

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 9, 2022

Karen S. Cain Sr. Regulatory Manager BASF Corporation 26 Davis Drive, P.O. Box 13528 RTP, NC 27709

Subject: PRIA Label Amendment – New food uses of glufosinate on tomato subgroup 8–10A; pepper/eggplant subgroup 8–10B; melon subgroup 9A; squash/cucumber subgroup 9B; fig; avocado; hops, crop group expansions for rapeseed subgroup 20A; cottonseed subgroup 20C; fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13–07F; tropical and subtropical, small fruit, edible peel, subgroup 23A; vegetable, tuberous and corm, subgroup 1C, crop group conversion for bushberry subgroup 13–07B, amended application rate for cotton, revised restricted entry intervals, and amended potato vine desiccation directions for use.

Product Name: Liberty 280 SL Herbicide

EPA Registration Number: 7969-448, 0E8859, 0F8865

Application Date: 06/30/2020; 08/07/2020

Decision Number: 564819, 564820, 564821, 564822, 564823, 565288, 565290, 576156

#### Dear Ms. Cain:

The application referred to above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable under FIFRA section 3(c)(5).

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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

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distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Marc Sheahin at 202-566-2896 or at sheahin.marc@epa.gov.

Sincerely,

Assetly Releas

Rachel C. Holloman, Chief Fungicide and Herbicide Branch

Registration Division, OPP

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# Liberty® 280 SL

## Herbicide

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

Liberty® 280 SL herbicide is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds.

Liberty 280 SL is registered for use as a:

- burndown treatment prior to planting or prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet
- postemergence weed control herbicide to be applied on LibertyLink® or glufosinate-resistant crops including LibertyLink canola, LibertyLink corn, LibertyLink sweet corn, LibertyLink cotton, LibertyLink soybeans, and LibertyLink sugar beets
- postemergence weed control herbicide to be applied in cotton with a hooded sprayer only
- postemergence weed control herbicide to be applied in listed tree, vine, and berry crops
- preplant burndown or postemergence weed control herbicide to be applied in cucurbits
- preplant burndown or postemergence weed control herbicide to be applied in fruiting vegetables
- postemergence weed control herbicide to be applied in olives
- vine desiccant in potatoes

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic	
acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
Total:	100.0%
* CAS Number 77192 92 9	

<sup>\*</sup>CAS Number 77182-82-2

EPA Reg. No. 7969-448

EPA Est. No.

## WARNING/AVISO

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

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

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

### **Net Contents:**

[Recirculation is advised] [for bulk tanks] [for totes]

**BASF** Corporation

26 Davis Drive, Research Triangle Park, NC 27709

ACCEPTED

12/9/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2000, 1440

7969-448



<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

FIRST AID	
If in eyes	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes.</li> <li>Get medical attention if irritation develops or persists.</li> </ul>
If on skin	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>
LIOTI INF NUMBER	

#### **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

**NOTE TO PHYSICIAN:** If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration. Additionally, call 1-800-832-HELP (4357) immediately for further information.

## **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

WARNING. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Harmful if swallowed. DO NOT get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before use.

## **Personal Protective Equipment (PPE)**

#### Applicators and other handlers must wear:

- Long-sleeve shirt and long pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes and socks
- Protective eyewear (goggles, face shield or safety glasses)

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

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

#### **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

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

## **Engineering Controls**

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

#### **Environmental Hazards**

**DO NOT** apply directly to water or to areas where surface water is present. **DO NOT** apply to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwater or rinsate.

This product is moderately toxic to bees on a chronic basis, and may cause chronic risk to pollinators or other terrestrial invertebrates. **DO NOT** apply this product to blooming vegetation or if bees or other pollinating insects are visiting the treatment area.

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift and runoff.

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where

possible, use methods which reduce soil erosion, including no till, limited till and contour plowing; these methods also reduce pesticide runoff. Use vegetation filter strips along rivers, creeks, streams, wetlands, etc. or on the downhill side of fields where runoff could occur to minimize water runoff.

#### **Directions For Use**

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

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

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

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

#### AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **12 hours**.

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, including plants, soil, or water, is:

- Coveralls worn over short-sleeve shirt and short pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC)
   ≥ 14 mils, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

## IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT

**Liberty® 280 SL herbicide** may be applied as a burndown treatment prior to planting of canola, corn, sweet corn, cotton, soybean, and sugar beet, fruiting vegetables, cucurbits, olives, trees, vines, berries listed on this label or after planting but prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet.

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

The basis of selectivity of **Liberty 280 SL** in crops is the presence of a gene in **LibertyLink** crops which results in a plant that is resistant to the active ingredient of **Liberty 280 SL**. Crops not containing this gene will not be resistant to **Liberty 280 SL** and severe crop injury and/or death may occur. **DO NOT** allow spray to contact foliage or green tissue of desirable vegetation other than crops resistant to the active ingredient in this product.

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

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

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

**DO NOT** use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature must not exceed 125° F. If storage temperature for bulk **Liberty® 280 SL** 

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

For containers larger than 2.5 gallons, periodic recirculation is advised during long term storage and prior to use or dispersement.

#### **Pesticide Disposal**

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

#### **STORAGE AND DISPOSAL** (continued)

## **Container Handling**

Rigid nonrefillable containers small enough to shake (i.e., [plastic] containers with capacities equal to or less than 5 gallons)

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Once container is rinsed, then offer for recycling if available or reconditioning if appropriate; or puncture and dispose of in a sanitary landfill, or by incineration; or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

Refillable Container. Refill this container with pesticide only. DO NOT reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. This is a sealed returnable container to be used only for Liberty® 280 SL herbicide. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

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

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

**SEED DISPOSAL:** To dispose of out-of-date or otherwise unmarketable seed from plants which have been treated with **Liberty® 280 SL herbicide**, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

#### **Product Information**

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

### Liberty 280 SL is registered for use as a:

- burndown treatment prior to planting of canola, corn, sweet corn, cotton, soybean, and sugar beet, fruiting vegetables, cucurbits, olives, trees, vines, berries listed on this label
- burndown treatment after planting but prior to emergence of canola, corn, sweet corn, cotton, soybean, and sugar beet
- postemergence weed control herbicide to be applied on LibertyLink® or glufosinate-resistant crops including LibertyLink canola, LibertyLink corn, LibertyLink sweet corn, LibertyLink cotton, LibertyLink soybeans, and LibertyLink sugar beets
- postemergence weed control herbicide to be applied in cotton with a hooded sprayer only
- postemergence weed control herbicide to be applied in listed tree, vine, hops, fig, avocado, and berry crops
- postemergence weed control herbicide to be applied between rows of fruiting vegetables and cucurbits
- vine desiccant in potatoes

**Liberty 280 SL** is only foliar-active with little or no activity in soil. Only weeds that are emerged at the time of application will be controlled by **Liberty 280 SL**.

#### Liberty 280 SL:

- Apply to actively growing small weeds as specified in the Weeds Controlled section.
- Liberty 280 SL is a contact herbicide and requires uniform, thorough spray coverage.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Liberty 280 SL.
- Necrosis of leaves and young shoots occurs within 2 to 4 days after application under good growing conditions.
- Liberty 280 SL is rainfast four (4) hours after application
  to most weed species; therefore, rainfall within four
  (4) hours may necessitate retreatment or may result in
  reduced weed control. Refer to specific use sections of
  this label for minimum intervals required before reapplication of this product and use rates.
- Liberty 280 SL requires sunlight for activity. Applications near dawn and dusk may result in reduced weed control. For best results, make applications between sunrise and 2 hours before sunset.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application.
- Consult your local Cooperative Extension Service or BASF representative for guidelines on the optimum application timing for **Liberty 280 SL** in your region.

## **Rotational Crop Restrictions**

Rotational crop planting intervals following application of **Liberty® 280 SL herbicide** with the exception of a potato vine desiccation\* are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant-back Interval (minimum rotational crop planting interval from last application)
Canola, Corn, Sweet Corn, Cotton, Soybean, Sugar Beets, Fruiting Vegetables**, and Cucurbits**	May be planted at any time
Cover Crops***	7 days
Transplanted Perennial Crops on label (bushberries group 13-07B, citrus group 10-10, olives, pome fruit group 11-10, stone fruit group 12-12, tree nuts group 14-12, fruit, grape (table, wine and raisins), hops, avocado, fig)	14 days
Brassica Leafy Vegetables, Leafy Vegetables, Root and Tuber Vegetables, and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 days
Other Crops	180 days

- \* See Application Directions for Potato Vine Desiccation for rotational crop restrictions.
- \*\* For in crop applications for these crops, follow the respective **Crop-Specific Application Information** section of the label.
- \*\*\* Planting of cover crops for conservation purposes may be planted in fields previously treated with **Liberty 280 SL** as long as these cover crops are not grazed by livestock nor harvested for food. For best results, **DO NOT** plant cover crops less than 7 days after an application of **Liberty 280 SL** nor before 1/2 inch of rainfall or irrigation has occurred. Planting sooner than this may result in stand reduction. Planting of crops listed in the **Rotational Crop Restrictions** that follow the listed planting intervals and other restrictions are considered a rotational crop and therefore may be harvested.

#### Resistance Management

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

Contact your local BASF representative, crop advisor or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions.

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

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

Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;

A spreading patch of non-controlled plants of a particular weed species; and

Surviving plants mixed with controlled individuals of the same species.

Report an incidence of non-performance of this product against a particular weed species to your local extension specialists, certified crop advisor and/or BASF representative.

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

Whenever possible, incorporate multiple weed-control practices including mechanical cultivation, biological management practices or crop rotation.

Contact your local extension specialist, certified crop advisory and/or BASF representative for additional resistance management or IPM recommendation. Also for more information on weed resistance management, visit the Herbicide Resistance Action Committee (HRAC) on the web at http://www.hracglobal.com.

#### **Weeds Controlled**

For best results, apply to emerged, small and actively growing weeds less than 3 inches in height. Warm temperatures, high humidity, and bright sunlight improve the performance of **Liberty® 280 SL herbicide**. Uniform, thorough spray coverage of weeds is necessary to achieve consistent weed control. Refer to the **Application Equipment** section for more details.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures and in dense populations. Stressed conditions may also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, use rate, or environmental conditions at the time of application.

When any of these conditions exist, select a higher rate within the label rate range to improve weed control.

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

#### Weeds Controlled at 22 to 28 fl ozs/A

Broadleaf Weeds	
Common Name	Scientific Name
Anoda, spurred	Anoda cristata
Beggarweed, Florida	Desmodium tortuosum
Black medic	Medicago lupulina L.
Blueweed, Texas	Helianthus ciliaris DC.
Buckwheat, wild	Polygonum convolvulus
Buffalobur	Solanum cornutum
Burcucumber	Sicyos angulatus
Canola, volunteer <sup>1</sup>	Brassica spp.
Carpetweed	Mollugo verticillata
Catchweed bedstraw (cleavers)	Galium aparine L.
Chickweed, common	Stellaria media
Cocklebur, common	Xanthium strumarium
Copperleaf, hophornbeam	Acalypha ostryaefolia
Cotton, volunteer <sup>1</sup>	Gossypium spp.
Croton, tropic	Croton glandulosus
Croton, woolly	Croton capitatus

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

Weeds Controlled at 22 to 28 fl ozs/A (continued)

weeds Controlled at 22 to 28 fl OZS/A (continued)		
Broadleaf Weeds (continued)		
Common Name	Scientific Name	
Devil's claw	Proboscidea Iouisiana	
Eclipta	Eclipta alba	
Fleabane, annual	Erigeron annuus	
Galinsoga, hairy	Galinsoga ciliate	
Galinsoga, smallflower	Galinsoga parviflora	
Geranium, cutleaf	Geranium dissectum L.	
Groundcherry, cutleaf	Physalis angulata	
Hempnettle	Galeopsis spp.	
Horsenettle, Carolina <sup>2</sup>	Solanum carolinense	
Jimsonweed	Datura stramonium	
Knotweed	Polygonum spp.	
Ladysthumb	Polygonum persicaria	
Lambsquarters, common	Chenopodium album	
Mallow, common	Malva spp.	
Mallow, Venice	Hibiscus trionum	
Marsh elder, annual	lva annua	
Morningglory, entireleaf	lpomoea hederacea var. integriuscula	
Morningglory, ivyleaf	Ipomoea hederacea	
Morningglory, pitted	Ipomoea lacunosa	
Morningglory, sharppod	Ipomoea cordatotriloba	
Morningglory, smallflower	Jacquemontia tamnifolia	
Morningglory, tall	Ipomoea purpurea	
Mustard, wild	Sinapis arvensis	
Nightshade, black	Solanum nigrum	
Nightshade, eastern black	Solanum ptycanthum	
Nightshade, hairy	Solanum sarrachoides	
Pennycress	Thlaspi arvense	
Pigweed, prostrate	Amaranthus blitoides	
Pigweed, redroot	Amaranthus retroflexus	
Pigweed, smooth	Amaranthus hybridus	
Pigweed, spiny	Amaranthus spinosus	
Pigweed, tumble	Amaranthus albus	
Puncturevine	Tribulus terrestris	
Purslane, common	Portulaca oleracea	
Ragweed, common	Ambrosia artemisiifolia	
Ragweed, giant	Ambrosia trifida	
Senna, coffee	Cassia occidentalis	
Sesbania, hemp	Sesbania herbacea	

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

Weeds Controlled at 22 to 28 fl ozs/A (continued)

Weeds Controlled at 22 to 28 fl ozs/A (continued)  Broadleaf Weeds (continued)	
Common Name	Scientific Name
Shepherd's purse	Capsella bursa-pastoris
Sicklepod (java bean)	Senna obtusifolia
Sida, prickly	Sida spinosa L.
Smartweed, Pennsylvania	Polygonum pensylvanicum
omartweed, i emisyivama	Cucumis melo L. var.
Smell melon	dudaim
Sowthistle, annual	Sonchus oleraceus L.
Soybeans, volunteer <sup>1</sup>	Glycine max
Spurge, prostrate	Euphorbia humifusa
Spurge, spotted	Euphorbia maculata L.
Starbur, bristly	Acanthospermum hispidum
Sunflower, common	Helianthus annuus
Sunflower, prairie	Corythucha pura
Sunflower, volunteer	Helianthus annuus
Velvetleaf	Abutilon theophrasti
Grass	Weeds
Common Name	Scientific Name
Barley, volunteer <sup>2</sup>	Hordeum vulgare
Barnyardgrass	Echinochloa spp.
Bluegrass, annual	Poa annua L.
Corn, volunteer <sup>1</sup>	Zea mays L.
Crabgrass, large <sup>4</sup>	Digitaria sanguinalis
Crabgrass, smooth <sup>4</sup>	Digitaria ischaemum
Cupgrass, woolly	Eriochloa villosa
Foxtail, bristly	Setaria verticillata
Foxtail, giant	Setaria faberi
Foxtail, green	Setaria viridis
Foxtail, robust purple	Setaria viridis
Foxtail, yellow <sup>4</sup>	Setaria pumila
Goosegrass <sup>2</sup>	Eleusine indica
Johnsongrass, seedling	Sorghum halepense
Junglerice	Echinochloa colonum
Millet, proso volunteer	Milium vernale
Millet, wild proso	Panicum miliaceum L.
Oat, wild <sup>4</sup>	Avena fatua
Panicum, fall	Panicum dichotomiflorum
Panicum, Texas	Panicum texanum
Rice, red	Oryza sativa L.
Rice, volunteer <sup>1</sup>	Oryza sativa

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

Weeds Controlled at 22 to 28 fl ozs/A (continued)

Grass Weeds (continued)	
Common Name	Scientific Name
Shattercane	Sorghum vulgare Pers.
Signalgrass, broadleaf	Brachiaria platyphylla
Sorghum, volunteer	Sorghum spp.
Sprangletop	Leptochloa spp.
Stinkgrass	Eragrostis cilianensis
Wheat, volunteer <sup>4</sup>	Triticum spp.
Witchgrass	Panicum virgatum L.

#### Additional Weeds Controlled at 29 to 43 fl ozs/A

Broadleaf Weeds	
Common Name	Scientific Name
Amaranth, Palmer	Amaranthus palmeri
Kochia	Kochia scoparia
Waterhemp, common	Amaranthus rudis
Waterhemp, tall	Amaranthus tuberculatus
Marestail <sup>3</sup>	Conyza canadensis
Pusley, Florida	Richardia scabra
Thistle, Russian <sup>2</sup>	Salsola kali
Grace Woods	

## Common Name Scientific Name Sandbur, field<sup>4</sup> Cenchrus pauciflorus

Odi labai, iloia	oonomae paaemerae
Biennial and Perennial Weeds	
Common Name	Scientific Name
Alfalfa	Medicago sativa L.
Bermudagrass	Cynodon dactylon
Bindweed, field	Convolvulus arvensis L.
Bindweed, hedge	Calystegia sepium
Bluegrass, Kentucky	Poa pratensis L.
Blueweed, Texas	Helianthus ciliaris DC.
Bromegrass, smooth	Bromus inermis
Burdock	Arctium spp.
Bursage, woollyleaf	Ambrosia grayi
Chickweed, mouse-ear	Cerastium vulgatum L.
Clover, red	Trifolium pratense L.
Dandelion	Taraxacum officinale
Dock, smooth*	Rumex spp.
Dogbane, hemp*	Apocynum cannabinum
Goldenrod, gray	Solidago nemoralis
Johnsongrass, rhizome	Sorghum halepense

(continued)

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

## Additional Weeds Controlled at 29 to 43 fl ozs/A (continued)

Biennial and Perennial Weeds (continued)	
Common Name	Scientific Name
Milkweed, common*	Asclepias syriaca
Milkweed, honeyvine*	Ampelamus albidus
Muhly, wirestem*	Muhlenbergia frondosa
Nightshade, silverleaf	Solanum elaeagnifolium
Nutsedge, purple*	Cyperus rotundus
Nutsedge, yellow*	Cyperus ferax
Orchardgrass	Dactylis glomerata L.
Poinsettia, wild*	Euphorbia heterophylla L.
Pokeweed	Phytolacca L.
Quackgrass	Agropyron repens
Sowthistle, perennial	Sonchus arvensis L.
Thistle, bull*	Cirsium vulgare
Thistle, Canada	Cirsium arvense
Timothy*	Phleum pratense L.
Wormwood, biennial	Artemisia biennis

## Additional Weeds Controlled at 48 to 82 fl ozs/A

Broadleaf Weeds	
Common Name	Scientific Name
Alkali sida	Sida hederacea
Ammannia, purple	Ammannia robusta
Arrowhead, California	Sagittaria montevidensis
Burclover, California	Medicago polymorpha
Chinese thornapple	Datura quercifolia
Copperleaf, Virginia	Acalypha virginica
Cudweed	Gnaphalium sp.
Cutleaf evening primrose	Oenothera laciniata
Dodder	Cuscuta sp.
Fiddleneck	Amsinckia intermedia
Filaree	Erodium sp.
Filaree, redstem	Erodium cicutarium
Goosefoot	Chenopodium sp.
Gromwell, field	Lithospermum arvense
Groundsel, common	Senecio vulgaris
Henbit	Lamium amplexicaule
Lettuce, miner's	Claytonia perfoliata
Lettuce, prickly	Lactuca serriola
London rocket	Sisymbrium irio

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

## Additional Weeds Controlled at 48 to 82 fl ozs/A (continued)

Broadleaf Weeds (continued)	
Common Name	Scientific Name
Malva (little mallow)	Malva parviflora
Mayweed	Anthemis cotula
Mullein, turkey	Croton setigerus
Nettle	Urtica sp.
Pineapple-weed	Matricaria discoidea
Radish, wild	Raphanus raphanistrum
Redmaids	Calandrinia ciliata
Starthistle, yellow	Centaurea solstitialis
Swinecress	Lepidium sp.
Turnip, wild	Rapistrum rugosum
Vervain	Verbena sp.
Vetch	Vicia sativa
Willowherb, panicle	Epilobium brachycarpum
Gra	ss Weeds
Common Name	Scientific Name
Brome, ripgut	Bromus diandrus
Bromegrass, downy	Bromus tectorum
Canarygrass	Phalaris canariensis
Chess, soft	Bromus hordeaceus
Rush, toad*	Juncus bufonius
Ryegrass, annual*	Lolium multiflorum subsp. gaudini
Windgrass	Apera spica-venti
Biennial and	d Perennial Weeds
Common Name	Scientific Name
Aster, white heath	Symphyotrichum pilosum
Bluegrass, Kentucky	Poa pratensis
Bulrush*	Scirpus sp.
Clover, Alsike	Trifolium hybridum
Clover, white	Trifolium repens
Dallisgrass	Paspalum dilatatum
Dock, curly	Rumex crispus
Fescue	Festuca sp.
Guineagrass	Megathyrsus maximus
Horsetail	Equisetum sp.
Lovegrass	Eragrostis sp.
Mugwort	Artemisia vulgaris
Mullein, common	Verbascum thapsus

(continued)

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

## Additional Weeds Controlled at 48 to 82 fl ozs/A (continued)

Biennial and Perennial Weeds (continued)		
Common Name	Scientific Name	
Mustard, tansy	Descurainia pinnata	
Onion, wild	Allium canadense	
Orchardgrass	Dactylis glomerata	
Paragrass	Urochloa mutica	
Plantain	Plantago sp.	
Poison ivy	Toxicodendron sp.	
Poison oak	Toxicodendron sp.	
Rocket, yellow	Barbarea vulgaris	
Rose, wild	Rosa multiflora	
Rubus spp.	Rubus sp.	
Spurge, leafy	Euphorbia esula	
Thistle, musk	Carduus nutans	
Torpedograss	Panicum repens	
Vaseygrass	Paspalum urvillei	
Woodsorrel	Oxalis sp.	
Yarrow, common	Achillea millefolium	
Suppression only		

<sup>\*</sup> Suppression only.

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

## Use Rate Equivalency for Liberty 280 SL (2.34 lbs ai/gal)

Amount of Liberty 280 SL (fl ozs/A)	Amount of glufosinate (lbs ai/A)
22	0.40
29	0.53
30	0.55
32	0.59
36	0.66
43	0.79
48	0.88
49	0.90
55	1.00
56	1.02
58	1.06
60	1.10
62	1.17
64	1.24
72	1.32
82	1.50
87	1.59
165	3.00
246	4.50

## **Compatibility Testing**

If **Liberty 280 SL** is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

- 1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1-quart jar.
- 2. For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3. For each 16 fl ozs of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 16 fl ozs of **Liberty 280 SL** 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.

<sup>&</sup>lt;sup>1</sup> Volunteer **LibertyLink®** crops from the previous season will not be controlled. A timely cultivation 7 to 10 days after an application and/or retreatment 10 to 21 days after the first application can be made for controlling dense clumps of volunteer corn or volunteer rice.

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

<sup>&</sup>lt;sup>3</sup> For optimum control apply **Liberty® 280 SL herbicide** on 6-inch marestail.

<sup>&</sup>lt;sup>4</sup> For best control of yellow foxtail, field sandbur, crabgrass, wild oats, and volunteer wheat, treat prior to tiller initiation.

 After compatibility testing is complete, dispose of any pesticide wastes in accordance with the STORAGE AND DISPOSAL section of this label.

## **Mixing Instructions**

Liberty® 280 SL herbicide is formulated to mix readily in water. Prior to adding Liberty 280 SL to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see Cleaning Instructions). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and precautions and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mix Instructions. Liberty 280 SL 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 restrictions and precautions. No label dosage rates may be exceeded. Liberty 280 SL cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and other restrictions.

#### Mixing Instructions for Liberty 280 SL

- 1. Start with properly calibrated and clean equipment.
- 2. Fill the spray tank half full with water.
- 3. Start agitation.
- 4. If mixing with a flowable/wettable powder tank mix partner, prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
- Add ammonium sulfate (AMS) to the spray tank if needed.
- 6. If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 7. Complete filling the spray tank with water **before adding Liberty 280 SL**, as foaming may occur.
- 8. Add **Liberty 280 SL** when tank is full and continue agitation.
- 9. If foaming occurs, use a silicone-based **anti-foam agent**.

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

If tank mix partners listed on this label are added, maintain thorough 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 280 SL Use**

Before using **Liberty 280 SL**, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter particularly if a herbicide with the potential to injure crops was previously used. Equipment must be thoroughly rinsed using a commercial tank cleaner and as instructed on the prior herbicide label.

#### After Liberty 280 SL Use

After using **Liberty 280 SL**, triple rinse the spray equipment and clean with a commercial tank cleaner before using the equipment for a new application. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

#### **Application Instructions**

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

## **Ground Application**

- Apply early when weeds are small with directed rates as identified in the Weeds Controlled section.
- Apply Liberty 280 SL in a minimum of 15 gallons of water per acre. Increase to 20 gallons of water per acre for better coverage of large weeds, dense foliage, or when using larger spray droplets.

#### **Nozzle Selection**

Apply with nozzles and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1 unless otherwise mandated by tank mix product.

Addition of some drift retardants can significantly increase the droplet size and reduce spray coverage and efficacy. If a drift retardant is used, ensure that it is compatible for use with **Liberty 280 SL** and spray equipment being used.

## **Aerial Application**

- Apply early when weeds are small with directed rates as identified in the Weeds Controlled section.
- Apply Liberty 280 SL 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 Liberty 280 SL.

#### **Application 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 Liberty 280 SL.

 DO NOT use flood jet nozzles, controlled droplet application equipment, or air-assisted spray equipment.

## **Adjuvant Instructions**

- Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.
- AMS has shown to improve weed control of difficultto-control weeds, like velvetleaf and lambsquarters, under difficult environmental conditions (low relative humidity) or hard water.
- Anti-foam agent is advised.
- No additional surfactant is needed with any tank mix partner.

The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

## **Mandatory Spray Drift Mitigation**

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.

#### **Advisory Spray Drift Language**

Pollinator Advisory Statement - This product contains a herbicide. Follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to

- the treated site which may serve as habitat or forage for pollinators.
- Spray Drift Management The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.
- Importance of Droplet Size The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind; Temperature and Humidity; and Temperature Inversions sections of this label.

## **Techniques for Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures specified 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. AVOID-ING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- **Nozzle Type** Solid stream nozzles (including disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** Longer booms increase drift potential. Therefore, a shorter boom length is recommended.
- **Application Height** Application more than 10 ft above the canopy increases the potential for spray drift.

**Boom Height.** Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

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

**Wind.** Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. **NOTE:** Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity.** When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

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

**Shielded Sprayers.** Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

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

Apply Liberty® 280 SL herbicide only to canola labeled as LibertyLink or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve optimum weed control.

Liberty 280 SL may be applied as a burndown treatment prior to planting or prior to emergence of LibertyLink or glufosinate-resistant canola.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

Refer to the maximum amount per year for that crop for the total amount of **Liberty 280 SL** that may be used.

## Use Rates for Burndown Applications for LibertyLink or Glufosinate-resistant Canola

Crop	Burndown (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
LibertyLink or glufosinate- resistant Canola	29 to 43	Up to 2 applications at 22 to 29 fl ozs/A	87

## In-crop Applications if a Burndown Application is Made

Application	Cotyledon up to early bolt stage of LibertyLink or glufosinate-resistant canola.
Application Timing	Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.
Application Use Rate	<ul> <li>Apply 22 to 29 fl ozs/A depending on weed species, size and density per the Weeds Controlled section.</li> </ul>
	<ul> <li>Up to 2 applications may be applied with a minimum of 7 days between applications.</li> </ul>

(continued)

## In-crop Applications if a Burndown Application is Made (continued)

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	Tank mixes may aid in the performance of Liberty® 280 SL herbicide. Please refer to the Weeds Controlled section for a listing of weed species controlled.	
Application Use Rate with	<ul> <li>Apply 22 to 29 fl ozs/A depending on weed species, size and density per weed chart.</li> </ul>	
	No additional surfactant is needed with any tank mix partner.	
Tank Mix Partners	The tank mix partner must be used in accordance with the label restrictions and precautions.	
	No label dosage rates may be exceeded.	
	Liberty 280 SL cannot be mixed with any product containing a label prohibition against such mixing.	
Maximum	<ul> <li>Up to 58 fl ozs/A may be used per year if no burndown application was used.</li> </ul>	
per Year	If a burndown application was used the maximum per year is 87 fl ozs/A.	
	<ul> <li>Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.</li> </ul>	
Adjuvants	AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.	
	Anti-foam agent is advised.	
	The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed information.	
	• 15 GPA minimum	
Spray Volume	Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.	
Nozzle Spray Quality	Liberty 280 SL is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.	
	See the <b>Application Instructions</b> section for more detailed information.	

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

- **DO NOT** use on **LibertyLink** or glufosinate-resistant canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- **DO NOT** apply **Liberty 280 SL** within 65 days of harvesting **LibertyLink** or glufosinate-resistant canola.
- **DO NOT** graze the treated crop or cut for hay.
- DO NOT apply Liberty 280 SL if LibertyLink or glufosinate-resistant canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 29 fl ozs/A (0.53 lb ai/A) in a single application for in crop use.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application for burndown use.
- DO NOT apply more than 3 applications including burndown per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- Retreatment interval for in-crop use is a minimum of 7 days.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) of Liberty 280 SL per year.
- Refer to Rotational Crop Restrictions under the Product Information section of this label for the appropriate rotational crop plant-back intervals.

# Application Directions for Use on LibertyLink® or Glufosinate-resistant Field Corn and LibertyLink or Glufosinate-resistant Silage Corn

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

Liberty 280 SL may be applied as a burndown treatment prior to planting or prior to emergence of LibertyLink or glufosinate-resistant corn.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

## Use Rates for Burndown Applications for LibertyLink® or Glufosinate-resistant Corn

Crop	Burndown (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
cr glufosinate- resistant Corn	29 to 43	Up to 2 applications at 29 to 43 fl ozs/A	87

## In-crop Applications if a Burndown Application is Made

Application Timing	Emergence through V6 stage of growth.		
Application	<ul> <li>Apply 29 to 43 fl ozs/A depending on weed species, size and density per the Weeds Controlled section.</li> </ul>		
Application Use Rate	Up to 3 applications may be applied with a minimum of 7 days between applications up to a maximum of 87 flozs/A per year.		
	Apply 22 to 43 fl ozs/A of     Liberty® 280 SL herbicide with     labeled tank mix partners depending     on weed species, size and density per     the Weeds Controlled section.		
Application Use Rate with Tank Mix Partners	Tank mixes may aid in the performance of Liberty 280 SL. Please refer to the Weeds     Controlled section for a listing of weed species controlled at this rate.		
	No additional surfactant is needed with any tank mix partner.		
	The tank mix partner must be used in accordance with the label restrictions and precautions.		
	No label dosage rates may be exceeded.		
	Liberty 280 SL cannot be mixed with any product containing a label prohibition against such mixing.		

(continued)

## **In-crop Applications if a Burndown Application is Made** (continued)

Maximum per Year	• 87 fl ozs/A		
	Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.		
Adjuvants	AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.		
	Anti-foam agent is advised.		
	The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.		
	• 15 GPA minimum		
Spray Volume	Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.		
Nozzle Spray	Liberty 280 SL is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.		
Quality	See Application Instructions for more detailed information.		

## **Application Drop Nozzle Equipment**

Applications of **Liberty 280 SL** on **LibertyLink** or glufosinate-resistant corn may be made with drop nozzles from emergence until **LibertyLink** or glufosinate-resistant corn is 36 inches tall. Avoid spraying into the whorl or leaf axils of the corn stalks. Uniform, thorough spray coverage of weeds is necessary to achieve consistent weed control.

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

- DO NOT apply Liberty 280 SL within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) of Liberty 280 SL on LibertyLink or glufosinate-resistant corn per year.
- **DO NOT** use nitrogen solutions as spray carriers.

- DO NOT apply Liberty® 280 SL herbicide if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to Rotational Crop Restrictions under the Product Information section of this label for the appropriate rotational crop plant-back intervals.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application.
- **DO NOT** apply more than 3 applications when using reduced rates including burndown use per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- Retreatment interval for in-crop use is a minimum of 7 days.

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

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

Liberty 280 SL may be applied as a burndown treatment prior to planting or prior to emergence of LibertyLink or glufosinate-resistant corn.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

Refer to the maximum amount per year for that crop for the total amount of **Liberty 280 SL** that may be used.

## Use Rates for Burndown Applications for LibertyLink or Glufosinate-resistant Sweet Corn

Crop	<b>Burndown</b> (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
CibertyLink or glufosinate- resistant Sweet Corn	29 to 43	none	43

## In-crop Applications if No Burndown Application is Made

	,		
Application Timing	Emergence through V6 stage of growth.		
	Apply 22 fl ozs/A		
Application Use Rate	Up to 2 applications may be applied with a minimum of 7 days between applications.		
	Apply 22 fl ozs/A		
	Tank mixes may aid in the performance of Liberty 280 SL.     Please refer to the Weeds     Controlled section for a listing of weed species controlled at this rate.		
Application Use Rate with	No additional surfactant is needed with any tank mix partner.		
Tank Mix Partners	The tank mix partner must be used in accordance with the label restrictions and precautions.		
	No label dosage rates may be exceeded.		
	Liberty 280 SL cannot be mixed with any product containing a label prohibition against such mixing.		
Maximum per Year	• 44 fl ozs/A		
	Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners,		
	environmental conditions, temperatures and potential for leaf burn.		
Adjuvants	environmental conditions, temperatures and potential for leaf		
Adjuvants	<ul> <li>environmental conditions, temperatures and potential for leaf burn.</li> <li>AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or</li> </ul>		
Adjuvants	<ul> <li>environmental conditions, temperatures and potential for leaf burn.</li> <li>AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.</li> </ul>		
Adjuvants	<ul> <li>environmental conditions, temperatures and potential for leaf burn.</li> <li>AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.</li> <li>Anti-foam agent is advised.</li> <li>The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant</li> </ul>		
Adjuvants Spray Volume	<ul> <li>environmental conditions, temperatures and potential for leaf burn.</li> <li>AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.</li> <li>Anti-foam agent is advised.</li> <li>The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.</li> </ul>		

(continued)

## In-crop Applications if No Burndown Application is Made (continued)

Nozzle Spray Quality	Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.
	See <b>Application Instructions</b> for more detailed information.

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

- DO NOT apply Liberty 280 SL within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- If Liberty 280 SL was used in a burndown application, no postemergence applications may be applied to the crop.
- **DO NOT** use nitrogen solutions as spray carriers.
- DO NOT apply Liberty 280 SL if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply this product through any type of irrigation system.
- DO NOT apply more than 44 fl ozs/A (0.80 lb ai/A) of Liberty 280 SL on sweet corn per year.
- DO NOT apply more than two applications of Liberty 280 SL to sweet corn per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- Sequential applications must be at least 7 days apart.
- DO NOT apply more than 22 fl ozs/A (0.40 lb ai/A) in a single application. Refer to Rotational Crop
  Restrictions under the Product Information section of this label for the appropriate rotational crop plant-back intervals.

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

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

Liberty 280 SL may be applied as a burndown treatment prior to planting or prior to emergence of LibertyLink or glufosinate-resistant cotton.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

Refer to the maximum amount per year for that crop for the total amount of **Liberty 280 SL** that may be used.

## Use Rates for Burndown Applications for LibertyLink or Glufosinate-resistant Cotton

Crop	<b>Burndown</b> (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
continuation or continuation o	29 to 43	Up to 2 applications at 29 to 43 fl ozs/A	87

## In-crop Applications if a Burndown Application is Made

Application Timing	Emergence up to early bloom.	
	Apply 29 to 43 fl ozs/A	
Application Use Rate	Up to 3 applications may be applied with a minimum of 5 days between applications up to a maximum of 87 fl ozs/A per year. Allow a minimum of 10 days between applications if additional herbicides or acephate is included in the application.	
Maximum per Year	• 87 fl ozs/A	
Adjuvants	<ul> <li>Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.</li> </ul>	
	AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.	
	Anti-foam agent is advised.	
	The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.	
	• 15 GPA minimum	
Spray Volume	Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.	

(continued)

## In-crop Applications if a Burndown Application is Made (continued)

## Nozzle Spray Quality

- Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.
- See the **Application Instructions** for more detailed information.

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

- DO NOT apply Liberty 280 SL to LibertyLink or glufosinate-resistant cotton in Florida, south of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
- DO NOT apply Liberty 280 SL within 70 days prior to cotton harvest.
- **DO NOT** apply this product through any type of irrigation system.
- DO NOT apply more than 43 fl ozs/A (0.79 lb ai/A) per application for burndown use.
- **DO NOT** make more than 1 application for burndown use for all crops.
- DO NOT apply more than 43 fl ozs/A (0.79 lb ai/A) per application for in-crop use.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) per vear.
- **DO NOT** apply more than 3 applications per year when using reduced rates.
- Minimum retreatment interval is 5 days in-crop.
- Refer to Rotational Crop Restrictions under the Product Information section of this label for the appropriate rotational crop plant-back intervals.

## LibertyLink or Glufosinate-resistant Cotton Tank Mix Instructions

- Tank mixes with emulsifiable concentrate (EC) formulations may result in temporary crop injury. These tank mixes are not advised when cotton plants are exhibiting slow growth or vigor.
- DO NOT tank mix Liberty 280 SL with both an EC formulation herbicide and acephate insecticide.
- Certain herbicide tank mixes may aid in the performance of Liberty 280 SL. Liberty 280 SL may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label restrictions and precautions. No label dosage rates may be exceeded. Liberty 280 SL cannot be mixed with any product containing a label prohibition against such mixing.

## Application Directions for Use in Conventional Cotton (not labeled as LibertyLink or glufosinate-resistant)

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

## In-crop Applications if a Burndown Application is Made

Application Timing	Emergence up to early bloom.	
	<ul> <li>Apply 29 to 43 fl ozs/A per application.</li> </ul>	
Up to 3 applications may be applications with a minimum of 5 days betwee applications up to a maximum of 5 ozs/A per year.		
Maximum per Year	• 87 fl ozs/A	
	<ul> <li>Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.</li> </ul>	
Adjuvants	AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.	
	Anti-foam agent is advised.	
	The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.	
	• 15 GPA minimum	
Spray Volume	<ul> <li>Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.</li> </ul>	
Nozzle Spray	Liberty 280 SL is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.	
Quality	See Application Instructions for more detailed information.	

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

- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) per application for burndown use.
- **DO NOT** make more than 1 application for burndown use for all crops.
- DO NOT apply more than 43 fl ozs/A (0.79 lb ai/A) per application for in-crop use.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) per year.
- **DO NOT** apply more than 3 applications per year when using reduced rates.
- **DO NOT** apply **Liberty® 280 SL herbicide** within 70 days prior to cotton harvest.
- Minimum retreatment interval is 5 days in-crop.

## Application Methods to non Glufosinateresistant Cotton

Application of **Liberty 280 SL** to non glufosinate-resistant cotton varieties requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With a hooded sprayer, the spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and come into contact with the cotton, causing damage or destruction of the crop.

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

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	X	Broadcast spray VOLUME per acre	=	Banded spray volume needed per acre
in inches		pc. 4010		po. 0010

#### Postharvest - Fall Burndown

**Liberty 280 SL** may be applied as a postharvest burndown treatment to fields (after cotton harvest). Up to 43 fl ozs/A of **Liberty 280 SL** may be applied in a single application to control larger weeds growing in the crop at the time of harvest. Refer to **Rotational Crop Restrictions** under the **Product Information** section of this label for appropriate rotational crop information.

#### **Cotton Tank Mix Instructions**

Certain tank mixes may aid in the performance of **Liberty 280 SL**. **Liberty 280 SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label restrictions and precautions. No label dosage rates may be exceeded. **Liberty 280 SL** cannot be mixed with any product containing a label prohibition against such mixing.

## Application Directions for Use on LibertyLink® or Glufosinate-resistant Soybean

Apply **Liberty 280 SL** only to soybean designated as **LibertyLink** or glufosinate-resistant. Uniform, thorough spray coverage is necessary to achieve optimum weed control.

Liberty 280 SL may be applied as a burndown treatment prior to planting or prior to emergence of LibertyLink or glufosinate-resistant soybean.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertyLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

Refer to the maximum amount per year for that crop for the total amount of **Liberty 280 SL** that may be used.

## Use Rates for Burndown Applications for LibertyLink or Glufosinate-resistant Soybean

Crop	Burndown (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
LibertyLink or glufosinate- resistant Soybean	29 to 43	Up to 2 applications at 29 to 43 fl ozs/A	87

## In-crop Applications if a Burndown Application is Made

Application Timing  Application Use Rate  Application Use Rate  Per Year  Application Use Rate  Application Use Rate  Application Use Rate  Application Use Rate  Per Year  Application Use Rate  Adjuvants  Anjuvants  Anju			
Application Use Rate  Possible Veeds Controlled Section.  Up to 3 applications may be applied with a minimum of 5 days between applications up to a maximum of 87 flozs/A per year.  Maximum per Year  Possible Veeds Ve			
Up to 3 applications may be applied with a minimum of 5 days between applications up to a maximum of 87 fl ozs/A per year.    Maximum	Application	weed species, size and density per	
* 87 fl ozs/A      * Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.      * AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.      * Anti-foam agent is advised.      * The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.      * 15 GPA minimum  Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.    * Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.    * See Application Instructions for*		with a minimum of 5 days between applications up to a maximum of 87 fl	
at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.  • AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.  • Anti-foam agent is advised.  • The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.  • 15 GPA minimum  • Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.  • Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.  • See Application Instructions for		• 87 fl ozs/A	
Adjuvants  control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.  • Anti-foam agent is advised.  • The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.  • 15 GPA minimum  • Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.  • Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.  • See Application Instructions for		at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf	
The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.      15 GPA minimum     Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.      Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.      See Application Instructions for	Adjuvants	control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or	
crop oils may increase the risk of crop response. Please refer to surfactant label for more detailed directions.  • 15 GPA minimum  • Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.  • Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.  • See Application Instructions for		Anti-foam agent is advised.	
<ul> <li>Spray Volume</li> <li>Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.</li> <li>Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.</li> <li>See Application Instructions for</li> </ul>		crop oils may increase the risk of crop response. Please refer to surfactant	
volume  coverage of large weeds, dense foliage, or when using larger spray droplets.  • Liberty® 280 SL herbicide is a contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.  • See Application Instructions for		• 15 GPA minimum	
Nozzle Spray Quality  contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.  • See Application Instructions for		coverage of large weeds, dense foliage, or when using larger spray	
• •	Spray	contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed	
more detailed information.		See <b>Application Instructions</b> for more detailed information.	

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

- DO NOT apply Liberty 280 SL within 70 days of harvesting LibertyLink or glufosinate-resistant soybean seed.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) of Liberty 280 SL on LibertyLink or glufosinate-resistant soybeans per year.
- **DO NOT** apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application.

- **DO NOT** apply more than 3 applications per year when using reduced rates.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based anti-foam agent may be added if needed.
- **DO NOT** apply **Liberty 280 SL** if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to Rotational Crop Restrictions under the Product Information section of this label for the appropriate rotational crop plant-back intervals.
- Sequential applications must be at least 5 days apart.

## LibertyLink® or Glufosinate-resistant Soybean Tank Mix Instructions

Certain herbicide tank mixes may complement **Liberty 280 SL**. No additional surfactant is needed with any tank mix partner. **Liberty 280 SL** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the soybean to be treated. The tank mix partner must be used in accordance with the label restrictions and precautions. No label dosage rates may be exceeded. **Liberty 280 SL** cannot be mixed with any product containing a label prohibition against such mixing.

## Application Directions for Use on LibertyLink® or Glufosinate-resistant Sugar Beets

Apply **Liberty 280 SL only to sugar beets labeled as LibertyLink** or glufosinate-resistant. **Liberty 280 SL** is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

**Liberty 280 SL** may be applied as a burndown treatment prior to planting or prior to emergence of **LibertyLink** or glufosinate-resistant sugar beets.

Use of **Liberty 280 SL** for burndown use prior to planting **LibertLink** or glufosinate-resistant crops will limit the amount of **Liberty 280 SL** that may be used in-crop.

Refer to the maximum amount per year for that crop for the total amount of **Liberty 280 SL** that may be used.

## Use Rates for Burndown Applications for LibertyLink® or Glufosinate-resistant Sugar Beets

Crop	Burndown (fl ozs/A)	Additional In-crop Applications if a Burndown Application Made	Maximum Per Year (fl ozs/A)
LibertyLink or glufosinate- resistant Sugar Beets	29 to 36	1 application at 29 fl ozs/A	60

## In-crop Applications if a Burndown Application is Made

15 Maue		
Application Timing	Cotyledon up to 10 leaf stage of LibertyLink or glufosinate-resistant sugar beets.	
	Apply 29 fl ozs/A	
Up to 2 applications may be ap with a minimum of 10 days bet applications.		
Maximum per Year	• 60 fl ozs/A	
	<ul> <li>Ammonium sulfate (AMS) can be used at 1.5 lbs/A to 3 lbs/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn.</li> </ul>	
Adjuvants	AMS has shown to improve weed control of difficult-to-control weeds, under difficult environmental conditions (low relative humidity) or hard water.	
	Anti-foam agent is advised.	
	The use of additional surfactants or crop oils may increase the risk of crop response. Please refer to the surfactant label for more detailed information.	
	• 15 GPA minimum	
Spray Volume	Increase to 20 GPA for better coverage of large weeds, dense foliage, or when using larger spray droplets.	

(continued)

## **In-crop Applications if a Burndown Application is Made** (continued)

	<ul> <li>Liberty<sup>®</sup> 280 SL herbicide is a</li> </ul>
Nozzle Spray Quality	contact herbicide and requires proper nozzles with uniform, thorough spray coverage to achieve optimum weed control.
	<ul> <li>See Application Instructions for more detailed information.</li> </ul>

## Restrictions to the Directions for Use on LibertyLink or Glufosinate-resistant Sugar Beets

- DO NOT apply more than 60 fl ozs/A (1.10 lbs ai/A) of Liberty 280 SL on LibertyLink or glufosinate-resistant sugar beet per year.
- DO NOT apply more than 36 fl ozs/A (0.66 lb ai/A) in a single application for burndown use or more than 29 fl ozs/A (0.53 lb ai/A) in a single application for in-crop use (only 1 in-crop use allowed if burndown application is made).
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** make more than 2 applications per year with a minimum 10-day retreatment interval.
- DO NOT apply Liberty 280 SL within 60 days of harvesting sugar beets.
- DO NOT plant rotation crops in a field treated with Liberty 280 SL within 120 days after the last application of this product with the exception of barley, buckwheat, millet, oats, rye, sorghum, triticale, and wheat, which may be planted 70 days after the last application of this product. Canola, corn, soybeans, and sugar beets resistant to the active ingredient of Liberty 280 SL may be planted at any time.
- DO NOT graze the treated crop or cut for hay.
- DO NOT apply Liberty 280 SL if LibertyLink or glufosinate-resistant sugar beets show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply this product through any type of irrigation system.

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

**Liberty 280 SL** may be applied to select out susceptible "segregates," i.e., canola, corn, cotton, and soybean plants that are not resistant to glufosinate-ammonium during seed propagation.

 LibertyLink or glufosinate-resistant Canola -Liberty 280 SL may be used in canola seed

propagation as a foliar spray to selectively eliminate canola plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the glufosinate-ammonium resistance gene will be severely injured or killed if treated with this herbicide. See application use directions for use on canola for use rates and application timing. Up to three applications of Liberty® 280 SL herbicide at up to 29 fl ozs/A per application may be made to **LibertyLink®** or glufosinate-resistant canola for seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18 to 30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

- LibertyLink or glufosinate-resistant Corn Inbred lines, plants not possessing glufosinate-ammonium resistance, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of resistant corn "segregates", Liberty 280 SL may be applied at 22 fl ozs/A plus AMS at 3 lbs/A (17 lbs/100 gallons) when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars. A second treatment of 22 fl ozs/A plus AMS at 3 lbs/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24 inches tall. Sequential applications must be at least 10 days apart. When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs/A (8.5 lbs/100 gallons) to reduce potential leaf burn.
- LibertyLink or glufosinate-resistant Cotton Liberty 280 SL may be used in LibertyLink or glufosinate-resistant cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate-ammonium resistance gene will be severely injured or killed if treated with this herbicide. See application use directions for use on cotton for use rates and application timing.
- Liberty Link or glufosinate-resistant Soybean Liberty 280 SL may be used in soybean seed propagation as a foliar spray to selectively eliminate soybean plants that do not carry a gene that imparts resistance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during soybean seed propagation. Soybeans not possessing the glufosinate-ammonium resistance gene will be severely injured or killed if treated with this herbicide.

# Restrictions to the Directions for Use for LibertyLink or Glufosinate-resistant Canola, Corn, Cotton, or Soybean for Seed Propagation

- DO NOT apply more than 2 applications per year to LibertyLink or glufosinate-resistant corn, cotton, or soybean for seed propagation. Sequential applications must be at least 10 days apart for corn and at least 5 days apart for cotton and soybean.
- DO NOT apply more than 22 fl ozs/A (0.40 lb ai/A) in a single application or more than 44 fl ozs/A (0.80 lb ai/A) per year to **LibertyLink** or glufosinate-resistant corn for seed propagation.
- DO NOT apply more than three applications of Liberty 280 SL per year to LibertyLink or glufosinateresistant canola for seed propagation.
- Sequential applications must be at least 7 days apart for canola.
- DO NOT apply more than 29 fl ozs/A (0.53 lb ai/A) in a single application to **LibertyLink** or glufosinate-resistant canola for seed propagation.
- DO NOT apply Liberty 280 SL 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 **Liberty 280 SL** if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply this product through any type of irrigation system.
- DO NOT apply more than 43 fl ozs/A (0.79 lb ai/A) in a single application for **LibertyLink** or glufosinateresistant soybean for seed propagation.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) per year for LibertyLink or glufosinate-resistant soybean or canola for seed propagation.

## Application Directions for Burndown Use in Conventional and non-glufosinate-resistant Crops

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

**Liberty 280 SL** may be applied as a burndown treatment a minimum of 14 days prior to planting crops listed in the **Application Directions for Use on Listed Tree, Vine, and Bushberry Crops** on this label.

**Liberty 280 SL** may be applied as a burndown treatment a minimum of 14 days prior to planting avocado, fig, and hops.

Table 2. Use Rates for Burndown Applications for Conventional and Non-glufosinate-resistant Crops

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

<sup>\*</sup> Post application in **non-LibertyLink®** or non glufosinateresistant cotton can ONLY be applied with a hooded sprayer. See application directions for cotton for more information.

Table 3. Use Rates for Burndown Applications for Labeled Tree, Vine and Bushberry Crops

Crop	Burndown (fl ozs/A)	Maximum Per Year (fl ozs/A)
Labeled tree nuts, pome fruit, citrus, stone fruit, olives, vines and bushberry crops	29 to 82	164 to     bushberry and     stone fruit      246 to tree     nuts, vines, pome     fruit, citrus, and     olives
Avocado	29 to 82	• 246
Fig	29 to 82	• 246

## Restrictions to the Directions for Burndown Use in Conventional Crops

- DO NOT make more than 1 application for burndown use for all crops.
- DO NOT make any in-crop applications for non glufosinate-resistant canola, sweet corn, corn, soybean or sugar beet.
- DO NOT apply more than 43 fl ozs/A (0.79 lb ai/A) per year for non glufosinate-resistant canola, corn, sweet corn, or soybean.
- DO NOT apply more than 36 fl ozs/A (0.66 lb ai/A) per year for non glufosinate-resistant sugar beet.
- DO NOT apply more than 87 fl ozs/A (1.59 lbs ai/A) per year for non glufosinate-resistant cotton.

## **Application Directions for Use on Listed Tree, Vine, and Bushberry Crops**

Apply **Liberty® 280 SL herbicide** in tree, vine, and bushberry crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

## **Registered Crops**

- Bushberries group 13-07B blueberry, currant, elderberry, gooseberry, 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 Nuts group 14-12 almonds, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachios, and walnuts
- Fruit, small, vine climbing, except fuzzy kiwifruit subgroup 13-07F [alternate text; grape varieties (table, wine, and raisins)]

## **Application Rate and Timing**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **Liberty 280 SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. **DO NOT** retreat these weeds with **Liberty 280 SL** until sufficient regrowth has occurred.

Apply **Liberty 280 SL** as a directed spray to control undesirable vegetation in trees, vines, and bushberries listed on this label. Apply as a broadcast, banded, or spot treatment application depending on the situation to control weeds listed under the heading **Table 1. Weeds Controlled**. 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 **Liberty 280 SL** may be necessary to control plants generating from underground parts or seed.

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

## **Application Methods for Broadcast Applications**

Apply **Liberty® 280 SL herbicide** at the rates listed below for broad applications based on weed size and stage of growth for all weeds listed in **Table 1. Weeds Controlled**.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48
Weeds < 6 inches in height pre-tiller grasses	49 to 56
Weeds > 6 inches in height and/or grasses that have tillered	56 to 82

## 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 Rate per acre broadcast = Amount of herbicide needed for treatment

## Application Methods for Spot or Directed-spray Applications

For spot or directed-spray applications, mix **Liberty 280 SL** at 1.7 fl ozs 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.

## **Application Methods for Sucker control**

**Liberty 280 SL** will reduce or eliminate sucker growth when applied to suckers that are young, green, and uncallused. For sucker control, apply a split application approximately 4 weeks apart at 56 fl ozs of product/A. Coverage of all sucker foliage is necessary for optimum control. Suckers must not exceed 12 inches in length. Contact of **Liberty 280 SL** with parts of trees, vines, or bushberries other than mature brown bark can result in serious damage.

## Restrictions to the Directions for Use on Tree, Vine, and Bushberry Crops

- DO NOT apply more than 82 fl ozs/A of Liberty 280 SL (1.50 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 164 fl ozs/A of Liberty 280 SL (3.0 lbs ai/A of glufosinate) from sequential applications in bushberries and stone fruit per 12-month period.
- DO NOT apply more than a maximum cumulative amount of 246 fl ozs/A of Liberty 280 SL (4.50 lbs ai/A of glufosinate) from sequential applications in citrus, pome fruit, olives, tree nuts, and vines per 12-month period.
- **DO NOT** make more than 2 applications per 12-month period at 82 fl ozs/A to bushberries and stone fruit.
- **DO NOT** make more than 3 applications per 12-month period at 82 fl ozs/A for tree nuts, vines, pome fruit, citrus, and olives.
- Separate sequential applications by at least 28 days in stone fruit.
- Separate sequential applications by at least 14 days in citrus, pome fruit, and olives.
- DO NOT graze, harvest, and/or feed treated orchard cover crops to livestock.
- DO NOT apply this product through any type of irrigation system.
- DO NOT apply this product aerially to tree, bushberry, or vine crops.
- **DO NOT** make spot spray applications to suckers, as tree injury may occur.
- **Pre-Harvest Interval (PHI)** for nut, tree fruit, bushberry, or grape: 14 days.
- DO NOT make spot or directed-spray applications to tree or vine trunk as injury may occur.
- DO NOT allow spray to contact trunks other than those that have callused, mature brown bark or are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.

#### **Tank Mix Partner Instructions**

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

- clethodim
- diuron
- flumioxazin
- glyphosate
- indaziflam
- napropramide
- norflurazon
- oryzalin
- oxyfluorfen
- pendimethalin
- penoxsulam
- quizalofop-P-ethyl
- rimsulfuron
- saflufenacil
- simazine
- terbacil

## **Application Directions for Use in Avocado**

#### **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

#### Postemergence-directed Application

For postemergence control of weeds present in avocado, apply **Liberty 280 SL** at 48 to 82 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage) as a broadcast directed spray anytime during the season up to the day of harvest.

Avoid contact of **Liberty 280 SL** solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. **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 Liberty 280 SL with** parts of trees other than mature brown bark can result in serious damage.

**Sequential Applications.** Apply **Liberty 280 SL** at a minimum of 30 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of **Liberty 280 SL** may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48 to 82
Weeds < 6 inches in height pre-tiller grasses	56 to 82
Weeds > 6 inches in height and/or grasses that have tillered	64 to 82

## **Crop-specific Restrictions**

- **DO NOT** apply more than 82 fl ozs/A of **Liberty 280 SL** (1.50 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 246 fl ozs/A of Liberty 280 SL (4.50 lbs ai/A of glufosinate) from sequential applications in avocado per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- **DO NOT** apply this product aerially to avocado.
- Pre-Harvest Interval (PHI): 0.5 days.

## Application Directions for Use on Listed Cucurbits

**Liberty 280 SL** may be applied to the following cucurbits of crop group(s) 9A and 9B:

Citron melon, muskmelon (includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), and watermelon

Chayote (fruit), Chinese waxgourd, cucumber, gherkin, edible gourd, momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), pumpkin, summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), and winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)

## **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

## Preplant Burndown Application to Bare Soil Surface (prior to direct seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 43 fl ozs/A to the bare soil surface.

Make a single application or multiple applications up to 3 before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 fl ozs/A. [Optional text: Make only a single application preplant burndown before planting.]

Planting Interval. Depending on soil texture and amount of precipitation after application, an interval between Liberty® 280 SL herbicide application and planting of cucurbits is required or crop injury may occur. See Table 4 for minimum planting intervals for direct-seeded cucurbits, and Table 5 for transplanted cucurbits.

**Table 4. Minimum Planting Intervals Direct-seeding** 

# Minimum Planting Interval (days) Required between Liberty 280 SL Application and Direct-seeding of Cucurbits Soil Texture<sup>1</sup> Amount of Precipitation<sup>2</sup>

Soil Texture <sup>1</sup>	Amount of Precipitation <sup>2</sup>	
Soil Texture	≥ 0.5 inch	< 0.5 inch
Fine	2	14
Medium	<u> </u>	14
Coarse	7	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

Table 5. Minimum Planting Intervals Transplanting

Mini	mum Planting Inter	val
	(days)	
Required between Liberty 280 SL		
Application and Transplanting of Cucurbits		
Soil Texture <sup>1</sup>	Amount of Precipitation <sup>2</sup>	
Soil lexture	≥ 0.5 inch	< 0.5 inch
All Soils	14	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

## Preplant Burndown Application to Plastic Mulch Covered Beds. (prior to seeding or transplanting)

before planting.]

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 43 fl ozs/A to pre-formed beds covered with plastic mulch and shaped such that water and herbicide run off between the rows.

Make a single application or multiple applications [Optional text: up to [2] [3] applications] (up to 3 [Alternate text: 2]) before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown per year is 87 [Alternate text: 64] fl ozs/A. [Optional text: Make only a single application preplant burndown to plastic mulch beds

**Planting Interval.** When applied prior to seeding or transplanting over the top of plastic mulch, **Liberty 280 SL** 

may damage cucurbits which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of **Liberty 280 SL** and direct seeding or transplanting. Additionally, ensure that at least 1/2 inch of precipitation (either rainfall or overhead irrigation) has occurred prior to direct seeding or transplanting. Precipitation is needed to wash **Liberty 280 SL** off the plastic and prevent damage to the crop. If less than 1/2 inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of **Liberty 280 SL**. Regardless of precipitation occurring, **DO NOT** direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

## Hooded Postemergence Row Middles Application (banded between crop rows)

For postemergence control of emerged weeds present between rows of established cucurbits, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 62 fl ozs/A up to 14 to 30 days before harvest (see crop-specific **PHI** statements in **Crop-specific Restrictions**).

**Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or crop injury will occur.

Make a single or multiple (up to 2) hooded postemergence row middles application(s) before harvest. The maximum total amount of **Liberty 280 SL** applied hooded postemergence row middles is 62 fl ozs/A.

**Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or severe crop injury will occur.

Hooded sprayers must be designed, adjusted, and operated in such a manner to totally enclose the spray pattern and prevent any spray deposition onto crop foliage, blooms, or fruit. Sprayers must be operated slowly to minimize bouncing of the boom and hoods. Hoods must be positioned so their height runs along the soil surface or no higher than the shoulder of beds. **DO NOT** apply this product if spray drift can not be controlled or if spray contact with crop foliage can not be avoided.

[Optional text: When crop is grown on flat beds, **DO NOT** spray within 6 inches of running vines.]

[Optional text: **Note:** in geographies were hooded sprayers are not available, use precision directed spray application equipment with nozzles adjusted to prevent spray contact with crop plants.]

#### **Sequential Application**

**Liberty 280 SL** may be applied sequentially in a combination of applications made either pre-plant burndown (prior to direct-seeding or transplanting, to bare soil or plastic mulch) or hooded postemergence row middles (banded between rows), or a combination of both timings. Apply up to 3 times per crop cycle but **DO NOT** exceed a total amount of 87 fl ozs/A of **Liberty 280 SL** per year from

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

sequential applications. Allow a minimum of 7 days between sequential applications.

## **Crop-specific Restrictions**

- DO NOT apply more than 62 fl ozs/A of Liberty® 280 SL herbicide (1.17 lbs ai/A of glufosinate) in a single broadcast application.
- DO NOT apply more than a maximum cumulative amount of 87 fl ozs/A of Liberty 280 SL (1.59 lbs ai/A of glufosinate) from sequential applications in cucurbits per year.

[Optional text: • **DO NOT** apply more than a maximum cumulative amount of 62 fl ozs/A of **Liberty 280 SL** (1.17 lbs ai/A of glufosinate) from sequential applications in cucurbits per year.]

- Maximum number of applications per crop cycle: 3 when using reduced rates
- Separate sequential applications by at least 7 [Alternate text: 14] days.
- For postemergence applications, **DO NOT** apply this product aerially to cucurbits.
- Pre-Harvest Interval (PHI) in melons: 30 days.
- Pre-Harvest Interval (PHI) in cucumbers, gourds, pumpkin, and squashes: 14 days.

## **Application Directions for Use in Fig**

## **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

#### Postemergence-directed Application

For postemergence control of weeds present in fig, apply **Liberty 280 SL** at 48 to 82 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage) as a broadcast directed spray anytime during the season up to the day of harvest. **Liberty 280 SL** may also be applied as a banded or spot treatment to target emerged weeds.

Avoid contact of **Liberty 280 SL** solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. **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 Liberty 280 SL with** parts of trees other than mature brown bark can result in serious damage.

**Sequential Applications.** Apply **Liberty 280 SL** at a minimum of 30 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of **Liberty 280 SL** may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48 to 82
Weeds < 6 inches in height pre-tiller grasses	56 to 82
Weeds > 6 inches in height and/or grasses that have tillered	64 to 82

## **Crop-specific Restrictions**

- DO NOT apply more than 82 fl ozs/A of Liberty 280 SL (1.50 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 246 fl ozs/A of Liberty 280 SL (4.50 lbs ai/A of glufosinate) from sequential applications in fig per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- DO NOT apply this product aerially to fig.
- Pre-Harvest Interval (PHI): 0.5 days.

## Application Directions for Use in Fruiting Vegetables

**Liberty 280 SL** may be applied to the following fruiting vegetables of crop group(s) 8-10A and 8-10B:

Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

African eggplant; bell pepper; eggplant; Martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

## **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

## Preplant Burndown Application to Bare Soil Surface (prior to direct seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 43 fl ozs/A to the bare soil surface.

Make a single application or multiple applications not to exceed 3 applications before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 fl ozs/A per year. [Optional text: Make only a single application preplant burndown before planting.]

**Planting Interval.** Depending on soil texture and amount of precipitation after application, an interval between **Liberty 280 SL** application and planting of fruiting vegetables is required or crop injury may occur. See **Table 6** for

minimum planting intervals for direct-seeded fruiting vegetables, and **Table 7** for transplanted fruiting vegetables.

**Table 6. Minimum Planting Intervals Direct-seeding** 

## Minimum Planting Interval (days)

Required between Liberty® 280 SL herbicide Application and Direct-seeding of Fruiting Vegetables

Soil Texture <sup>1</sup>	Amount of Precipitation <sup>2</sup>	
Soil Texture	≥ 0.5 inch	< 0.5 inch
Fine	0	14
Medium	3	14
Coarse	7	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

**Table 7. Minimum Planting Intervals Transplanting** 

•		
Minimum Planting Interval		
(days)		
Required between Liberty 280 SL Application		
and Transplanting of Fruiting Vegetables		
Soil Toytural	Amount of Precipitation <sup>2</sup>	
Soil Texture <sup>1</sup>	≥ 0.5 inch	< 0.5 inch
All Soils	14	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

## Preplant Burndown Application to Plastic Mulch Covered Beds. (prior to seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 43 fl ozs/A to pre-formed beds covered with plastic mulch and shaped such that water and herbicide run off between the rows.

Make a single application or multiple applications not to exceed 3 [Alternate text: 2] before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 [Alternate text: 64] fl ozs/A per year. [Optional text: Make only a single application preplant burndown to plastic mulch covered beds before planting.]

**Planting Interval.** When applied prior to seeding or transplanting over the top of plastic mulch, **Liberty 280 SL** may damage fruiting vegetables which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of **Liberty 280 SL** and direct seeding or transplanting. Additionally, ensure that at least 1/2 inch of precipitation (either rainfall or overhead irrigation) has

occurred prior to direct seeding or transplanting. Precipitation is needed to wash **Liberty 280 SL** off the plastic and prevent damage to the crop. If less than 1/2 inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of **Liberty 280 SL**. Regardless of precipitation occurring, **DO NOT** direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

## Hooded Postemergence Row Middles Application (banded between crop rows)

For postemergence control of weeds present between rows of established fruiting vegetables, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 62 fl ozs/A up to 30 days before harvest. **Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or crop injury will occur.

Make a single or multiple not to exceed 2 hooded postemergence row middles applications before harvest. The maximum total amount of **Liberty 280 SL** applied hooded postemergence row middles is 62 fl ozs/A.

**Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or severe crop injury will occur.

Hooded sprayers must be designed, adjusted, and operated in such a manner to totally enclose the spray pattern and prevent any spray deposition onto crop foliage, blooms, or fruit. Sprayers must be operated slowly to minimize bouncing of the boom and hoods. Hoods must be positioned so their height runs along the soil surface or no higher than the shoulder of beds. **DO NOT** apply this product if spray drift can not be controlled or if spray contact with crop foliage can not be avoided.

[Optional text: When crop is grown on flat beds, **DO NOT** spray within 6 inches of running vines.]

[Optional text: **Note:** in geographies where hooded sprayers are not available, use precision directed spray application equipment with nozzles adjusted to prevent spray contact with crop plants.]

#### Sequential Application

**Liberty 280 SL** may be applied sequentially in a combination of applications made either pre-plant burndown (prior to direct-seeding or transplanting, to bare soil or plastic mulch) or hooded postemergence row middles (banded between rows), or a combination of both timings. Apply up to 3 times per crop cycle but **DO NOT** exceed a total amount of 87 fl ozs/A of **Liberty 280 SL** per year from sequential applications. Allow a minimum of 7 [Alternate text: 14] days between sequential applications.

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

## **Crop-specific Restrictions**

- DO NOT apply more than 62 fl ozs/A of Liberty® 280 SL herbicide (1.17 lbs ai/A of glufosinate) in a single broadcast application.
- DO NOT apply more than a maximum cumulative amount of 87 fl ozs/A of Liberty 280 SL (1.59 lbs ai/A of glufosinate) from sequential applications in fruiting vegetables per year.
- **DO NOT** apply more than 43 fl oz/A in a single application as a preplant application.

[Optional text: • **DO NOT** apply more than a maximum cumulative amount of 62 fl ozs/A of **Liberty 280 SL** (1.17 lbs ai/A of glufosinate) from sequential applications in fruiting vegetables per year.]

- Maximum number of applications per year: 3 when using reduced rates
- Separate sequential applications by at least 7 [Alternate text: 14] days.
- For postemergence applications, **DO NOT** apply this product aerially to fruiting vegetables.
- Pre-Harvest Interval (PHI): 30 days.

## **Application Directions for Use in Hops**

#### **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

#### Postemergence-directed Application

For postemergence control of weeds present between hops rows and/or for control of hop sucker growth, apply **Liberty 280 SL** at 32 to 55 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage, and presence of hop suckers) as a broadcast directed spray to the lower portion of the hop plant.

**Liberty 280 SL** may be applied with a hooded sprayer to prevent spray drift to susceptible vegetation.

Avoid contact of **Liberty 280 SL** solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. **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 Liberty 280 SL with** parts of vines other than mature brown bark can result in serious damage.

**Sequential Applications.** Apply **Liberty 280 SL** at a minimum of 25 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of **Liberty 280 SL** may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height and hop sucker control	32 to 55
Weeds < 6 inches in height pre-tiller grasses	55

## **Crop-specific Restrictions**

- **DO NOT** apply hops that are less than 6 feet tall, and then only apply to the lower 18 inches of hops plants that are over 6 feet tall.
- DO NOT apply to hop suckers prior to training hops on the string/wire and before hop height is 6 feet tall on string/wire.
- **DO NOT** use **Liberty 280 SL** to burn back existing vines to obtain even emergence of subsequent vines.
- **DO NOT** apply more than 55 fl ozs/A of **Liberty 280 SL** (1.00 lb ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 165 fl ozs/A of Liberty 280 SL (3.00 lbs ai/A of glufosinate) from sequential applications in hops per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 25 days.
- DO NOT apply this product aerially to hops.
- Pre-Harvest Interval (PHI): 10 days.

## Application Directions for Potato Vine Desiccation

#### **Application Rate and Timing**

Apply **Liberty 280 SL** at the beginning of natural senescence of potato vines and when petiole nitrate levels are below 15,000 ppm. Apply 21 fl ozs/A. **DO NOT** split this application or apply more than one application per harvest. Potato varieties with heavy or dense vines may require an application of an additional 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 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 **Liberty 280 SL** with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

The use of additives or adjuvants may improve the performance of **Liberty 280 SL** in desiccating potatoes. However, the combination of **Liberty 280 SL** with

adjuvants, other than ammonium sulfate (AMS), have been known to cause injury in potatoes under specific conditions and in certain geographies. To the extent consistent with applicable law, the user assumes all risks associated with adding adjuvants, other than AMS, to the **Liberty® 280 SL herbicide** spray solution. BASF cannot be held responsible for crop injury on potatoes when using these adjuvants.

## Restrictions to the Directions for Use in Potato Vine Desiccation

- DO NOT make more than 1 application per year to potato vines.
- DO NOT apply more than 21 fl ozs/A (0.38 lb ai/A) per application per year to potato vines.
- DO NOT harvest potatoes until 9 days or more after application of Liberty 280 SL.
- DO NOT apply to potatoes grown for seed.
- Potatoes, canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of Liberty 280 SL as a potato vine desiccant.
- DO NOT plant treated areas to barley, buckwheat, millet, oats, rye, sorghum, triticale, and wheat until 30 or more days after an application of Liberty 280 SL as a potato vine desiccant.
- DO NOT plant treated areas to root and tuber vegetables, leafy vegetables, and Brassica vegetables until 70 days after an application of Liberty 280 SL as a potato vine desiccant.
- DO NOT plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of Liberty 280 SL as a potato vine desiccant.
- DO NOT split this application or apply more than one application per harvest.

#### **Fallow Fields and Postharvest**

**Liberty 280 SL** may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **Weeds Controlled** section of this label. Applications may be made in fallow fields, postharvest, prior to planting or emergence of any crop listed on this label.

Apply **Liberty 280 SL** at 22 to 29 fl ozs/A to fallow fields to control weeds. **Liberty 280 SL** must be applied with ammonium sulfate or an adjuvant containing ammonium sulfate at a rate that provides 1.5 to 3 lbs ammonium sulfate/acre. Tank mixes with 2,4-D, glyphosate or atrazine can be made with **Liberty 280 SL** to enhance total weed control. When using **Liberty 280 SL** in tank mix combinations, follow the precautions and directions of use of the most restrictive label. See the **Application Instructions** and **Mixing Instructions** sections of this label for additional information on how to apply this product. See the **Product Information** section of this label for **Rotational Crop Restrictions**.

## Restrictions to the Directions for Use in Fallow Fields or Postharvest Use

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

## Farmsteads, Recreational, and Public Areas

When applied as listed, **Liberty 280 SL** controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks, and nonselective farmstead weed control in farmstead areas (barnyards, buildings, driveways, facilities, farmyards, machinery or implement yards, windbreaks, shelter belts). Refer to the **Application Rate and Timing** section following this section of this label for appropriate application broadcast and spot spray application rates and lists of weeds controlled.

## **Application Rate and Timing**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **Liberty 280 SL**. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. **DO NOT** retreat these weeds with **Liberty 280 SL** until sufficient regrowth has occurred. Apply **Liberty 280 SL** as a directed spray to control undesirable vegetation in farmsteads, recreational, and public areas listed on this label. Apply as a broadcast, banded, or spot treatment application depending on the situation to control weeds listed under the heading

**Table 1. Weeds Controlled**. 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 **Liberty 280 SL** may be necessary to control plants generating from underground parts or seed.

Apply **Liberty 280 SL** at the rates listed below for broad applications based on weed size and stage of growth for all weeds listed in **Table 1. Weeds Controlled**.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48
Weeds < 6 inches in height pre-tiller grasses	49 to 56
Weeds > 6 inches in height and/or grasses that have tillered	56 to 82

## Application Methods for Spot or Directed-spray Applications

For spot or directed-spray applications, mix **Liberty® 280 SL herbicide** at 1.7 fl ozs 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

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

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

## **Conditions of Sale and Warranty**

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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

[Note to PM/reviewer: Making the product more restrictive than Federally accepted, incorporating the optional statement "Not for Use in California" may be included on the container label for any use, weed, or crop as determined to be necessary to secure CA-DPR registration.]

[Alternate text: Maximum [annual] rate in California is [22] [29] [36] [44] [72] fl ozs/A.]

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007969-00448.20200803g.**NVA 2020-04-594-0066** 

Supersedes: NVA 2019-04-594-0101 Supplementals: NVA 2021-04-594-0197 NVA 2021-04-594-0198 NVA 2020-04-594-0199 NVA 2021-04-594-0200 NVA 2021-04-594-0201 NVA 2022-04-0594-0065

> BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



## **Supplemental Label**

Liberty 280 SL

Herbicide

ACCEPTED

12/09/2022

7969-448

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

#### For weed control in avocado

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

## **Active Ingredient:**

## EPA Reg. No. 7969-448 WARNING/AVISO

## **Directions For Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
- Read the label affixed to the container for Liberty 280 SL before applying.
- Use of Liberty 280 SL according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Liberty 280 SL.

#### **Product Information**

**Liberty 280 SL** is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the **Liberty 280 SL** container label for a complete list of weeds controlled.

For best results, apply **Liberty 280 SL** to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **Liberty 280 SL**. Uniform, thorough spray coverage of weeds is required to achieve consistent weed control.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, low use rate, or environmental conditions at the time of application.

Rate of	Glufosinate Rate
Liberty 280 SL	Equivalency
(fl ozs/A)	(lbs ai/A)
48	0.88
56	1.02
64	1.24
82	1.50



<sup>\*</sup> CAS Number 77182-82-2

<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

## **Application Information**

Refer to the **Liberty® 280 SL herbicide** container label for additional application instructions and restrictions.

## **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

## Postemergence-directed Application

For postemergence control of weeds present in avocado, apply **Liberty 280 SL** at 48 to 82 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage) as a broadcast directed spray anytime during the season up to the day of harvest. **Liberty 280 SL** may also be applied as a banded or spot treatment to target emerged weeds. See the **Liberty 280 SL** container label for application directions of banded and spot treatments.

Avoid contact of Liberty 280 SL solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. 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 Liberty 280 SL with parts of trees other than mature brown bark can result in serious damage.

Sequential applications. Apply Liberty 280 SL at a minimum of 30 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of Liberty 280 SL may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48 to 82
Weeds < 6 inches in height pre-tiller grasses	56 to 82
Weeds > 6 inches in height and/or grasses that have tillered	64 to 82

## **Crop-specific Restrictions**

- DO NOT apply more than 82 fl ozs/A of Liberty 280 SL (1.50 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 246 fl ozs/A of Liberty 280 SL (4.50 lbs ai/A of glufosinate) from sequential applications in avocado per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- DO NOT apply this product aerially to avocado.
- Pre-Harvest Interval (PHI) 0.5 days.

## **Conditions of Sale and Warranty**

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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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

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BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



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## Supplemental Label

Liberty 280 SL

Herbicide

ACCEPTED

12/09/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

7969-448

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

#### For weed control in cucurbits

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
Total:	100.0%

- \* CAS Number 77182-82-2
- \*\* Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

#### EPA Reg. No. 7969-448 **WARNING/AVISO**

#### **Directions for Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
- Read the label affixed to the container for Liberty 280 SL before applying.
- . Use of Liberty 280 SL according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Liberty 280 SL.

#### **Product Information**

Liberty 280 SL is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the Liberty 280 SL container label for a complete list of weeds controlled.

For best results, apply Liberty 280 SL to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Liberty 280 SL. Uniform, thorough spray coverage of weeds is required to achieve consistent weed control.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, low use rate, or environmental conditions at the time of application.

Rate of Liberty 280 SL (fl ozs/A)	Glufosinate Rate Equivalency (lbs ai/A)
29	0.53
32	0.59
43	0.79
62	1.17
64	1.24
87	1.59
246	4.50



**Liberty® 280 SL herbicide** may be applied to the following cucurbits of crop(s) groups 9A and 9B:

Citron melon, muskmelon (includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon), and watermelon

Chinese waxgourd, cucumber, gherkin, edible gourd, momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), pumpkin, summer squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), and winter squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)

#### Application Rate and Timing

**Liberty 280 SL** may be applied in a single application or in sequential applications.

## Preplant Burndown Application to Bare Soil Surface

#### (prior to direct seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [*Alternate text:* 32] to 43 fl ozs/A to the bare soil surface.

Make a single application or multiple applications (up to 3) before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 fl ozs/A. [Optional text: Make only a single application preplant burndown before planting.]

Planting Interval. Depending on soil texture and amount of precipitation after application, an interval between Liberty 280 SL application and planting of cucurbits is required or crop injury may occur. See Table 1 for minimum planting intervals for direct-seeded cucurbits, and Table 2 for transplanted cucurbits.

Table 1. Minimum Planting Intervals Direct-seeding

Minimum Planting Interval

(days)  Required between Liberty 280 SL Application and Direct-seeding of Cucurbits		
Amount of Precipitation <sup>2</sup>		Precipitation <sup>2</sup>
Soil Texture <sup>1</sup>	≥ 0.5 inch	< 0.5 inch
Fine	3	14
Medium	3	14
Coarse	7	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

Table 2. Minimum Planting Intervals Transplanting

Minimum Planting Interval (days)		
Required between Liberty 280 SL Application and Transplanting of Cucurbits		
Soil Texture <sup>1</sup> Amount of Precipitation <sup>2</sup>		Precipitation <sup>2</sup>
Son rexture	≥ 0.5 inch	< 0.5 inch
All Soils	14	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

# Preplant Burndown Application to Plastic Mulch Covered Beds. (prior to seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [*Alternate text:* 32] to 43 fl ozs/A to pre-formed beds covered with plastic mulch and shaped such that water and herbicide run off between the rows.

Make a single application or multiple applications (up to 3 [Alternate text: 2]) before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 [Alternate text: 64] fl ozs/A. [Optional text: Make only a single application preplant burndown to plastic mulch covered beds before planting.]

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application.

Planting Interval. When applied prior to seeding or transplanting over the top of plastic mulch, Liberty® 280 SL herbicide may damage cucurbits which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of Liberty 280 SL and direct seeding or transplanting. Additionally, ensure that at least 1/2 inch of precipitation (either rainfall or overhead irrigation) has occurred prior to direct seeding or transplanting. Precipitation is needed to wash Liberty 280 SL off the plastic and prevent damage to the crop. If less than 1/2 inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of Liberty 280 SL. Regardless of precipitation occurring. DO NOT direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

## **Hooded Postemergence Row Middles Application**

#### (banded between crop rows)

For postemergence control of emerged weeds present between rows of established cucurbits, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 62 fl ozs/A up to 14 to 30 days before harvest (see crop-specific **PHI** statements in **Crop-specific Restrictions**). **DO NOT** concentrate **Liberty 280 SL** in the treated band in row middles. The use rate specified is for treated area.

Make a single or multiple (up to 2) hooded postemergence row middles application(s) before harvest. The maximum total amount of **Liberty 280 SL** applied hooded postemergence row middles is 62 fl ozs/A.

**Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or severe crop injury will occur.

Hooded sprayers must be designed, adjusted, and operated in such a manner to totally enclose the spray pattern and prevent any spray deposition onto crop foliage, blooms, or fruit. Sprayers must be operated slowly to minimize bouncing of the boom and hoods. Hoods must be positioned so their height runs along the soil surface or no higher than the shoulder of beds. **DO NOT** apply this product if spray drift can not be controlled or if spray contact with crop foliage can not be avoided.

[Optional text: When crop is grown on flat beds, **DO NOT** spray within 6 inches of running vines.]

[Optional text: **Note:** in geographies were hooded sprayers are not available, use precision directed spray application equipment with nozzles adjusted to prevent spray contact with crop plants.]

#### Sequential Application

Liberty 280 SL may be applied sequentially in a combination of applications made either pre-plant burndown (prior to direct-seeding or transplanting, to bare soil or plastic mulch) or hooded postemergence row middles (banded between rows), or a combination of both timings. Apply up to 3 times per year but DO NOT exceed a total amount of 87 fl ozs/A of Liberty 280 SL per year from sequential applications. Allow a minimum of 7 days between sequential applications.

#### **Crop-specific Restrictions**

- DO NOT apply more than 62 fl ozs/A of Liberty 280 SL (1.17 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 87 fl ozs/A of Liberty 280 SL (1.59 lbs ai/A of glufosinate) from sequential applications in cucurbits per year.

[Optional text: • **DO NOT** apply more than a maximum cumulative amount of 64 fl ozs/A of **Liberty 280 SL** (1.17 lbs ai/A of glufosinate) from sequential applications in cucurbits per year.]

- Maximum number of applications per crop cycle: 3 when using reduced rates
- Separate sequential applications by at least 7 [Alternate text: 14] days.
- For postemergence applications, DO NOT apply this product aerially to cucurbits.
- Pre-Harvest Interval (PHI) in melons 30 days.
- **Pre-Harvest Interval (PHI)** in cucumbers, gourds, pumpkin, and squashes 14 days.

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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## Supplemental Label

Liberty 280 SL

Herbicide

ACCEPTED

10

12/09/2022

7969-448

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

#### For weed control in fig

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
Total:	100.0%

<sup>\*</sup> CAS Number 77182-82-2

#### EPA Reg. No. 7969-448 WARNING/AVISO

#### **Directions For Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
- Read the label affixed to the container for Liberty 280 SL before applying.
- Use of Liberty 280 SL according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Liberty 280 SL.

#### **Product Information**

**Liberty 280 SL** is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the **Liberty 280 SL** container label for a complete list of weeds controlled.

For best results, apply **Liberty 280 SL** to emerged, young, actively growing weeds. Warm temperatures,

high humidity, and bright sunlight improve the performance of **Liberty 280 SL**. Uniform, thorough spray coverage of weeds is required to achieve consistent weed control.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, low use rate, or environmental conditions at the time of application.

Rate of Liberty 280 SL (fl ozs/A)	Glufosinate Rate Equivalency (lbs ai/A)
48	0.88
56	1.02
64	1.24
82	1.50



<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

Refer to the **Liberty® 280 SL herbicide** container label for additional application instructions and restrictions.

#### **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

#### Postemergence-directed Application

For postemergence control of weeds present in fig, apply **Liberty 280 SL** at 48 to 82 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage) as a broadcast directed spray anytime during the season up to the day of harvest. **Liberty 280 SL** may also be applied as a banded or spot treatment to target emerged weeds. See the **Liberty 280 SL** container label for application directions of banded and spot treatments.

Avoid contact of Liberty 280 SL solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. 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 Liberty 280 SL with parts of trees other than mature brown bark can result in serious damage.

Sequential applications. Apply Liberty 280 SL at a minimum of 30 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of Liberty 280 SL may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height	48 to 82
Weeds < 6 inches in height pre-tiller grasses	56 to 82
Weeds > 6 inches in height and/or grasses that have tillered	64 to 82

#### **Crop-specific Restrictions**

- DO NOT apply more than 82 fl ozs/A of Liberty 280 SL (1.50 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 246 fl ozs/A of Liberty 280 SL (4.50 lbs ai/A of glufosinate) from sequential applications in fig per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- DO NOT apply this product aerially to fig.
- Pre-Harvest Interval (PHI) 0.5 days.

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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## Supplemental Label

Liberty 280 SL

Herbicide

ACCEPTED

12/09/2022

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

7969-448

### For weed control in fruiting vegetables

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
Total:	100.0%

<sup>\*</sup> CAS Number 77182-82-2

#### EPA Reg. No. 7969-448 WARNING/AVISO

#### **Directions For Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
- · Read the label affixed to the container for Liberty 280 SL before applying.
- Use of Liberty 280 SL according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Liberty 280 SL.

#### **Product Information**

**Liberty 280 SL** is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the Liberty 280 SL container label for a complete list of weeds controlled.

For best results, apply **Liberty 280 SL** to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Liberty 280 SL. Uniform, thorough spray coverage of weeds is required to achieve consistent weed control.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, low use rate, or environmental conditions at the time of application.

Rate of Liberty 280 SL (fl ozs/A)	Glufosinate Rate Equivalency (lbs ai/A)
29	0.53
32	0.59
43	0.79
62	1.17
64	1.24
87	1.59
246	4.50



<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S.gallon.

**Liberty® 280 SL herbicide** may be applied to the following fruiting vegetables of crop(s) groups 8-10A and 8-10B:

Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

African eggplant; bell pepper; eggplant; Martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

#### **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

## Preplant Burndown Application to Bare Soil Surface

#### (prior to direct seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [*Alternate text:* 32] to 43 fl ozs/A to the bare soil surface.

Make a single application or multiple applications (up to 3) before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 fl ozs/A. [Optional text: Make only a single application preplant burndown before planting.]

Planting Interval. Depending on soil texture and amount of precipitation after application, an interval between Liberty 280 SL application and planting of fruiting vegetables is required or crop injury may occur. See Table 1 for minimum planting intervals for direct-seeded fruiting vegetables, and Table 2 for transplanted fruiting vegetables.

Table 1. Minimum Planting Intervals Direct-seeding

Minimum Planting Interval

(days)

	(days)	
	tween Liberty 280 -seeding of Fruiti	
Amount of Precipitation <sup>2</sup>		Precipitation <sup>2</sup>
Soil Texture <sup>1</sup>	≥ 0.5 inch	< 0.5 inch
Fine	3	14
Medium	3	14
Coarse	7	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

**Table 2. Minimum Planting Intervals Transplanting** 

Minimum Planting Interval		
(days)		
Required between Liberty 280 SL Application		
and Transplanting of Fruiting Vegetables		
Soil Texture <sup>1</sup>	Amount of Precipitation <sup>2</sup>	
Son rexture	≥ 0.5 inch	< 0.5 inch
All Soils	14	21

<sup>&</sup>lt;sup>1</sup> Soil texture groups defined as **Coarse** (sand, loamy sand, sandy loam), **Medium** (silt, silt loam, loam, sandy clay loam), and **Fine** (sandy clay, silty clay, silty clay loam, clay loam, and clay).

## Preplant Burndown Application to Plastic Mulch Covered Beds.

#### (prior to seeding or transplanting)

For burndown of emerged weeds prior to planting, apply **Liberty 280 SL** at 29 [Alternate text: 32] to 43 fl ozs/A to pre-formed beds covered with plastic mulch and shaped such that water and herbicide run off between the rows.

Make a single application or multiple applications (up to 3 [Alternate text: 2]) before planting. The maximum total amount of **Liberty 280 SL** applied preplant burndown is 87 [Alternate text: 64] fl ozs/A. [Optional text: Make only a single application preplant burndown to plastic mulch covered beds before planting.]

Planting Interval. When applied prior to seeding or transplanting over the top of plastic mulch, Liberty 280 SL may damage fruiting vegetables which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of **Liberty** 280 SL and direct seeding or transplanting. Additionally, ensure that at least 1/2 inch of precipitation (either rainfall or overhead irrigation) has occurred prior to direct seeding or transplanting. Precipitation is needed to wash Liberty 280 SL off the plastic and prevent damage to the crop. If less than 1/2 inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of Liberty 280 SL. Regardless of precipitation occurring, **DO NOT** direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

## Hooded Postemergence Row Middles Application

#### (banded between crop rows)

For postemergence control of weeds present between rows of established fruiting vegetables, apply **Liberty 280 SL** at 29 [*Alternate text:* 32] to 62 fl ozs/A up to 30 days before harvest. **DO NOT** concentrate

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application

<sup>&</sup>lt;sup>2</sup> Precipitation defined as either rainfall or overhead irrigation occurring after **Liberty 280 SL** application

**Liberty® 280 SL herbicide** in the treated band in row middles. The use rate specified is for treated area.

Make a single or multiple (up to 2) hooded postemergence row middles application(s) before harvest. The maximum total amount of **Liberty 280 SL** applied hooded postemergence row middles is 62 fl ozs/A.

**Liberty 280 SL** must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or severe crop injury will occur.

Hooded sprayers must be designed, adjusted, and operated in such a manner to totally enclose the spray pattern and prevent any spray deposition onto crop foliage, blooms, or fruit. Sprayers must be operated slowly to minimize bouncing of the boom and hoods. Hoods must be positioned so their height runs along the soil surface or no higher than the shoulder of beds. **DO NOT** apply this product if spray drift can not be controlled or if spray contact with crop foliage can not be avoided.

[Optional text: When crop is grown on flat beds, **DO NOT** spray within 6 inches of running vines.]

[Optional text: **Note:** in geographies where hooded sprayers are not available, use precision directed spray application equipment with nozzles adjusted to prevent spray contact with crop plants.]

#### Sequential Application

Liberty 280 SL may be applied sequentially in a combination of applications made either pre-plant burndown (prior to direct-seeding or transplanting, to bare soil or plastic mulch) or hooded postemergence row middles (banded between rows), or a combination of both timings. Apply up to 3 times per crop cycle but DO NOT exceed a total amount of 87 fl ozs/A of Liberty 280 SL per crop cycle from sequential applications. Allow a minimum of 7 [Alternate text: 14] days between sequential applications.

#### **Crop-specific Restrictions**

- DO NOT apply more than 62 fl ozs/A of Liberty 280 SL (1.17 lbs ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 87 fl ozs/A of Liberty 280 SL (1.59 lbs ai/A of glufosinate) from sequential applications in fruiting vegetables per year.

[Optional text: • **DO NOT** apply more than a maximum cumulative amount of 64 fl ozs/A of **Liberty 280 SL** (1.17 lbs ai/A of glufosinate) from sequential applications in fruiting vegetables per year.]

- Maximum number of applications per year: 3 when using reduced rates
- Separate sequential applications by at least 7 [Alternate text: 14] days.
- For postemergence applications DO NOT apply this product aerially to fruiting vegetables.
- Pre-Harvest Interval (PHI) 30 days.

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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007969-00448.20220225f.**NVA 2021-04-594-0200** 



## Supplemental Label

Liberty 280 SL

Herbicide

ACCEPTED

12/09/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 7969-448

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

#### For weed control in hops

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
Total:	100.0%

<sup>\*</sup> CAS Number 77182-82-2

#### EPA Reg. No. 7969-448 **WARNING/AVISO**

#### **Directions For Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
- · Read the label affixed to the container for Liberty 280 SL before applying.
- . Use of Liberty 280 SL according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for Liberty 280 SL.

#### **Product Information**

Liberty 280 SL is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the Liberty 280 SL container label for a complete list of weeds controlled.

For best results, apply **Liberty 280 SL** to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Liberty 280 SL. Uniform, thorough spray coverage of weeds is required to achieve consistent weed control.

Weed control may be reduced when applications are made to weeds under stress including drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Regrowth of weeds may occur due to the weed stage of growth at application, low use rate, or environmental conditions at the time of application.

Rate of Liberty 280 SL (fl ozs/A)	Glufosinate Rate Equivalency (lbs ai/A)
32	0.59
55	1.00



<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

Refer to the **Liberty® 280 SL herbicide** container label for additional application instructions and restrictions.

#### **Application Rate and Timing**

**Liberty 280 SL** may be applied in a single application or in sequential applications.

#### Postemergence-directed Application

For postemergence control of weeds present between hops rows and/or for control of hop sucker growth, apply **Liberty 280 SL** at 32 to 55 fl ozs/A (see table below, use rate is dependent on target weed growth size and stage, and presence of hop suckers) as a broadcast directed spray to the lower portion of the hop plant. **Liberty 280 SL** may be applied with a hooded sprayer to prevent spray drift to susceptible vegetation.

Avoid contact of Liberty 280 SL solution, spray, drift, or mist with green bark, stems, foliage, or fruit as injury may occur to trees. 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 Liberty 280 SL with parts of trees other than mature brown bark can result in serious damage.

Sequential applications. Apply Liberty 280 SL at a minimum of 25 days apart. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of Liberty 280 SL may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	Liberty 280 SL Rate (fl ozs/A)
Weeds < 3 inches in height and hop sucker control	32 to 55
Weeds < 6 inches in height pre-tiller grasses	55

#### **Crop-specific Restrictions**

- DO NOT apply hops that are less than 6 feet tall, and then only apply to the lower 18 inches of hops plants that are over 6 feet tall.
- DO NOT apply to hop suckers prior to training hops on the string/wire and before hop height is 6 feet tall on string/wire.
- DO NOT use Liberty 280 SL to burn back existing vines to obtain even emergence of subsequent vines.
- DO NOT apply more than 55 fl ozs/A of Liberty 280 SL (1.00 lb ai/A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 165 fl ozs/A of Liberty 280 SL (3.00 lbs ai/A of glufosinate) from sequential applications in hops per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 25 days.
- **DO NOT** apply this product aerially to hops.
- Pre-Harvest Interval (PHI) 25 days.

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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EPA Reg. No.

10

### **Supplemental Label**

Liberty 280 SL

Herbicide

ACCEPTED

12/09/2022

7969-448

Alternate Brand Names: Rely® 280; Rely® 280 herbicide; Noventa™ herbicide

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

#### For amended crop rotation intervals

This supplemental label expires December 1, 2025, and must not be used or distributed after this date.

#### **Active Ingredient:**

glufosinate-ammonium*: 2-amino-4-(hydroxymethylphosphinyl) butanoic acid-monoammonium salt	24.5%**
Other Ingredients:	75.5%
· ·	100.00/

<sup>\*</sup> CAS Number 77182-82-2

#### EPA Reg. No. 7969-448 WARNING/AVISO

#### **Directions For Use**

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire Liberty® 280 SL herbicide container label, EPA Reg. No. 7969-448, must be in possession of the user at the time of application.
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#### **Product Information**

**Liberty 280 SL** is a water-soluble nonselective herbicide for application as foliar spray for the control of a broad spectrum of emerged broadleaf and grassy weeds. Refer to the **Liberty 280 SL** container label for a complete list of weeds controlled and for specific application use directions in labeled crops.



<sup>\*\*</sup> Equivalent to 2.34 pounds of active ingredient per U.S.gallon.

#### **Crop Rotation Intervals**

Use the following table to determine the proper interval between **Liberty® 280 SL herbicide** application and planting of various rotational crops. Determine the crop rotation interval for tank mix products and use the most restrictive interval of all products applied.

Crop	Rotational Crop Interval (minimum number of days from last application of Liberty 280 SL)
Cucurbits*, Fruiting Vegetables*	May be planted at any time
Transplanted Perennial Crops on label (bushberries group 13-07B, citrus group 10-10, olives, pome fruit group 11- 10, stone fruit group 12-12, tree nuts group 14-12, fruit, grape (table, wine and raisins), hops, avocado, fig)	14

<sup>\*</sup> For in crop applications for these crops, follow the respective Crop-specific Application Information section of the label.

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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