

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 2, 2020

Ms. Mary Beth Endres Registration Manager Liberty Crop Protection, LLC. 1880 Fall River Drive, Suite 100 Loveland, CO 80538

Subject: Notification per PRN 98-10 – Minor label revisions

Product Name: Liberty Glufos 280 EPA Registration Number: 89168-80 Application Date: December 13, 2019

Decision Number: 558459

Dear Ms. Endres:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

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

If you have any questions, you may contact BeWanda Alexander at (703)347-0313 or by email at alexander.bewanda@epa.gov.

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

NOTIFICATION

89168-80

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

01/02/2020

GLUFOSINATE

GROUP 10 HERBICIDE

LIBERTY GLUFOS 280

LIBERTY GLUFOS 280 is a non-selective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds.

LIBERTY GLUFOS 280 may be used as a burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn[*], cotton, soybean and sugar beet[*]; as a postemergence weed control herbicide to be applied on LibertyLink® crops including canola, soybeans, corn, sweet corn[*] cotton and sugar beet[*]; as a hooded sprayer application in conventional cotton; as a postemergence weed control herbicide to be applied in listed tree, vine and berry crops and as a vine desiccant in potatoes

[*Not for use in California]

ACTIVE INGREDIENT:

ACTIVE INCREDIENT.	/0 D1 VVI.
Glufosinate-ammonium (CAS No. 77182-82-2)	
OTHER INGREDIENTS:	
TOTAL:	100.0%
*Equivalent to 2.34 pounds of active ingredient per U.S. gallon.	
KEEP OUT OF REACH OF CHI	LDREN
CAUTION / PRECAU	CIÓN
Si usted no entiende la etiqueta, busque a alguien para que se	la explique a usted en detaile.
(If you do not understand the label, find someone to exp	
For Chemical Spill, Leak, Fire, or Exposure, Call Ch	HEMTREC (800) 424-9300
SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL P	RECAUTIONARY STATEMENTS.
EPA Reg. No.: 89168-80	EPA Est. No.:
-	

Manufactured For:

LIBERTY CROP PROTECTION, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538

NET CONTENTS: ____Gal (____ L)

	FIRST AID				
 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 					
	• Do not induce vomiting unless told to do so by the poison control center or doctor.				
	Do not give anything by mouth to an unconscious person.				
IF ON SKIN OR	Take off contaminated clothing.				
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
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 INHALED:	Move person to fresh air.				
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.				
Call a poison control center or doctor for further treatment advice.					

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at **1-800-858-7378** or your poison control center at **1-800-222-1222**. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC **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.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. 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. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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

ENVIRONMENTAL HAZARDS

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

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

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.

Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

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 requirement 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 for all post-application activities, with the following exceptions:

- Scouting activities in corn, canola and soybeans REI is 4 days.
- Workers moving irrigation piping REI is 7 days for all crops.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls worn over short-sleeved shirt and short pants; chemical resistant gloves such as barrier laminate, butyl rubber ≥14 mils, or Viton® ≥14 mils; chemical resistant footwear plus socks.

IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT

LIBERTY GLUFOS 280 may be applied as a burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn, cotton, soybean or sugar beet.

Postemergence row crop applications of this product may be made only to crops not sensitive to the active ingredient in this product. To the extent consistent with applicable law, Liberty Crop Protection,

LLC does not warrant the use of this product on crops other than those designated as LibertyLink® to safely withstand the application of this product.

The basis of selectivity of this product in crops is the presence of a gene in LibertyLink crops which results in a plant that is not sensitive to the active ingredient of this product. Crops not containing this gene will be sensitive to this product and severe crop injury and/or death may occur. Do not allow spray to contact foliage or green tissue of desirable vegetation other than LibertyLink crops.

This product may be applied to cotton sensitive to the active ingredient in this product using a hooded sprayer.

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

PRODUCT INFORMATION

LIBERTY GLUFOS 280 is a water-soluble non-selective herbicide for application as a foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds in LibertyLink designated crops including canola, corn, sweet corn[*], cotton, soybean and sugar beet[*] and in trees vine and berry crops; as a burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn[*], cotton, soybean and sugar beet[*] and in farmsteads and fallow fields; as a hooded spray in non-LibertyLink cotton and for use in potato desiccation.

[*Not for use in California]

LIBERTY GLUFOS 280:

- Foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled.
- Apply this product to actively growingly growing weeds as described in the Weed Control for Row Crops section.
- This product is a contact herbicide and requires uniform thorough spray coverage.
- Warm temperatures, high humidity and bright sunlight improve the performance of this product.
- Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.
- This product is rainfast 4 hours after application to most weed species; therefore, rainfall within four hours may necessitate retreatment or may result in reduced weed control.
- Applications must be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.
- Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures or extended periods of cloudiness.
- To maximize weed control, do not cultivate from 5 days before an application to 7 days after an application.
- Consult your local Cooperative Extension Service or LIBERTY CROP PROTECTION, LLC representative for guidelines on optimum application timing for this product in your region.

ROTATIONAL CROP RESTRICTIONS

Rotational crop planting intervals following application of LIBERTY GLUFOS 280, except for potato vine desiccation*, are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Стор	Minimum Crop Rotation Interval		
Canola, Corn, Sweet Corn, Cotton, Soybeans and Sugar Beets	0 Days		
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy			
Vegetables and Small Grains (Barley, Buckwheat, Oats, Rye,	70 Days		
Teosinte, Triticale, and Wheat)			
Other crops	180 Days		
*See Application Directions for Potato Vine Desiccation for Rotational Crop Restrictions.			

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, this product is a Group 10 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

Weed Management

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

- Rotate the use of this product or other Group 10 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on
 resistance in target weed species is available, use the less resistance-prone partner at a rate that will
 control the target weed(s) equally as well as the more resistance-prone partner. Consult your local
 extension service or certified crop advisor if you are unsure as to which active ingredient is currently
 less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses
 historical information related to herbicide use and crop rotation, and that considers tillage (or other
 mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application
 method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties)
 and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected are by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at [855-466-8428 or 844-425-8488 or other appropriate telephone number].

Management of Resistant Biotypes

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, to the extent consistent with applicable law, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- · Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- · Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected
 resistant weeds to this Mode of Actions have been found in your region. Do not assume that each listed
 weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are
 intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled only
 one of the active ingredients in this product.

Integrated Pest (Weed) Management

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

WEED CONTROL FOR ROW CROPS

The weed table indicates rates of product to be used per acre. If weed populations are mixed, apply at indicated rate to weeds 3 inches in height or less.

Table 1. BROADLEAF WEEDS (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)

Common Name	Scientific Name	22 fl oz/A (0.40 lb ai/A)	29 – 43 fl oz/A (0.53 – 0.79 lb ai/A)
Amaranth, Palmer	Amaranthus palmeri	NR	С
Anoda, spurred	Anoda cristata	С	С
Beggarweed, Florida	Desmodium tortuosum	С	С
Black medic	Medicago lupulina L.	С	С
Blueweed, Texas	Helianthus ciliaris DC.	С	С
Buckwheat, wild	Polygonum convolvulus	С	С
Buffalobur	Solanum cornutum	С	С
Burcucumber	Sicyos angulatus	С	С
Canola, volunteer ¹	Brassica spp.	C ¹	C ¹
Catchweed bedstraw (cleavers)	Galium aparine L.	C	C
Carpetweed	Mollugo verticillata	Č	Č
Chickweed, common	Stellaria media	C	C
Cocklebur, common	Xanthium strumarium	C	C
Copperleaf, hophornbeam	Acalypha ostryaefolia	C	Č
Cotton, volunteer ¹	Gossypium sp.	C ¹	C ¹
Croton, tropic	Croton glandulosus	C	C
Croton, woolly	Croton capitatus	Č	Č
Eclipta	Eclipta alba	C	Č
Devil's claw	Proboscidea Louisiana	C	Č
Fleabane, annual	Erigeron annuus	C	C
Galinsoga, hairy	Galinsoga ciliate	C	C
Galinsoga, small flower	Galinsoga parviflora	С	С
Groundcherry, cutleaf	Physalis angulate	C	C
Geranium, cutleaf	Geranium dissectrum L.	С	С
Hempnettle	Galeopsis sp.	С	С
Horsenettle, Carolina ²	Solanum carolinense	C ²	C ²
Jimsonweed	Datura stramonium	С	С
Knotweed	Polygonum spec.	С	С
Kochia	Kochia scoparia	С	С
Ladysthumb	Polygonum persicaria	C	C
Lambsquarters, common	Chenopodium album	С	С
Mallow, common	Malva spec.	C	C
Mallow, Venice	Hibiscus trionum	C	C
Marestail ³	Conyza Canadensis	S	C
Marsh-elder, annual	Iva annua	C	Č
Morningglory, entireleaf	Ipomoea hederacea var. intergriuscula	C	Č
Morningglory, ivyleaf	Ipomoea hederacea	Č	Č
Morningglory, pitted	Ipomoea lacunose	Č	Č
Morningglory, sharppod	Ipomoea cordatotriloba	C	Č
Morningglory, smallflower	Jacquemontia tamnifolia	Č	Č

Common Name	Scientific Name	22 fl oz/A (0.40 lb ai/A)	29 – 43 fl oz/A (0.53 – 0.79 lb ai/A)
Morningglory, tall	Lpomoea purppurea	С	С
Mustard, wild	Sinapis arvensis	С	С
Nightshade, black	Solanum nigrum	С	С
Nightshade, eastern black	Solanum ptycanthum	С	С
Nightshade, hairy	Solanum sarrachoides	С	С
Pennycress	Thlaspi arvense	С	С
Pigweed, redroot	Amaranthus retroflexus	С	С
Pigweed, prostrate	Amaranthus blitoides	С	С
Pigweed, spiny	Amaranthus spinosus	С	С
Pigweed, smooth	Amaranthus hybridus	С	С
Pigweed, tumble	Amaranthus albus	С	С
Puncturevine	Tribulus terrestris	С	С
Purslane, common	Portulaca oleracea	С	С
Pusley, Florida	Richardia scabra	S	С
Ragweed, common	Ambrosia artemisiifolia	С	С
Ragweed, giant	Ambrosia trifida	С	С
Senna coffee	Cassia occidentalis	С	С
Sesbania, hemp	Sesbania herbacea	С	С
Shepherd's-Purse	Capsella bursa-pastoris	С	С
Sicklepod (java bean)	Senna obtusifolia	С	С
Sida, prickly	Sida spinosa L.	С	С
Smartweed, Pennsylvania	Polygonum pensylvanicum	С	С
Smell melon	Cucumis melo L. var. Dudaim	С	С
Sowthistle, annual	Sonchus oleraceus L.	С	С
Soybeans, volunteer ¹	Glycine max	C ¹	C ¹
Spurge, prostrate	Euphorbia humifusa	С	С
Spurge, spotted	Euphorbia maculate L.	С	С
Starbur, bristly	Acanthospermum hispidum	С	С
Sunflower, common	Helianthus annuus	С	С
Sunflower, prairie	Corythucha pura	С	С
Sunflower, volunteer	Girassol	С	С
Thistle, Russian ²	Salsola kali	S ²	C ²
Velvetleaf	Abutilon theophrasti	С	С
Waterhemp, common	Amaranthus rudis	NR	С
Waterhemp, tall	Amaranthus tuberculatos	NR	С

C = Control; NR = Not Recommended; S = Suppression

- ¹ Volunteer LibertyLink crops from previous season will not be controlled.
- ² May require sequential applications for control.
- ³ For optimum control apply on marestail that is 6 inches in height.

Table 2. BIENNIAL AND PERENNIAL WEEDS (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)

For control of the biennial and perennial weeds listed below, apply tank mix partners or sequential

applications of this product are specified by crop (see crop sections).

Common Name	Scientific Name	29 - 43 fl oz/A (0.53 – 0.79 lb ai/A)
Alfalfa	Medicago sativa L.	С
Bermudagrass	Cynodon dactylon	С
Bindweed, field	Convolvulus arvensis L.	С
Bindweed, hedge	Calystegia sepium	С
Bluegrass, Kentucky	Poa pratensis L.	С
Blueweed, Texas	Helianthus ciliaris DC.	С

Common Name	Scientific Name	29 - 43 fl oz/A (0.53 – 0.79 lb ai/A)
Bromegrass, smooth	Bromus inermis	С
Burdock	Arctium sp.	С
Bursage, woolyleaf	Ambrosia grayi	С
Chickweed, Mouse-ear	Cerastium vulgatum L.	С
Clover, red	Trifolium pretense L.	С
Dandelion	Taraxacum officinale	С
Dock, smooth	Rumex spec.	С
Dogbane, hemp	Apocynum cannabinum	S
Goldenrod, gray	Solidago nemoralis	S
Johnsongrass, rhizome	Sorghum halepense	С
Milkweed, common	Asclepias syriaca	S
Milkweed, honeyvine	Ampelamus albidus	S
Muhly, wirestem	Muhlenbergia frondosa	S
Nightshade, silverleaf	Solanum elaeagnifoium	С
Nutsedge, purple	Cyperus rotundus	S
Nutsedge, yellow	Cyperus ferax	S
Orchardgrass	Dactylis glomerata L.	С
Poinsettia, wild	Euphorbia heterophylla L.	С
Pokeweed	Phytolaccaceae	С
Quackgrass	Agropyron repens	S
Sowthistle, perennial	Sonchus arvensis L.	С
Thistle, bull	Cirsium vulgare	С
Thistle, Canada	Cirsium arvense	С
Timothy	Phleum pretense L.	S
Wormwood, biennial	Artemisia biennis	С
C = Control; S = Suppression		

Table 3. GRASS WEEDS (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)

Common Name	Scientific Name	22 fl oz/A (0.40 lb ai/A)	29 – 43 fl oz/A (0.53 – 0.79 lb ai/A)
Barley, volunteer ³		C ₃	C ³
Barnyardgrass	Echinochloa spec.	С	С
Bluegrass, annual	Poa annua L.	С	С
Corn, volunteer ¹	Zea mays L.	C ¹	C ¹
Crabgrass, large ²	Digitaria sanguinalis	C ²	C ²
Crabgrass, smooth ²	Digitaria ischaemum	C ²	C ²
Cupgrass, woolly	Eriochloa villosa	С	С
Foxtail, bristly	Setaria verticillata	С	С
Foxtail, giant	Setaria faberi	С	С
Foxtail, green	Setaria viridis	С	С
Foxtail, robust purple	Setaria viridis	С	С
Foxtail, yellow ²	Pennisetum glaucum	C ²	C ²
Goosegrass ³	Eleusine indica	C ₃	C ³
Johnsongrass, seedling	Sorghum halepense	С	С
Junglerice	Echinochloa colonum	С	С
Millet, wild-proso	Panicum miliaceum L.	С	С
Millet, proso volunteer	Milium vernale	С	С
Oat, wild ²	Avena fatua	С	С
Panicum, fall	Panicum dichotomiflorum	С	С
Panicum, Texas	Panicum texanum	С	С
Rice, red	Oryza sativa L.	С	С
Rice, volunteer ¹	Oryza sativa	C ¹	C ¹

Common Name	Scientific Name	22 fl oz/A (0.40 lb ai/A)	29 – 43 fl oz/A (0.53 – 0.79 lb ai/A)
Sandbur, field ²	Cenchrus pauciflorus	S ²	C ²
Shattercane	Sorghum vulgare PERS.	С	С
Signalgrass, broadleaf	Brachiaria platyphylla	С	С
Sprangletop	Leptochloa spec.	С	С
Sorghum, volunteer	Sorghum sp.	С	С
Stinkgrass	Eragrostis cilianensis	С	С
Wheat, volunteer ²	Triticum spec.	C ²	C ²
Witchgrass	Panicum virgatum L.	С	С

C = Control; S = Suppression

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

APPLICATION AND MIXING PROCEDURES

Uniform, thorough spray coverage is important to achieve consistent weed control with this product. Make application when weeds are small and growing (3 inches or less in height), at rates indicated in crop specific sections of this label.

Ground Application: LIBERTY GLUFOS 280 can be applied as a broadcast treatment. Apply this product in a minimum of 15 gallons of water per acre. Increase to 20 gallons of water per acre if dense weed canopy exists. Apply at a ground speed of less than 15 mph to attain adequate coverage. See the **Spray Drift Management** section of this label for additional information on proper application of this product.

Aerial Application: Unless otherwise specified in specific crop use directions LIBERTY GLUFOS 280 can be applied aerially. Apply this product 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 this product.

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 this product.
- Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment.

COMPATIBILITY TESTING

If LIBERTY GLUFOS 280 is to be mixed with pesticide products are 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 fluid ounces of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 16 fluid ounces of this product 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: LIBERTY GLUFOS 280 may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and other restrictions.

LIBERTY GLUFOS 280 must be applied with properly calibrated and clean equipment. This product is formulated to mix readily in water. Prior to adding this product to the spray tank, ensure that the spray tank is thoroughly clean, particularly if an 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 LIBERTY GLUFOS 280

Mix this product with water to make a finished spray solution as follows:

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

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

If tank mix partners 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 LIBERTY GLUFOS 280 Use

Before using LIBERTY GLUFOS 280, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tanks, lines, and filter, particularly if an herbicide with the potential to injure crops was previously used. Equipment needs to be thoroughly rinsed using a commercial tank cleaner.

After LIBERTY GLUFOS 280 Use

After using this product, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

SPRAY DRIFT MANAGEMENT

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.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

ADVISORY SPRAY DRIFT LANGUAGE

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.

POLLINATOR ADVISORY STATEMENT

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

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 feet 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 manufacturer, 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

LIBERTY GLUFOS 280 may be applied as a burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn[*], cotton, soybean, and sugar beet[*]. [*Not for use in California]

Use Rate and Timing

Apply to small and actively growing weeds, targeting less than 3-inch weeds in height. For additional information on weed heights refer to **Weed Control for Row Crops** section. For best results, warm temperatures, high humidity, and bright sunlight improve the performance of this product. Weed control may be reduces if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures or extended periods of cloudiness. To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre depending on crop, weed species and intention of post application use. See application charts below. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with

uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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 conditions (low relative humidity) or hard water. An anti-foam agent is advised. The use of surfactants may be included. Refer to surfactant label for more detailed information.

Table 4. Application Directions for Conventional and Non-LibertyLink Crops

Crop	Burndown	In-Season Application	Minimum Retreatment Interval	Maximum Per Year
Canola,				
Soybean,				
Field Corn,	29 to 43 fl oz/A			43 fl oz/A
Sweet Corn	(0.53 to 0.79 lb ai/A)	None	N/A	(0.79 lb ai/A)
	29 to 36 fl oz/A			36 fl oz/A
Sugar Beet	(0.53 to 0.66 lb ai/A)	None	N/A	(0.66 lb ai/A)
Cotton Use	29 fl oz/A	2 applications at 29 fl oz/A*		87 fl oz/A
Pattern 1	(0.53 lb ai/A)	(0.53 lb ai/A)	10 days	(1.59 lbs ai/A)
Cotton Use	30 to 43 fl oz/A	1 application at 29 fl oz/A*		72 fl oz/A
Pattern 2	(0.55 to 0.79 lb ai/A)	(0.53 lb ai/A)	10 Days	(1.3 lbs ai/A)

^{*} Post application in non-LibertyLink cotton can only be applied with a hooded sprayer. See **Application Directions for Cotton** for more information.

Restrictions - Conventional and Non-LibertyLink Crops

• Canola, Corn and Soybeans:

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre for all application timings, per year.
- Do not make in-season (postemergent) applications of this product.

• Sugar Beets:

- Do not make more than one burndown application per year.
- Do not apply more than 36 fluid ounces (0.66 lb ai) per acre per application
- Do not apply more than 36 fluid ounces (0.66 lb ai) per acre for all application timings, per year.
- Do not make in-season (postemergent) applications of this product.

• In Cotton (use pattern 1)

- Do not make more than one burndown application per year.
- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lbs ai) per acre for all application timings, per year.
- Do not exceed a total of three applications of this product, including all application timings, per year. If a burndown treatment of 29 fluid ounces (0.53 lb ai) was applied, only two in-season (postemergent) applications at 29 fluid ounces (0.53 lb ai) may be applied.
- Make repeat applications at a minimum of 10 days apart.

• In Cotton (use pattern 2)

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 72 fluid ounces (1.3 lbs ai) per acre, including all application timings, per year.
- Do not exceed a total of two applications of this product, including all application timing, per year. If a burndown treatment was applied at a rate greater than 29 fluid ounces (0.53 lb ai), only one inseason (postemergent) application at 29 fluid ounces (0.53 lb ai) may be applied.
- Make repeat applications at a minimum of 10 days apart.

Table 5. Application Directions for LibertyLink Crops

LibertyLink			Minimum Retreatment	Maximum
Crop	Burndown	In-Season Application	Interval	Per Year
		Up to 2 applications		
	29 to 43 fl oz/A	at 29 fl oz/A		87 fl oz/A
Canola	(0.53 to 0.79 lb ai/A)	(0.53 lb ai/A)	7 days	(1.59 lbs ai/A)
		Up to 2 applications		
	29 to 43 fl oz/A	at 29 to 43 fl oz/A		87 fl oz/A
Field Corn	(0.53 to 0.79 lb ai/A)	(0.53 to 0.79 lb ai/A)	7 days	(1.59 lbs ai/A)
		If burndown treatment applied:		22 fl oz/A
		None	N/A	(0.40 lb ai/A)
		If no burndown treatment is		
		applied:		
		Up to 2 applications		
	29 to 43 fl oz/A	at 22 fl oz/A		44 fl oz/A
Sweet Corn	(0.53 to 0.79 lb ai/A)	(0.53 to 0.79 lb ai/A)	7 days	(0.80 lb ai/A)
Cotton Use	29 fl oz/A	2 applications at 29 fl oz/A		87 fl oz/A
Pattern 1	(0.53 lb ai/A)	(0.53 lb ai/A)	10 days	(1.59 lbs ai/A)
Cotton Use	30 to 43 fl oz/A	1 application at 29 fl oz/A		72 fl oz/A
Pattern 2	(0.55 to 0.79 lb ai/A)	(0.53 lb ai/A)	10 days	(1.3 lbs ai/A)
		Up to 2 applications		
	29 to 43 fl oz/A	at 29 to 43 fl oz/A		87 fl oz/A
Soybean	(0.53 to 0.79 lb ai/A)	(0.53 to 0.79 lb ai/A)	5 days	(1.59 lbs ai/A)
	29 to 36 fl oz/A	1 application at 29 fl oz/A		60 fl oz/A
Sugar Beet	(0.53 to 0.66 lb ai/A)	(0.53 lb ai/A)	10 days	(1.1 lbs ai/A)

Restrictions - LibertyLink Crops

• Canola:

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lb ai) per acre for all application timings, per year.
- Do not exceed a total of three applications of this product, including all application timings (one burndown application and up to two in-season (postemergent) applications per year.
- Make repeat applications at a minimum of 7 days apart.

• Field Corn:

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lb ai) per acre for all application timings, per year.
- Do not exceed a total of three applications of this product, including all application timings (one burndown application and up to two in-season (postemergent) applications per year.
- Make repeat applications at a minimum of 7 days apart.

• Sweet Corn:

- Do not make more than one burndown application per year.
- Do not apply more than 22 fluid ounces (0.40 lb ai) per acre per application.
- Do not apply more than 44 fluid ounces (0.80 lb ai) per acre for all application timings, per year.
- Do not make an in-season (postemergent) application to sweet corn crop if this product was used in a burndown application.
- If no burndown treatment is made, see the **Application Directions for Use on LibertyLink Sweet Corn** section of this label for in-season application directions.
- Make repeat applications at a minimum of 7 days apart.

• In Cotton (use pattern 1)

- Do not make more than one burndown application per year.
- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.

- Do not apply more than 87 fluid ounces (1.59 lbs ai) per acre for all application timings, per year.
- Do not exceed a total of three applications of this product, including all application timings, per year. If a burndown treatment of 29 fluid ounces (0.53 lb ai) was applied, only two in-season (postemergent) applications at 29 fluid ounces (0.53 lb ai) may be applied.
- Make repeat applications at a minimum of 10 days apart.

• In Cotton (use pattern 2)

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 72 fluid ounces (1.3 lbs ai) per acre, including all application timings, per vear.
- Do not exceed a total of two applications of this product, including all application timing, per year. If a burndown treatment was applied at a rate greater than 29 fluid ounces (0.53 lb ai), only one inseason (postemergent) application at 29 fluid ounces (0.53 lb ai) may be applied.
- Make repeat applications at a minimum of 10 days apart.

Soybeans:

- Do not make more than one burndown application per year.
- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lb ai) per acre for all application timings, per year.
- Do not exceed a total of three applications of this product, including all application timings (one burndown application and up to two in-season (postemergent) applications per year.
- Make repeat applications at a minimum of 5 days apart.

• Sugar Beets:

- Do not make more than one burndown application per year.
- Do not apply more than 36 fluid ounces (0.66 lb ai) per acre per application
- Do not apply more than 60 fluid ounces (1.1 lb ai) per acre for all application timings, per year.
- Do not exceed a total of two applications of this product, including all application timings per year. If a burndown treatment of this product was made up to one in-season (postemergent) application may be made.
- Make repeat applications at a minimum of 10 days apart.

APPLICATION DIRECTIONS FOR USE ON LIBERTYLINK CANOLA

Apply LIBERTY GLUFOS 280 only to canola labeled as LibertyLink. This product is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

Use Rate and Timing

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 this product. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply this product from the cotyledon stage up to the early bolt stage at 22 to 29 fluid ounces (0.40 to 0.53 lb ai) per acre depending on weeds pieces, size and density per weed chart. If required, a second application up to 29 fluid ounces (0.53 lb ai) per acre can be applied at a minimum of 7 days after the first application. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on canola. No additional surfactant is needed when tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable

restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Precaution – LibertyLink Canola

• Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity or yield.

Restrictions - LibertyLink Canola

- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lb ai) per acre per year for all application timings.
- Do not make more than two in-season applications of this product per year. Sequential applications must be made at least 7 days apart.
- Preharvest Interval (PHI): Do not apply this product within 65 days of harvesting LibertyLink canola.
- **Do not use on LibertyLink Canola in:** Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- Do not graze the treated crop or cut for hay.
- Do not apply this product if LibertyLink Canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- Do not apply this product through any type of irrigation system.
- Refer to the **Rotational Crop Restrictions** section under **Product Information** section of this label for the appropriate rotational crop plant back intervals.

Application Rate and Timing for LibertyLink Canola Seed Propagation

Up to three applications of LIBERTY GLUFOS 280 at up to 29 fluid ounces (0.53 lb ai) per acre per application may be made to LibertyLink canola for seed propagation. Applications may be made from the cotyledone stage up to the early bolting stage (e.g. BBCH 18-30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

Restrictions – LibertyLink Canola for Seed Propagation

- Do not apply more than three applications of this product at up to 29 fluid ounces (0.53 lb ai) per acre per application. Sequential applications must be made at least 7 days apart.
- Do not apply more than 87 fluid ounces (1.59 lbs ai) per acre per year.
- Do not apply this product 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 this product if LibertyLink 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 SWEET CORN[*] [*Not for use in California]

Apply LIBERTY GLUFOS 280 only to sweet corn labeled as LibertyLink. This product is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

Use Rate and Timing

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 this product. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of

cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Applications of this product on sweet corn may be made from emergence up to the V-6 stage of growth. Apply 22 fluid ounces (0.40 lb ai) per acre of this product depending on weed species, size and density per weed chart. If required, a second application up to 22 fluid ounces (0.40 lb ai) per acre can be applied at a minimum of 7 days after the first application. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on sweet corn. No additional surfactant is needed when tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Restrictions – LibertyLink Sweet Corn

- Do not apply more than 22 fluid ounces (0.40 lb ai) per acre per application.
- Do not apply more than 44 fluid ounces (0.80 lbs ai) per acre per year.
- Do not make more than two in-season applications of this product per year. Sequential applications must be made at least 7 days apart.
- If this product was used as a burndown application, no postemergent applications can be applied to the crop.
- **Preharvest Interval (PHI):** Do not apply this product within 50 days of harvesting sweet corn and within 55 days of harvesting stover.
- Do not use nitrogen solutions as spray carriers.
- Do not apply this product if LibertyLink corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- Do not apply this product through any type of irrigation system.
- Refer to the **Rotational Crop Restrictions** section under **Product Information** section of this label for the appropriate rotational crop plant back intervals.

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

APPLICATION DIRECTIONS FOR USE ON LIBERTYLINK FIELD CORN AND LIBERTYLINK SILAGE CORN

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

Use Rate and Timing

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 this product. Weed control

may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Applications of this product on field or silage corn may be made with over-the-top broadcast or drop nozzles from emergence up to V6 stage of growth. Apply 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre of this product depending on weed species, size and density per weed chart. If required, a second application of 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre can be applied at a minimum of 7 days after the first application. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on field corn or silage corn. No additional surfactant is needed when tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Application Drop Nozzle Equipment

Application of this product on LibertyLink corn may be made with drop nozzles from emergence until the LibertyLink corn is 36 inches tall. Avoid spraying into the whorl or leaf axils of the corn stalks.

Restrictions - LibertyLink Field Corn and LibertyLink Silage Corn

- Do not apply more than 43 fluid ounces (0.79 lb ai) of this product per acre per application.
- Do not apply more than 87 fluid ounces (1.59 lbs ai) per acre per year for all application timings.
- Do not make more than two in-season applications of this product per year. Sequential applications must be made at least 7 days apart.
- **Preharvest Interval (PHI):** Do not apply this product within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- Do not use nitrogen solutions as spray carriers needed.
- Do not apply this product if corn shows injury from prior herbicide applications or environmental stress (droughts, excessive rainfall, etc.).
- Do not apply this product through any type of irrigation system.
- Refer to the **Rotational Crop Restrictions** section under the **Product Information** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR USE ON LIBERTYLINK COTTON

Apply this product only to cotton labeled as LibertyLink. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Use Rate and Timing

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 this product. Weed control

may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply from emergence up to early bloom. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Application Rate and Timing – LibertyLink Cotton

Use Pattern	1 st Application	2 nd Application (Minimum of 10 days up to 14 days after 1 st application)	3 rd Application (Minimum of 10 days up to 14 days after 2 nd application)	Yearly Maximum
Option 1	32 to 43 fl oz/A	29 fl oz/A	None	72 fl oz/A
·	(0.59 to 0.79 lb ai/A)	(0.53 lb ai/A)		(1.3 lbs ai/A)
Option 2	29 fl oz/A	29 fl oz/A	29 fl oz/A	87 fl oz/A
·	(0.53 lb ai/A)	(0.53 lb ai/A)	(0.53 lb ai/A)	1.59 lbs ai/A)

Application Use Rate Option 1 (2 postemergence applications)

Apply 32 to 43 fluid ounces (0.59 to 0.79 lb ai) per acre in first application depending on weed species, size and density per weed chart. If required, a second application of 29 fluid ounces (0.53 lb ai) per acre can be applied at a minimum of 10 days after the first application.

Application Use Rate Option 2 (3 postemergence applications)

Apply 29 fluid ounces (0.53 lb ai) per application depending on weed species, size and density per weed chart. If required, a second application of 29 fluid ounces (0.53 lb ai) per acre can be applied followed by a third application of 29 fluid ounces (0.53 lb ai) per acre. The sequential applications must be made minimum 10 days up to 14 days after each other.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on cotton. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Restrictions – LibertyLink Cotton

- Option 1:
 - Do not apply more than 43 fluid ounces (0.79 lb ai) per acre in a first application.
 - Do not apply more than 29 fluid ounces (0.53 lb ai) per acre in a second application.
 - Do not apply more than 72 fluid ounces (1.3 lb ai) per acre per year for all application timings.
 - Do not make more than two in-season applications per year.
 - The second application must be made a minimum of 10 days after the first application.

• Option 2:

- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.6 lb ai) per acre per year for all application timings.
- Do not make more than three applications per year. Sequential applications must be at least 10 to 14 days apart.
- Preharvest Interval (PHI): Do not apply this product within 70 days prior to cotton harvest.
- Do not apply this product through any type of irrigation system.
- Do not apply this product to cotton south of Tampa, Florida (Route 60) or in Hawaii (except for test plots or breeding nurseries).
- Refer to the **Rotational Crop Restrictions** section under the **Product Information** heading of this label for the appropriate rotational crop plan back intervals.

APPLICATION DIRECTIONS FOR USE ON NON-LIBERTYLINK COTTON

Application of LIBERTY GLUFOS 280 to cotton varieties not labeled as LibertyLink requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Use Rate and Timing

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 this product. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply from emergence up to early bloom. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Application Rate and Timing – Non-LibertyLink Cotton

Use Pattern	1 st Application	2 nd Application (Minimum of 10 days up to 14 days after 1 st application)	3 rd Application (Minimum of 10 days up to 14 days after 2 nd application)	Yearly Maximum
Option 1	32 to 43 fl oz/A	29 fl oz/A	None	72 fl oz/A
	(0.59 to 0.79 lb ai/A)	(0.53 lb ai/A)		(1.3 lbs ai/A)
Option 2	29 fl oz/A	29 fl oz/A	29 fl oz/A	87 fl oz/A
	(0.53 lb ai/A)	(0.53 lb ai/A)	(0.53 lb ai/A)	1.59 lbs ai/A)

Application Use Rate Option 1 (2 postemergence applications)

Apply 32 to 43 fluid ounces (0.59 to 0.79 lb ai) per acre in first application depending on weed species, size and density per weed chart. If required, a second application of 29 fluid ounces (0.53 lb ai) per acre can be applied at a minimum of 10 days up to 14 days after the first application.

Application Use Rate Option 2 (3 postemergence applications)

Apply 29 fluid ounces (0.53 lb ai) per application depending on weed species, size and density per weed chart. If required, a second application of 29 fluid ounces (0.53 lb ai) per acre can be applied followed by a third application of 29 fluid ounces (0.53 lb ai) per acre. The sequential applications must be made minimum 10 days up to 14 days after each other.

Application Methods to Non-LibertyLink Cotton

Application of LIBERTY GLUFOS 280 to cotton varieties not labeled as LibertyLink requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With the 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 of sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and comes into contact with the cotton, causing damage or destruction of the crop.

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

Band width in inches Row width in inches	X	Broadcast RATE per acre	=	Amount of banded product needed per acre
Band width in inches Row width in inches	X	Broadcast <u>spray</u> VOLUME per acre	=	Amount of banded product Banded spray volume needed per acre

Post-Harvest – Fall Burndown

This product may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fluid ounces (0.79 lb ai) per acre of this product may be applied in a single application to control larger weeds growing in the crop at the time of harvest. If more than 29 fluid ounces (0.53 b ai) per acre is used in a single application, the yearly total may not exceed 72 fluid ounces (1.3 lb ai) per acre, including all application timings. Refer to the **Rotational Crop Restrictions** section of this label for appropriate rotational crop information.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on cotton. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Restrictions – Non-LibertyLink Cotton

- Option 1:
 - Do not apply more than 43 fluid ounces (0.79 lb ai) per acre in a first application.
 - Do not apply more than 29 fluid ounces (0.53 lb ai) per acre in a second application.
 - Do not apply more than 72 fluid ounces (1.3 lb ai) per acre per year for all application timings.
 - Do not make more than two in-season applications per year.
 - The second application must be made a minimum of 10 days up to 14 days after the first application.

• Option 2:

- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.6 lb ai) per acre per year for all application timings.
- Do not make more than three in-season applications per year. Sequential applications must be at least 10 to 14 days apart.
- Preharvest Interval (PHI): Do not apply this product within 70 days prior to cotton harvest.
- Do not apply this product through any type of irrigation system.
- Do not apply this product to cotton south of Tampa, Florida (Route 60) or in Hawaii (except for test plots or breeding nurseries).
- Refer to the **Rotational Crop Restrictions** section under the **Product Information** heading of this label for the appropriate rotational crop plan back intervals.

APPLICATION DIRECTIONS FOR USE ON LIBERTYLINK SOYBEANS

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

Use Rate and Timing

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 this product. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply this product at 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre from emergence up to bloom or R1 growth stage. If required, a second application of 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre can be applied up to a yearly maximum of 87 fluid ounces (1.6 lb ai) per acre. The second application must be made a minimum of 5 days after the first application. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Application Rate and Timing – Soybeans

Use Pattern Rate Ranges		
1 st Application 2 nd Application Per Y (Minimum of 5 days after 1 st Application)		
29 to 43 fl oz/A	29 to 43 fl oz/A	87 fl oz/A
(0.53 to 0.79 lb ai/A)	(0.53 to 0.79 lb ai/A)	(1.6 lb ai/A)

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on soybeans. No additional surfactant is needed when tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Restrictions - LibertyLink Soybeans

- Do not apply more than 43 fluid ounces (0.79 lb ai) per acre per application.
- Do not apply more than 87 fluid ounces (1.6 lbs ai) per acre per year for all application timings.
- Do not make more than two in-season applications per year. Sequential applications must be made at least 5 days apart.
- Preharvest Interval (PHI): Do not apply this product within 70 days of harvesting LibertyLink Soybean seed
- Do not graze the treated crop or cut for hay.
- Do not use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- Do not apply this product if soybeans shows injury from prior herbicide applications or environmental stress (droughts, excessive rainfall, etc.).
- Do not apply this product through any type of irrigation system.
- Refer to the **Rotational Crop Restrictions** section under the **Product Information** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR USE ON LIBERTYLINK SUGAR BEETS[*] [*Not for use in California]

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

Use Rate and Timing

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 this product. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness. To avoid possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset. This product is rainfast 4 hours after application.

Apply this product to from cotyledon stage up to the 10-leaf stage at 29 fluid ounces (0.53 lb ai) per acre depending on weeds pieces, size and density per weed chart. If required, a second application of 29 fluid ounces 0.53 lb ai) per acre may be applied at a minimum of 10 days after the first application. Apply in a minimum of 15 GPA of water. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA. Use a medium or coarse spray nozzle. This product is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control. See the **Spray Drift Management** section for more information.

Tank Mixes: To support product performance, this product can be mixed with other herbicides registered for use on sugar beets. 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 mix.

Spray Additives: Ammonium sulfate (AMS) can be used at 1.5 to 3 pounds per acre. 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. Use of an anti-foam is advised. The use of additional surfactants or crop oils may increase the risk of crop response. Refer to the surfactant label for more detailed information.

Restrictions – LibertyLink Sugar Beets

- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 60 fluid ounces (1.1 lbs ai) per acre per year for all application timings.

- Do not make more than two applications of this product per year. Make repeat applications at a minimum of 10 days apart.
- **Preharvest Interval (PHI):** Do not apply this product within 60 days of harvesting LibertyLink sugar beets.
- Do not plant rotation crops in field treated with this product within 120 days after the last application of this product with the following exceptions:
 - 70 days after last application: wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale
 - Any time after last application: Corn, soybeans, canola and sugar beets containing the LibertyLink trait
- Do not graze the treated crop or cut for hay
- Do not apply this product if LibertyLink sugar beets show injury from prior herbicide applications or environmental stress (drought, excess rainfall, etc.)
- Do not apply this product through any type of irrigation system.

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

LIBERTY GLUFOS 280 may be applied to select out susceptible "segregates", i.e., canola, corn, cotton, and soybean plants that are sensitive to glufosinate-ammonium during seed propagation.

- **LibertyLink Canola:** LIBERTY GLUFOS 280 may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry the LibertyLink trait and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the the LibertyLink trait will be severely injured or killed if treated with this herbicide. See **Application Use Directions for Use on Canola** for use rates and application timing.
- **LibertyLink Corn:** Inbred lines, plants not possessing the LibertyLink trait, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of non-sensitive corn "segregates", this product may be applied at 22 fluid ounces (0.40 lb ai) per acre plus AMS at 3 pounds per acre (17 pounds per 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 fluid ounces (0.40 lb ai) per acre plus AMS at 3 pounds per acre 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 pounds per acre (8.5 pounds per 100 gallons) to reduce potential leaf burn.
- **LibertyLink Cotton:** LIBERTY GLUFOS 280 may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry the LibertyLink trait and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the LibertyLink trait will be severely injured or killed if treated with this herbicide. See **Application Use Directions for Use on Cotton** for use rates and application timing.
- **LibertyLink Soybeans:** For the selection of non-sensitive soybean "segregates", LIBERTY GLUFOS 280 may be applied at up to 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre when soybean is in the third trifoliate stage. A second treatment of 29 to 43 fluid ounces (0.53 to 0.79 lb ai) per acre may be applied up to but not including the bloom growth stage of soybean. Sequential applications must be at least 5 days apart.

APPLICATION DIRECTIONS FOR USE ON LISTED TREE. VINE AND BERRY CROPS

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

Registered Crops

- Bushberry subgroup 13B: blueberry, currant, elderberry, gooseberry, and huckleberry
- Lingonberry, Juneberry and Salal
- Citrus group 10-10: lemon, orange, grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, citron, citrus hybrids, Tangor, and cultivars, varieties and/or hybrids of these

- Olives
- **Pome fruit group 11-10:** Apple, pear, crabapple, loquat, mayhaw, quince, azarole, Medlar, Tejocote, cultivars, varieties and/or hybrids of these
- **Stone fruit group 12-12:** Apricot, cherry, peach, nectarine, plum, capulin, jujube, Sloe, and cultivars, varieties and/or hybrids of these
- Tree nut group 14: almonds, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachios, and walnuts
- Vineyards: grape varieties (table, wine, and raisins)

Use Rate and Timing

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of LIBERTY GLUFOS 280. Refer to the **Weed Control for Row Crops** section of this label for selection of the proper rate dependent upon weed species present and size. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Do not retreat these weeds with this product until sufficient regrowth has occurred.

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

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

Application Methods for Broadcast Applications

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

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

Application Methods for Banded Spray Applications

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

Band width in inches

Row width in inches

x Broadcast rate per acre = Amount of herbicide needed for treatment

Application Methods for Spot or Directed-Spray Applications

For spot or directed spray application, mix this product at 1.7 fluid ounces (0.03 lb ai) of product per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. Do not make spot or directed spray applications to tree or vine trunk as injury may occur.

Sucker Control with LIBERTY GLUFOS 280

LIBERTY GLUFOS 280 will reduce or eliminate sucker growth when applied to suckers that are young, green, uncallused and not more than 12 inches in height. For sucker control, apply a split application approximately 4 weeks apart at 56 fluid ounces (1.02 lbs ai/A) per acre. Coverage of all sucker foliage is necessary for optimum control.

Tank Mixes: LIBERTY GLUFOS 280 does not provide residual weed control or control of unexposed plant parts. For residual control or control of a broader spectrum of weeds, or to support product performance, this product can be mixed with other herbicides registered for use on tree, vine and berry crops. No additional surfactant is needed when tank mixing. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Weeds Controlled in Tree, Vine and Berry Crops

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

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

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

Clover, red	Mugwort	Quackgrass	Yarrow, common
Clover, white			

^{*} apply to annual ryegrass prior to 3 inches in height

Restrictions – Tree, Vine and Berry Crops

- Berry Bushes and Stone Fruit: Do not make more than 2 applications at a maximum application rate of 82 fluid ounces (1.5 lbs ai) per acre per application. Do not apply more than 164 fluid ounces (3 lbs ai) per acre per 12-month period. Make sequential applications a minimum of 28 days apart.
- Tree Nuts, Vines, Pome Fruit, Citrus and Olives: Do not make more than 3 applications at a maximum application rate of 82 fluid ounces (1.5 lbs ai) per acre per application. Do not apply more than 246 fluid ounces (4.5 lbs ai) per acre in any calendar year.
- Application to citrus fruits, pome fruits and olives must be a minimum of 14 days apart.
- Applications to berry bushes and stone fruit must be a minimum of 28 days apart.
- Preharvest Interval (PHI): Do not apply this product within 14 days of nut, fruit, berry or grape harvest.
- Do not graze, harvest, and/or feed treated orchard cover crops to livestock
- Do not apply this product through any type of irrigation system.
- Do not apply this product aerially to tree, berry, or vine crops.
- Do not make spot spray applications to suckers, as tree injury may occur.

APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

Use Rate and Timing

Apply LIBERTY GLUFOS 280 at the beginning of natural senescence of potato vines. Apply 21 fluid ounces (0.38 lb ai) per acre. Do not split this application or make more than one application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

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

Restrictions - Potato Vine Desiccation

- Do not apply more than 21 fluid ounces (0.38 lb ai) per acre per application.
- Do not apply more than 21 fluid ounces (0.38 lb ai) per acre per year.
- Do not split this application or apply more than one application per harvest.
- Preharvest Interval (PHI): Do not apply within 9 days of potato harvest.
- Do not apply to potatoes grown for seed.
- Crop rotation and plantback intervals after application of this product for potato vine desiccant are:

Crop	Minimum Crop Rotation Interval
Canola, Corn, Cotton, Potato, Soybean, Sugar Beets	0 Days
Barley, Buckwheat, Millet, Oats, Rye, Sorghum, Triticale, Wheat	30 Days
Brassica Vegetables, Leafy Vegetables, Root and Tuber Vegetables	70 Days
Other crops	120 Days

FALLOW FIELDS OR POST HARVEST

LIBERTY GLUFOS 280 may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **Weed Control for Row Crops** section of this label. Applications may be made in fallow fields, postharvest, prior to planting or emergence of any crop listed on this label.

^{**} indicates suppression

Apply this product at 22 or 29 fluid ounces (0.2 to 0.53 lb ai) per acre to fallow fields to control specific weeds. This product must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are advised with this product to enhance total weed control. 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. 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

- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per application.
- Do not apply more than 29 fluid ounces (0.53 lb ai) per acre per year.
- Do not make more than one application per year.

FARMSTEADS, RECREATIONAL AND PUBLIC AREAS

When applied as directed, LIBERTY GLUFOS 280 controls undesirable plant vegetation in non-crop areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks and non-selective farmstead weed control. Refer to the **Application Directions for Use on Listed Tree, Vine and Berry Crops** section of this label for appropriate application broadcast and spot spray application rates and lists of weeds controlled.

Restrictions

- Do not apply more than 82 fluid ounces (1.5 lbs ai) per acre per application.
- Do not apply more than 246 fluid ounces (4.5 lbs ai) per acre per year.
- Do not make more than 3 applications per year.
- Sequential applications must be made 14 days apart.
- Do not allow grazing of treated vegetation.

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 of this product 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

NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): 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 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. 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.

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): 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 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. 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.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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 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. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or Seller. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LIBERTY CROP PROTECTION, LLC and Seller harmless for any claims relating to such factors.

LIBERTY CROP PROTECTION, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION, LLC, and TO THE EXTENT CONSISTENT WITH APPLICABLE LAW Buyer and User assume the risk of any such use. To the extent consistent with applicable law LIBERTY CROP PROTECTION, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE. To the extent consistent with applicable law, neither LIBERTY CROP PROTECTION, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF LIBERTY CROP PROTECTION, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT.

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