or glufosinate-resistant cotton is a minimum of 10 days.
- **DO NOT** make any in-crop applications for non glufosinate-resistant canola, sweet corn, corn, soybean or sugar beet.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) per year for non glufosinate-resistant canola, corn, sweet corn, or soybean.
- **DO NOT** apply more than 36 fl ozs/A (0.66 lb ai/A) per year for non glufosinate-resistant sugar beet.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) per year for non glufosinate-resistant cotton.

Application Directions for Use on LibertyLink® or Glufosinate-resistant Canola

Apply **Helena Glufosinate 280 SL Herbicide** only to canola labeled as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve optimum weed control.

Application Directions

Application Timing	<ul style="list-style-type: none"> • Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. • For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. • 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 including drought, cool temperatures, or extended periods of cloudiness.
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	<ul style="list-style-type: none"> To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
Application Use Rate	<ul style="list-style-type: none"> Apply 22 to 29 fl ozs/A depending on weed species, size and density per weed chart. If required, a second application up to 29 fl ozs/A can be applied a minimum of 7 days after application.
Application Use Rate with Tank Mix Partners	<ul style="list-style-type: none"> Apply 22 to 29 fl ozs/A depending on weed species, size and density per weed chart. Tank mix partners to enhance grass control eg: Poast® herbicide, Assure® II herbicide, Select® 2 EC herbicide, Select Max® herbicide, clethodim, sethoxydim. If required, a second application up to 29 fl ozs/A can be applied a minimum of 7 days after application. Tank mixes may aid in the performance of Helena Glufosinate 280 SL Herbicide. 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 and precautions. No label dosage rates may be exceeded. Helena Glufosinate 280 SL Herbicide cannot be mixed with any product containing a label prohibition against such mixing.
Maximum per Year	<ul style="list-style-type: none"> 87 fl ozs/A
Adjuvant	<ul style="list-style-type: none"> Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. Anti-foam agent is advised.
Surfactants/ Oils	<ul style="list-style-type: none"> The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed information.
Application Window	<ul style="list-style-type: none"> Cotyledon up to early bolt stage of LibertyLink or glufosinate-resistant canola Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.
Spray Volume	<ul style="list-style-type: none"> 15 GPA minimum If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> Refer to Table 5.

Restrictions to the Directions for Use on LibertyLink® or Glufosinate-resistant Canola

- DO NOT** use on **LibertyLink** or glufosinate-resistant canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 65 days of harvesting **LibertyLink** or glufosinate-resistant canola.
- DO NOT** graze the treated crop or cut for hay.
- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** if **LibertyLink** or glufosinate-resistant 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.
- DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) in a single application for in crop use.
- DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application for burndown use.

- **DO NOT** apply more than 3 applications including burndown per year. Retreatment interval for in-crop use is a minimum of 7 days.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) of **Helena Glufosinate 280 SL Herbicide** per year.
- Refer to **Rotational Crop Restrictions** under the **Product Information** section of this label for the appropriate rotational crop plant-back intervals.

Application Rate and Timing for LibertyLink or Glufosinate-resistant Canola Seed Propagation

Up to three applications of **Helena Glufosinate 280 SL Herbicide** at up to 29 fl ozs/A per application may be made to **LibertyLink** or glufosinate-resistant canola for seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18 to 30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

Restrictions to the Directions for LibertyLink or Glufosinate-resistant Canola for Seed Propagation

- **DO NOT** apply more than three applications of **Helena Glufosinate 280 SL Herbicide** per year with a minimum of 7 days between applications.
- **DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) in a single application.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) of **Helena Glufosinate 280 SL Herbicide** per year.
- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** 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 **Helena Glufosinate 280 SL Herbicide** 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 LibertyLink® or Glufosinate-resistant Field Corn and LibertyLink or Glufosinate-resistant Silage Corn

Apply **Helena Glufosinate 280 SL Herbicide** only to corn labeled as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Directions

Application Timing	<ul style="list-style-type: none"> • Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. • For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. • 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 including drought, cool temperatures, or extended periods of cloudiness. • To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
Application Window	<ul style="list-style-type: none"> • Emergence through V6 stage of growth
Application Use Rate	<ul style="list-style-type: none"> • Apply 32 fl ozs/A depending on weed species, size and density per weed chart. • If required, a second application of 32 fl ozs/A can be applied a minimum of 7 days after the first application.
Application Use Rate with Tank Mix Partners	<ul style="list-style-type: none"> • Apply 22 fl ozs/A of Helena Glufosinate 280 SL Herbicide with labeled tank mix partners depending on weed species, size and density per weed chart. • Tank mix partners eg: atrazine, Armezon® herbicide, Status® herbicide, Outlook® herbicide. • If required, a second application of 32 fl ozs/A can be applied a minimum of 7 days after application. • Tank mixes may aid in the performance of Helena Glufosinate 280 SL Herbicide. 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 and precautions. • No label dosage rates may be exceeded.

	<ul style="list-style-type: none"> • Helena Glufosinate 280 SL Herbicide cannot be mixed with any product containing a label prohibition against such mixing.
Maximum per Year	<ul style="list-style-type: none"> • 87 fl ozs/A
Adjuvant	<ul style="list-style-type: none"> • Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. • Anti-foam agent is advised.
Surfactants/ Oils	<ul style="list-style-type: none"> • The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed information.
Application Window	<ul style="list-style-type: none"> • Cotyledon up to early bolt stage of LibertyLink or glufosinate-resistant canola • Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.
Spray Volume	<ul style="list-style-type: none"> • 15 GPA minimum • If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> • Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> • 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> • Refer to Table 5.

Application Drop Nozzle Equipment

Applications of **Helena Glufosinate 280 SL Herbicide** on **LibertyLink®** or glufosinate-resistant corn may be made with drop nozzles from emergence until **LibertyLink** or glufosinate-resistant corn is 36 inches tall. Avoid spraying into the whorl or leaf axils of the corn stalks.

Restrictions to the Directions for Use on LibertyLink or Glufosinate-resistant Field Corn and LibertyLink or Glufosinate-resistant Silage Corn

- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) of **Helena Glufosinate 280 SL Herbicide** on **LibertyLink** or glufosinate-resistant corn per year.
- **DO NOT** use nitrogen solutions as spray carriers.
- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** 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 **Rotational Crop Restrictions** under the **Product Information** section of this label for the appropriate rotational crop plant-back intervals.
- **DO NOT** apply more than 32 fl ozs/A (0.79 lb ai/A) in a single application.
- **DO NOT** apply more than 3 applications including burndown use per year. Retreatment interval for in-crop use is a minimum of 7 days.

Application Directions for Use on LibertyLink® or Glufosinate-resistant Sweet Corn

Apply **Helena Glufosinate 280 SL Herbicide** only to sweet corn labeled as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Directions

Application Timing	<ul style="list-style-type: none"> • Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. • For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. • 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 including drought, cool temperatures, or extended periods of cloudiness. • To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
Application Window	<ul style="list-style-type: none"> • Emergence through V6 stage of growth
Application Use Rate	<ul style="list-style-type: none"> • Apply 22 fl ozs/A depending on weed species, size and density per weed chart. • If required, a second application of 22 fl ozs/A can be applied a minimum of 7 days after the first application.
Application Use Rate with Tank Mix Partners	<ul style="list-style-type: none"> • Apply 22 fl ozs/A depending on weed species, size and density per weed chart. • Tank mix partners eg: atrazine. • If required, a second application of 22 fl ozs/A can be applied a minimum of 7 days after the first application. • Tank mixes may aid in the performance of Helena Glufosinate 280 SL Herbicide. 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 and precautions. • No label dosage rates may be exceeded. • Helena Glufosinate 280 SL Herbicide cannot be mixed with any product containing a label prohibition against such mixing.
Maximum per Year	<ul style="list-style-type: none"> • 44 fl ozs/A
Adjuvant	<ul style="list-style-type: none"> • Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. • Anti-foam agent is advised.
Surfactants/Oils	<ul style="list-style-type: none"> • The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed directions.
Spray Volume	<ul style="list-style-type: none"> • 15 GPA minimum • If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> • Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> • 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> • Refer to Restrictions following.

Restrictions to the Directions for Use on LibertyLink® or Glufosinate-resistant Sweet Corn

- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- If **Helena Glufosinate 280 SL Herbicide** was used in a burndown application, no postemergence applications may be applied to the crop.
- **DO NOT** use nitrogen solutions as spray carriers.
- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** 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.
- **DO NOT** apply more than 44 fl ozs/A (0.80 lb ai/A) of **Helena Glufosinate 280 SL Herbicide** on sweet corn per year.
- **DO NOT** apply more than two applications of **Helena Glufosinate 280 SL Herbicide** to sweet corn per year. Sequential applications must be at least 7 days apart.
- **DO NOT** apply more than 22 fl ozs/A (0.40 lb ai/A) in a single application.

Refer to **Rotational Crop Restrictions** under the **Product Information** section of this label for the appropriate rotational crop plant-back intervals.

See application directions for use on field corn and silage corn for application methods, mixing instructions, and weed control tables.

Application Directions for Use on LibertyLink® or Glufosinate-resistant Cotton

Apply **Helena Glufosinate 280 SL Herbicide** only to cotton labeled as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Directions

Application Timing	<ul style="list-style-type: none">• Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section.• For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide.• 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 including drought, cool temperatures, or extended periods of cloudiness.• To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications should be made between dawn and 2 hours before sunset.
Application Use Rate Scenario 1 (2 post applications)	<ul style="list-style-type: none">• Apply 32 to 43 fl ozs/A in first application depending on weed species, size and density per weed chart.• If required, a second application of 29 fl ozs/A can be applied a minimum of 10 days up to 14 days after the first application.
Maximum per Year	<ul style="list-style-type: none">• 72 fl ozs/A
Application Use Rate Scenario 2 (3 post applications)	<ul style="list-style-type: none">• Apply 29 fl ozs/A depending on weed species, size and density per weed chart.• If required, a second application of 29 fl ozs/A can be applied, followed by a third application of 29 fl ozs/A.• The sequential applications must be made minimum 10 days up to 14 days after each application.
Maximum per Year	<ul style="list-style-type: none">• 87 fl ozs/A
Adjuvants	<ul style="list-style-type: none">• Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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.• Anti-foam agent is advised.

Surfactants/ Oils	<ul style="list-style-type: none"> The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed directions.
Application Window	<ul style="list-style-type: none"> Emergence up to early bloom
Spray Volume	<ul style="list-style-type: none"> 15 GPA minimum If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> Refer to Table 5.

Application Rate and Timing

Use Pattern	1st	2nd	3rd	Per Year (fl ozs/A)
	Application (fl ozs/A)			
Option 1	32 to 43	29		72
Option 2	29	29	29	87

Restrictions to the Directions for Use on LibertyLink or Glufosinate-resistant Cotton

- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** to **LibertyLink** or glufosinate-resistant cotton in Florida, south of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 70 days prior to cotton harvest.
- DO NOT** apply this product through any type of irrigation system.
- DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) per application for burndown use.
- DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) per application for in-crop use.
- DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) per year.
- DO NOT** apply more than 3 applications per year.
- Minimum retreatment interval is 10 days in-crop.
- Refer to **Rotational Crop Restrictions** under the **Product Information** section of this label for the appropriate rotational crop plant-back intervals.

LibertyLink® or Glufosinate-resistant Cotton Tank Mix Instructions

- Certain herbicide tank mixes may aid in the performance of **Helena Glufosinate 280 SL Herbicide**. **Helena Glufosinate 280 SL Herbicide** 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. **Helena Glufosinate 280 SL Herbicide** cannot be mixed with any product containing a label prohibition against such mixing.

Application Directions for Use on Cotton

Application of **Helena Glufosinate 280 SL Herbicide** to cotton varieties not labeled as LibertyLink or glufosinate-resistant requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Directions

Application Timing	<ul style="list-style-type: none"> • Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. • For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. • 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 including drought, cool temperatures, or extended periods of cloudiness. • To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
Application Use Rate Scenario 1 (2 post applications)	<ul style="list-style-type: none"> • Apply 32 to 43 fl ozs/A in first application depending on weed species, size and density per weed chart. • If required, a second application of 29 fl ozs/A can be applied a minimum of 10 days after the first application.
Maximum per Year	<ul style="list-style-type: none"> • 72 fl ozs/A
Application Use Rate Scenario 2 (3 post applications)	<ul style="list-style-type: none"> • Apply 29 fl ozs/A depending on weed species, size and density per weed chart. • If required, a second application of 29 fl ozs/A can be applied, followed by a third application of 29 fl ozs/A a minimum 10 days up to 14 days after each other.
Maximum per Year	<ul style="list-style-type: none"> • 87 fl ozs/A
Adjuvants	<ul style="list-style-type: none"> • Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. • Anti-foam agent is advised.
Surfactants/ Oils	<ul style="list-style-type: none"> • The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed directions.
Application Window	<ul style="list-style-type: none"> • Emergence up to early bloom
Spray Volume	<ul style="list-style-type: none"> • 15 GPA minimum • If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> • Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> • 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> • Refer to Table 4. • DO NOT apply Helena Glufosinate 280 SL Herbicide within 70 days prior to cotton harvest.

Restrictions to the Directions for Use on non Glufosinate-resistant Cotton

- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) per application for burndown use.
- **DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) per application for in-crop use.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) per year.

- **DO NOT** apply more than 3 applications per year.
- **DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 70 days prior to cotton harvest.
- Minimum retreatment interval is 10 days in-crop.

Application Methods to non Glufosinate-resistant Cotton

Application of **Helena Glufosinate 280 SL Herbicide** to non glufosinate-resistant cotton varieties 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:

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

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

Postharvest - Fall Burndown

Helena Glufosinate 280 SL Herbicide may be applied as a postharvest burndown treatment to fields (after cotton harvest). Up to 43 fl ozs/A of **Helena Glufosinate 280 SL Herbicide** 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 ozs/A is used in a single application, the **yearly** total may not exceed 72 fl ozs/A, including all application timings. Refer to **Rotational Crop Restrictions** under the **Product Information** section of this label for appropriate rotational crop information.

Cotton Tank Mix Instructions

Certain tank mixes may aid in the performance of **Helena Glufosinate 280 SL Herbicide**. **Helena Glufosinate 280 SL Herbicide** 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. **Helena Glufosinate 280 SL Herbicide** cannot be mixed with any product containing a label prohibition against such mixing.

Application Directions for Use on LibertyLink® or Glufosinate-resistant Soybeans

Apply **Helena Glufosinate 280 SL Herbicide** only to soybean designated as LibertyLink. Uniform, thorough spray coverage is necessary to achieve optimum weed control.

Application Directions

Application Timing	<ul style="list-style-type: none"> • Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the Weed Control for Row Crops section. • For best results, warm temperatures, high humidity, and bright sunlight improve the performance of Helena Glufosinate 280 SL Herbicide. • 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 including drought, cool temperatures, or extended periods of cloudiness. • To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.
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Application Window	<ul style="list-style-type: none"> Emergence up to bloom or R1 growth stage
Application Use Rate	<ul style="list-style-type: none"> Apply 32 to 43 fl ozs/A depending on weed species, size and density per weed chart. If required, a second application of 32 to 43 fl ozs/A can be applied a minimum of 5 days after the first application up to a yearly maximum of 87 fl ozs/A.
Maximum per Year	<ul style="list-style-type: none"> 87 fl ozs/A
Adjuvants	<ul style="list-style-type: none"> Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix 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. Anti-foam agent is advised.
Surfactants/ Oils	<ul style="list-style-type: none"> The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed directions.
Spray Volume	<ul style="list-style-type: none"> 15 GPA minimum If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.
Nozzle Spray Quality	<ul style="list-style-type: none"> Helena Glufosinate 280 SL Herbicide 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.
Rainfast	<ul style="list-style-type: none"> 4 hours
Maximum Number of Applications per Year	<ul style="list-style-type: none"> Refer to Table 5.

Application Rate and Timing

Use Pattern Rate Ranges (fl ozs/A)		
1st Application	2nd Application	Per Year
32 to 43	32 to 43	87

Restrictions to the Directions for Use on LibertyLink® or Glufosinate-resistant Soybeans

- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** within 70 days of harvesting **LibertyLink** or glufosinate-resistant soybean seed.
- DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) of **Helena Glufosinate 280 SL Herbicide** on **LibertyLink** or glufosinate-resistant soybeans per year.
- DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application.
- DO NOT** apply 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 anti-foam agent may be added if needed.
- DO NOT** apply **Helena Glufosinate 280 SL Herbicide** 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 **Rotational Crop Restrictions** under the **Product Information** section of this label for the appropriate rotational crop plant-back intervals.
- Sequential applications must be at least 5 days apart.

LibertyLink or Glufosinate-resistant Soybean Tank Mix Instructions

Certain herbicide tank mixes may complement **Helena Glufosinate 280 SL Herbicide**. No additional surfactant is needed with any tank mix partner. **Helena Glufosinate 280 SL Herbicide** 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. **Helena Glufosinate 280 SL Herbicide** cannot be mixed with any product containing a label prohibition against such mixing.

Application Directions for LibertyLink® or Glufosinate-resistant Canola, Corn, Cotton, and Soybean Seed Propagation

Helena Glufosinate 280 SL Herbicide may be applied to select out susceptible “segregates,” i.e., canola, corn, cotton, and soybean plants that are not resistant to glufosinate-ammonium during seed propagation.

- **LibertyLink** or glufosinate-resistant Canola – **Helena Glufosinate 280 SL Herbicide** may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the glufosinate-ammonium resistance gene 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.
- **LibertyLink®** or glufosinate-resistant Corn – Inbred lines, plants not possessing glufosinate-ammonium resistance, 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 resistant corn “segregates”, **Helena Glufosinate 280 SL Herbicide** may be applied at 22 fl ozs/A plus AMS at 3 lbs/A (17 lbs/100 gallons) when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars. A second treatment of 22 fl ozs/A plus AMS at 3 lbs/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24 inches tall. Sequential applications must be at least 10 days apart. When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs/A (8.5 lbs/100 gallons) to reduce potential leaf burn.

Restrictions to the Directions for Use for LibertyLink or Glufosinate-resistant Corn for Seed Propagation

- **DO NOT** apply more than 2 applications per year to **LibertyLink** or glufosinate-resistant corn for seed propagation. Sequential applications must be at least 10 days apart.
- **DO NOT** apply more than 22 fl ozs/A (0.40 lb ai/A) in a single application or more than 44 fl ozs/A (0.80 lb ai/A) per year.
- **LibertyLink or glufosinate-resistant Cotton** - **Helena Glufosinate 280 SL Herbicide** may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate-ammonium resistance gene 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.
- **LibertyLink or glufosinate-resistant Soybeans** - For the selection of resistant soybean “segregates”, **Helena Glufosinate 280 SL Herbicide** may be applied at up to 32 to 43 fl ozs/A when soybean is in the third trifoliolate stage. A second treatment of 32 to 43 fl ozs/A may be applied up to but not including the bloom growth stage of soybean. Sequential applications must be at least 5 days apart.

Restrictions to the Directions for Use for LibertyLink or Glufosinate-resistant Soybean for Seed Propagation

- **DO NOT** apply more than 2 applications per year to **LibertyLink** or glufosinate-resistant soybean for seed propagation.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application.
- **DO NOT** apply more than 87 fl ozs/A (1.59 lbs ai/A) per year.
- Sequential applications must be at least 5 days apart.

Fallow Fields or Postharvest

Helena Glufosinate 280 SL Herbicide 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, postharvest, prior to planting or emergence of any crop listed on this label.

Apply **Helena Glufosinate 280 SL Herbicide** at 22 or 29 fl ozs/A to fallow fields to control specific weeds. **Helena Glufosinate 280 SL Herbicide** must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine can be made with **Helena Glufosinate 280 SL Herbicide** to enhance total weed control. When using **Helena Glufosinate 280 SL Herbicide** 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 Directions for Use in Fallow Fields or Postharvest Use

- **DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) to fallow fields in a single application per year.
- **DO NOT** make more than 1 application per year to fallow fields.

Farmsteads, Recreational, and Public Areas

When applied as listed, **Helena Glufosinate 280 SL Herbicide** controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks, and nonselective farmstead weed control in farmstead areas (barnyards, buildings, driveways, facilities, farmyards, machinery or implement yards, windbreaks, shelter belts).

Restrictions to the Directions for Use for Farmsteads, Recreational, and Public Areas

- **DO NOT** make more than 3 applications to farmsteads, recreational, and public areas in a 12-month period.
- **DO NOT** make more than 82 fl ozs/A (1.5 lbs ai/A) per application.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 246 fl ozs (4.5 lbs ai/A) per calendar year.
- Applications must be a minimum of 14 days apart.

Tank Mix Partners

Brand Name	Chemical Name	EPA Reg. No.
Armezon® herbicide	Topramezone	7969-262
Assure® II herbicide	Quizalofop-p-ethyl	352-541
Outlook® herbicide	Dimethenamid-P	7969-156
Poast® herbicide	Sethoxydim	7969-58
Select® 2 EC herbicide	Clethodim	59639-3
Select Max® herbicide	Clethodim	59639-132
Status® herbicide	Dicamba + Diflufenzapyr	7969-242

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions 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 Helena Agri-Enterprises, LLC ("HELENA") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

Helena Agri-Enterprises, 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.

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