

GLUFOSINATE-AMMONIUM GROUP 10 HERBICIDE

# Refer<sup>®</sup> 280 SL

## Herbicide

Refer<sup>®</sup> 280 SL is a non-selective herbicide. Apply Refer<sup>®</sup> 280 SL for post emergence control of listed weed species in listed berry, tree and vine crops. Refer<sup>®</sup> 280 SL Herbicide may also be applied for potato vine desiccation. Refer<sup>®</sup> 280 SL Herbicide is also a non-selective herbicide for hooded spray applications in conventional cotton and post emergence broadcast use on canola, field corn, sweet corn\* cotton, soybean and sugar beets\* designated as LibertyLink. Refer<sup>®</sup> 280 SL Herbicide may be applied as a broadcast burndown application before planting or prior to emergence of any conventional or LibertyLink variety of canola, field corn, cotton, soybean or sugar beet. Refer<sup>®</sup> 280 SL herbicide may also be applied for canola, corn, cotton and soybean seed propagation.

**\*Not for use in California.**

### ACTIVE INGREDIENT:

Glufosinate-ammonium .....24.5%

**OTHER INGREDIENTS** .....75.5%

**TOTAL** .....100.0%

2.34 pounds of active ingredient per U.S. gallon.

## KEEP OUT OF REACH OF CHILDREN

## WARNING - AVISO

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

### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 82534-4-88783

EPA Est. No. 61842-CA-001

FOR ADDITIONAL PRECAUTIONARY STATEMENTS:  
See Inside Booklet.

For MEDICAL and TRANSPORTATION emergencies  
call 1-800-334-7577

SummitAgro<sup>USA</sup>

### Distributed by:

Summit Agro USA, LLC  
240 Leigh Farm Road, Suite 215  
Durham, NC 27707

Net Contents **2.5 gals**

#### FIRST AID

<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><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 do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>

#### NOTE TO PHYSICIAN

If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact **Chemtrec** at **1-800-424-9300** for emergency medical treatment information 24 hrs. per day.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

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

#### Personal Protective Equipment (PPE)

##### Applicators and other handlers must wear:

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

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

Mixers/loaders supporting aerial applications must wear a minimum of a NIOSH approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection.

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

##### Engineering Control Statement:

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

#### USER SAFETY RECOMMENDATIONS

##### Users should:

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

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

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

#### ENVIRONMENTAL HAZARDS

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

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

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils with shallow groundwater. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks after application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of glufosinate ammonium from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

#### DIRECTIONS FOR USE

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

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

#### AGRICULTURAL USE REQUIREMENTS

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

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls worn over short-sleeved shirt and short pants; chemical resistant gloves such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, polyvinyl chloride (PVC)  $\geq 14$  mils, or Viton<sup>®</sup>  $\geq 14$  mils; shoes plus socks; protective eyewear (goggles, face shield or safety glasses).

#### PRODUCT INFORMATION

Refer<sup>®</sup> 280 SL is a water soluble herbicide for use as a foliar spray in berries, trees (citrus, olive, pome, stone, tree nut), vines (grapes); also for foliar spray in LibertyLink<sup>®</sup> canola, corn\*, cotton, soybean and sugar beet\*, as well as hooded spray in non-LibertyLink cotton; and for use in potato desiccation, burndown, farmsteads and fallow fields. Refer<sup>®</sup> 280 SL exhibits foliar activity to a wide spectrum of broadleaf, grass, annual and perennial weeds.

**\*Not for use on sweet corn, or sugar beet in California.**

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

When making post emergent foliar application to canola, corn, cotton, soybean and sugar beet, be sure to make application only to LibertyLink crops. If used on row crops not designated as LibertyLink, Summit Agro USA, LLC does not warrant that they will tolerate the use of this product without harm.

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

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

Refer<sup>®</sup> 280 SL can be applied broadcast prior to planting or emergence of conventional or LibertyLink canola, corn, cotton, soybean or sugar beet, to act as a burndown agent for existing weed species.

#### IMPORTANT

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

## MIXING DIRECTIONS

*It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.*

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

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

### Tank Mixtures - Compatibility

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

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

### Tank Mixtures – Mixing

*It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.*

Refer® 280 SL can be applied on its own or in combination with other herbicides to provide additional residual control or to support product performance. Make certain that any tank mix partners are registered for use on the same crops or use sites on this product label, and follow all label instructions, restrictions and precautions on both labels. Consult specific crop use directions for additional information regarding rates and restrictions.

Mix Refer® 280 SL using the following procedure:

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

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

## APPLICATION DIRECTIONS

Apply Refer® 280 SL to weeds in a manner that results in good coverage of the weed foliage, otherwise diminished weed control will result. Make application when weeds are small and growing (3 inches or less in height), at rates indicated in crop specific sections of this product label.

### Ground Application

Refer® 280 SL can be applied as a broadcast treatment. To ensure complete spray coverage, mix product in at least 15 gallons of water per acre, and up to 20 gallons of water per acre if weed or crop canopy is heavy, unless otherwise indicated in specific crop use directions. For additional information concerning product application, consult the Spray Drift Management portion of this label.

### Aerial Application

Unless otherwise specified in specific crop use directions, Refer® 280 SL can be applied aerially. Mix product in a minimum of 10 gallons of water per acre. For additional information concerning product application, consult the Spray Drift Management portion of this label.

**Application Restriction:** Air-assisted spray equipment, flood jet nozzles or controlled droplet application equipment cannot be used.

## CLEANING

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

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

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

## CROP ROTATION

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

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

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

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

### WEED RESISTANCE MANAGEMENT

Glufosinate-ammonium, the active ingredient in this product, is a Group 10 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 10 herbicides. Weed species with acquired resistance to Group 10 herbicides may eventually dominate the weed population if Group 10 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Refer® 280 SL Herbicide or other Group 10 herbicides. Users should scout before and after application.

Suspected herbicide resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide applied at specified application rates, especially if control is achieved on adjacent weeds.
- The spreading of a patch of a particular weed species that survives a herbicide application; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of Refer® 280 SL Herbicide or other target site of action Group 10 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides)
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Summit Agro USA, LLC retailer, representative or call 984-260-0407. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

#### Best Management Practices

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

## SPRAY DRIFT MANAGEMENT

### MANDATORY SPRAY DRIFT MITIGATION

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- For aerial applications, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

### SPRAY DRIFT ADVISORIES

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

#### POLLINATOR ADVISORY STATEMENT

This product contains an herbicide. Follow all label directions and precautions to minimize potential 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.

#### 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.

#### Controlling Droplet Size – Ground Boom

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size – Aircraft

- Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. **AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**
- Nozzle Type - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length - Longer booms increase drift potential. Therefore a shorter boom length is recommended.
- Application Height - Application more than 10 ft. above the canopy increases the potential for spray drift.

#### BOOM HEIGHT

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

#### 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.

### LISTED BERRY, TREE AND VINE CROPS USE DIRECTIONS

Refer<sup>®</sup> 280 SL can be applied to the following Berry, Tree and Vine Crops:

- Bushberry Subgroup 13B: blueberry, currant, elderberry, gooseberry, huckleberry, lingonberry, juneberry, salal
- Fruit, 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
- Fruit, Pome, Group 11-10: apples, pear, crabapple, loquat, mayhaw, quince, azarole, Medlar, Tejocote, cultivars, varieties and/or hybrids of these
- Fruit, Stone, Group 12-12: apricot, cherry, peach, nectarine, plum, capulin, jujube, Sloe and cultivars, varieties and/or hybrids of these
- Nut, Tree, Group 14: almond, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachio, walnut
- Vine: all grape varieties (table, wine, raisin)

Application of Refer<sup>®</sup> 280 SL can be made via broadcast, spot or directed spray or banded spray applications

### USE RATE AND TIMING

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

- 48 fl. oz. product/A (0.87 lb ai/A) – weeds <3" in height
- 56 fl. oz. product/A (1.02 lbs ai/A) – weeds < 6" in height, pre-tiller grasses
- 56 – 82 fl. oz./A (1.02 lbs – 1.5 lbs ai/A)– Weeds > 6" in height and/or grasses that have tillered

**Spot or Directed Spray:** Make application to weeds until foliage is wet, but not to the point of runoff. Use 1.7 fl. oz. Refer<sup>®</sup> 280 SL per gallon of water.

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

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

**Sucker Control:** Apply 56 oz. product/A (1.02 lbs ai/A) in a split application to young, green uncalled suckers that are no more than 12" in length. Wait approximately 4 weeks between applications. Sucker foliage must be thoroughly covered with product.

### IMPORTANT

- Refer<sup>®</sup> 280 SL can be applied as a directed broadcast spray, banded or spot treatment, to control weeds and undesirable vegetation in tree, vine and berries listed above
- Consult Weed Chart A for weeds controlled
- For best results, use appropriate rates for size of weeds, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- For enhanced performance of Refer<sup>®</sup> 280 SL, apply during warm and sunny weather, and high humidity
- Lower use rate, unfavorable environment, or weed growth stage at time of treatment could result in regrowth of weeds. Additional application of Refer<sup>®</sup> 280 SL may be needed for control of weeds growing from seeds or in-ground portions of weeds
- Use highest labeled application rate for weeds in thick populations or under stress (including prior treatments with other herbicides). Do not retreat after previous herbicide application until weeds have reached adequate height for effective treatment
- Refer<sup>®</sup> 280 SL solution can injure or severely damage green bark, branches or vegetation, or desirable nontarget plants. Avoid contact with mixture, spray, drift or mist. Trunks with callused, established brown bark, or shielded by nonporous wraps, grow tubes or waxed containers can be sprayed with Refer<sup>®</sup> 280 SL
- Thoroughly clean application equipment following use.

**Tank Mixes:** Unexposed plant parts or residual weed growth is not controlled by Refer<sup>®</sup> 280 SL. For residual control or control of a broader spectrum of weeds, or to support product performance, Refer<sup>®</sup> 280 SL can be mixed with other herbicides registered for use on berries, trees and vine crops. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix. When using Refer<sup>®</sup> 280 SL in a tank mix, additional surfactant is not required.

**Crop Restrictions:**

- Do not apply more than 164 fl. oz. Refer® 280 SL (3 lbs ai/A) to berry (bushes), berry (other) or stone fruit within a 1 year period.
- Do not apply more than 246 fl. oz. Refer® 280 SL (4.5 lbs ai/A) to tree nuts and vines, pome fruit, citrus and olives within a 1 year period.
- Make no more than 2 applications at the maximum rate of 82 fl. oz. per acre (1.5 lb. ai/A) per application to berry (bushes), berry (other) or stonefruit, or no more than 3 applications at the maximum rate of 82 fl. oz. per acre (1.5 lb. ai/A) per application to tree nuts, vines, pome fruit citrus or olives.
- Pre Harvest interval is 14 days.
- Orchard cover crops are not to be grazed or harvested and/or fed to livestock
- Do not make directed spray or spot applications to vine trunk or tree trunk, or spot applications to suckers (to avoid injury)
- Refer® 280 SL is not to be applied through any type of irrigation system
- Refer® 280 SL is not to be applied aerially to tree, berry or vine crops
- Observe an application interval of 14 days for citrus fruits, pome fruits and olives, and 28 days for stone fruits.

**PUBLIC, RECREATIONAL AREAS AND FARMSTEADS USE DIRECTIONS**

Refer® 280 SL can be used around public and recreational areas and non-crop areas of farmsteads to provide nonselective weed control. Use areas include:

- building foundations and farmstead areas
- shelter belts
- along fences and fence lines
- ditch banks and dry ditches
- storage and lumber yards, tank farms, pumping stations
- airports, commercial plants
- schools and other educational facilities
- parks, parking lots, roadsides

**USE RATES AND TIMING**

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

Consult Weed List A for list of weeds controlled.

**WEED LIST A  
For Berry, Tree and Vine Crops and Farmsteads**

**Broadleaf Weeds**

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

**Biennial and Perennial Weeds**

Aster, white heath	Dallisgrass	Mullein, common	Rocket, yellow
Bindweed, field	Dandelion	Mustard, tansy	Rose, wild
Bindweed, hedge	Dock, curly	Nutsedge, purple	<i>Rubus</i> spp.
Bluegrass, Kentucky	Dogbank (hemp)	Nutsedge, yellow	Spurge, leafy
Bromegrass, smooth	Fescue	Onion, wild	Thistle, bull
Bulrush <sup>1</sup>	Goldenrod, gray	Orchardgrass	Thistle, musk
Burdock	Guineagrass	Paragrass	Torpedograss
Canada thistle	Horsetail	Plantain	Vaseygrass
Clover, Alsike	Lovegrass	Poison ivy/oak	Woodsorrel
Clover, red	Mugwort	Quackgrass	Yarrow, common
Clover, white			

<sup>1</sup>suppression only



### Grass Weeds

Barnyardgrass	Crabgrass, smooth	Junglerice	Shattercane
Bluegrass, annual	Cupgrass, woolly	Oat, wild	Sprangletop
Brome, ripgut	Foxtail, giant	Panicum, fall	Stinkgrass
Bromegrass, downy	Foxtail, green	Panicum, Texas	Wheat, volunteer
Canarygrass	Foxtail, yellow	Rush, toad <sup>1</sup>	Windgrass
Chess, soft	Goosegrass	Ryegrass, annual <sup>2</sup>	Witchgrass
Crabgrass, large	Johnsongrass, seedling	Sandbur, field	

<sup>1</sup>suppression only

<sup>2</sup>Make application to annual ryegrass before it reaches 3" tall

### CANOLA USE DIRECTIONS

Refer<sup>®</sup> 280 SL can be applied to LibertyLink canola to control weeds.

#### USE RATE AND TIMING

Apply 22 - 29 fl. oz./A (0.4 – 0.53 lb ai/A) product to canola in cotyledon to early bolt stage. A second application of up to 29 fl. oz./A (0.53 lb ai/A) may be used for control of later emerging weeds.

**California ONLY:** Apply 22 fl. oz./A (0.4 lb ai/A) product to canola in cotyledon to early bolt stage. A second application of 22 fl. oz./A (0.4 lb ai/A) may be used for control of later emerging weeds.

Consult Weed List B (20-22 fl. oz. rate) (0.16 – 0.4 lb ai) for weed species controlled.

#### IMPORTANT

- For enhanced performance of Refer<sup>®</sup> 280 SL, apply during warm and sunny weather and high humidity
- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- Use of Refer<sup>®</sup> 280 SL may result in a temporary slight discoloration of canola after application, which will not influence yield, growth or maturity of the crop.
- Early season weed control is necessary for best harvest
- Refer<sup>®</sup> 280 SL will not control any volunteer LibertyLink plants (corn, cotton, soybean or sugarbeets) that are left from the previous season.

If canola is injured or adversely affected by environmental stress or conditions (for example excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) or prior herbicide application, weed control can be reduced

**Tank Mixes:** To support product performance, Refer<sup>®</sup> 280 SL can be mixed with other herbicides registered for use on canola. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix. When using Refer<sup>®</sup> 280 SL in a tank mix with a grass herbicide used at a reduced rate (for example a herbicide containing the active ingredients quizalofop, sethoxydim or clethodim) the AMS rate may be reduced to 1.5 lb./A. When using Refer<sup>®</sup> 280 SL in a tank mix, additional surfactant is not required.

**Spray Additive:** If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb/A to Refer<sup>®</sup> 280 SL can enhance results. Choose appropriate rate based on temperatures and environmental conditions, the probability of leaf burn, or tank mixes. If necessary, other additives, such as drift control agents can be used. Use of an antifoam agent is suggested. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

#### CROP RESTRICTIONS

- Do not apply more than 29 fl. oz./A (0.53 lb ai/A) per application. **In California:** Do not apply more than 22 fl. oz./A (0.4 lb ai/A) per application.
- Do not make more than 2 in-season applications of Refer<sup>®</sup> 280 SL to canola per year (3 applications per year including burndown). **In California:** Do not make more than 2 applications of Refer<sup>®</sup> 280 SL per year.
- Do not exceed the max yearly application rate of 87 fl. oz./A (1.6 lbs ai/A). **In California:** Do not exceed the max yearly application rate of 44 fl. oz./A (0.8 lb ai/A).
- Wait 7 days between applications. **In California:** Wait 10 days between applications.
- When Refer<sup>®</sup> 280 SL is used as a burndown, no additional (post emergent) applications can be made to canola.
- Preharvest interval is 65 days.
- Refer<sup>®</sup> 280 SL is not to be applied through any type of irrigation system.
- Canola treated with Refer<sup>®</sup> 280 SL cannot be cut for hay or grazed
- Do not apply Refer<sup>®</sup> 280 SL to LibertyLink canola in the following states: AL, DE, GA, KY, MD, NJ, NC, SC, TN, VA, WV

### SWEET CORN\*, FIELD CORN AND SILAGE CORN USE DIRECTIONS

Refer<sup>®</sup> 280 SL can be applied to LibertyLink corn to control weeds.

**\*Not for use on sweet corn in California**

#### USE RATE AND TIMING

Apply 29-43 fl. oz./A product (0.53 lb – 0.79 lb ai/A) to field and silage corn, or 22 fl. oz./A product (0.4 lb ai/A) to sweet corn. A second application of 29-43 fl. oz./A (0.53 lb – 0.79 lb ai/A) (field and silage corn) or 22 fl. oz./A (0.4 lb ai/A) (sweet corn), or tank mix with a residual herbicide may be used for control of later emerging weeds.

**California ONLY:** Apply 22 fl. oz. / A product (0.4 lb ai/A) to field and silage corn. A second application of 22 fl. oz./A product (0.4 lb ai/A) to field and silage corn, or tank mix with a residual herbicide may be used for control of later emerging weeds.

Consult weed list B for weed species controlled.

**Timing**

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

**IMPORTANT**

- For best results, make sure spray consistently and fully covers weeds and apply to emerged weeds that are young and actively growing and which are less than 3" in height.
- For enhanced performance of Refer® 280 SL, apply during warm and sunny weather and high humidity
- Early season weed control is necessary for best harvest

If corn is injured or adversely affected by environmental stress or conditions (such as excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) or prior herbicide applications, weed control can be reduced.

**Tank Mixes:** To support product performance, Refer® 280 SL can be mixed with other herbicides registered for use on corn (sweet, field or silage). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix. Additional surfactant is not needed when tank mixing. If tank mixing with products containing the active ingredients carfentrazone-ethyl, metolachlor, s-metolachlor, and products with a combination of s-metolachlor, mezo-trione and atrazine, use ½ rate with Refer® 280 SL, to reduce the risk for adverse crop response. If tank mixing with products containing pendimethalin, be aware that reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail and volunteer corn can occur.

**Spray Additive:** If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb/A to Refer® 280 SL can enhance results. Choose appropriate rate based on temperatures and environmental conditions, the probability of leaf burn, or tank mixes. Use of an antifoam agent is suggested. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

**CROP RESTRICTIONS**

- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) per application. **In California:** Do not apply more than 22 fl. oz./A (0.4 lb ai/A) per application.
- Do not make more than 2 applications of Refer® 280 SL to corn per year.
- Do not exceed the maximum yearly application rate of 87 fl. oz./A (1.6 lbs ai/A) for field and silage corn or 44 fl. oz./A (0.80 lb ai/A) for sweet corn. **In California:** Do not exceed the maximum yearly application rate of 44 fl. oz. / A (0.8 lb ai/A) for field and silage corn.
- Wait 7 days between applications. **In California:** Wait 10 days between applications.
- When Refer® 280 SL is used as a burndown, no additional (post emergent) applications can be made to corn.
- Preharvest intervals are 50 days for sweet corn ears, 55 days for sweet corn stover, 60 days for field and silage corn forage and 70 days for field and silage corn grain and fodder.
- Refer® 280 SL is not to be applied through any type of irrigation system.
- Nitrogen solutions are not to be used as spray carriers

**COTTON USE DIRECTIONS**

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

**USE RATE AND TIMING**

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

Use Pattern	Use Rate Application 1	Use Rate Application 2	Use Rate Application 3	Cumulative Maximum use rate per year
TIMING 1	32 – 43 fl. oz./A (0.59 lb – 0.79 lb ai/A)	29 fl. oz./A (0.53 lb ai/A)	None	72 fl. oz./A (1.32 lbs ai/A)
TIMING 2	29 fl. oz./A (0.53 lb ai/A)	29 fl. oz./A (0.53 lb ai/A)	29 fl. oz./A (0.53 lb ai/A)	87 fl. oz. / A (1.59 lbs ai/A)

Yearly maximum use rate is 72 fl oz/A (1.32 lbs ai/A) (including all application timings) when a single application higher than 29 fl oz/A (0.53 lb ai/A) is made.

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

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

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

**Post Harvest Application:** When using Refer® 280 SL as a post harvest burndown treatment to cotton fields, a single application not to exceed 43 fl. oz./A (0.79 lb ai/A) can be applied. Adjust use rate to correspond with size of weeds. If the single application rate exceeds 29 fl. oz./A (0.53 lb ai/A), then the yearly maximum use rate is 72 fl. oz./A (1.32 lbs ai/A) (including all application timings).

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

**Non LibertyLink Cotton - Hooded Spray Application:**

Apply Refer® 280 SL via a hooded sprayer that is designed to direct product spray to the weeds and minimize exposure to cotton plants. When using this method of application, take all possible steps to avoid exposing cotton plants to product spray. Key points for using hooded sprayer are:

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

**IMPORTANT**

- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- For enhanced performance of Refer® 280 SL, apply during warm and sunny weather, and high humidity
- If cotton are injured or adversely affected by environmental stress or conditions (such as excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) or prior herbicide application, weed control can be reduced
- Consult Weed Chart B for weed control, and if a mixed population of weeds are present, use the rate necessary to control all weed species.
- Additional application of Refer® 280 SL or tank mix with other herbicide may be needed for control of weeds growing from seeds or in-ground portions of weeds
- Early season weed control is necessary for best harvest
- Refer® 280 SL will not control any volunteer LibertyLink plants (corn, cotton, soybean, sugarbeet) that are left from the previous season

**Tank Mixes:** To support product performance, Refer® 280 SL can be mixed with other herbicides registered for use on cotton. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

**Spray Additive:** If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb /A to Refer® 280 SL can enhance results. Choose appropriate rate based on temperatures and environmental conditions, the probability of leaf burn, or tank mixes. Use of an antifoam agent is suggested. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

**CROP RESTRICTIONS**

- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) in a single application.
- Within a 1 year period, up to 3 applications of Refer® 280 SL may be made at a maximum rate of 29 fl. oz./A (0.53 lb ai/A).
- If applying a maximum application rate of 29 fl. oz./A (0.53 lb ai/A), the maximum yearly application rate is not to exceed 87 fl. oz./A (1.6 lbs ai/A), including all application timings. Observe an application interval of at least 10 – 14 days.
- If large weeds or dense infestation is present, because timely application was not possible (due to environmental conditions), an application not to exceed 43 fl. oz./A (0.79 lb ai/A) can be made, and a second application may be made at a maximum rate of 29 fl. oz./A (0.53 lb ai/A).
- If applying a maximum application rate of greater than 29 fl. oz./A (0.53 lb ai/A), the maximum yearly application rate is not to exceed 72 fl. oz./A (1.32 lbs ai/A), including all application timings.
- Observe an application interval of at least 10 – 14 days.
- Preharvest interval is 70 days.
- Refer® 280 SL is not to be applied through any type of irrigation system
- Refer® 280 SL cannot be applied to cotton south of Tampa in Florida (Route 60) or in Hawaii (except for application to breeding nurseries or test plots)

**SOYBEANS USE DIRECTIONS**

Refer® 280 SL can be applied to LibertyLink soybeans to control weeds.

**USE RATE AND TIMING**

Apply 29 - 43 fl. oz./A product (0.53 lb – 0.79 lb ai/A) to soybeans, from emergence up to just before bloom. A second application of 29 - 43 fl. oz./A (0.53 lb – 0.79 lb ai/A) can be used for later emerging weeds. Yearly maximum use rate is 87 fl. oz. product per acre (1.6 lbs ai/A).

**California ONLY:** Apply 22 – 29 fl. oz./A product (0.4 – 0.53 lb ai/A) to soybeans, from emergence up to just before bloom. If weed pressure is high, due to environmental conditions, preventing a timely use of Refer® 280 SL, a single application of up to 36 fl. oz./A product (0.66 lb ai/A) can be made to soybeans beyond the V3-V4 vegetative growth phase. A second application of 29 fl. oz. /A product (0.53 lb ai/A) can be used for later emerging weeds. Yearly maximum use rate is 65 fl. oz. product per acre (1.2 lbs ai/A).

Consult Weed List B for weed species controlled.

#### IMPORTANT

- For enhanced performance of Refer® 280 SL, apply during warm and sunny weather and high humidity
- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- Early season weed control is necessary for best harvest
- Refer® 280 SL can provide complete weed control when applied in a timely manner, however tank mixing or use of Refer® 280 SL in conjunction with residual herbicides can help with reduction of early season weed competition, and control of later emerging weeds (particularly if environmental conditions prevented timely application of Refer® 280 SL)

If soybeans are injured or adversely affected by environmental stress or conditions (for example excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) or prior herbicide application, weed control can be reduced.

**Tank Mixes:** To support product performance, Refer® 280 SL can be mixed with other herbicides registered for use on soybeans. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix. Additional surfactant is not necessary when tank mixing.

**Spray Additives:** If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb /A to Refer® 280 SL can enhance results. Use of an antifoam agent is suggested. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

#### CROP RESTRICTIONS

- Do not make more than 2 in-season applications of Refer® 280 SL to soybeans per year (3 applications per year including burndown). **In California:** Do not make more than 2 applications of Refer® 280 SL to soybeans per year (including burndown).
- Do not exceed the max yearly application rate of 87 fl. oz./ A (1.6 lbs ai/A). **In California:** Do not exceed the max yearly application rate of 65 fl. oz. / A (1.2 lbs ai/A).
- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) in a single application. **In California:** Do not apply more than 36 fl. oz. / A (0.66 lb ai/A) in a single application.
- Wait 5 days between applications. **In California:** Wait at least 10 days between applications.
- Preharvest interval is 70 days.
- Refer® 280 SL is not to be applied through any type of irrigation system
- Soybeans treated with Refer® 280 SL cannot be cut for hay or grazed
- Nitrogen solutions are not to be used as spray carriers.

#### SUGARBEETS USE DIRECTIONS (Not for use in California)

Refer® 280 SL can be applied to LibertyLink sugarbeets to control weeds.

#### USE RATE AND TIMING

Apply up to 30 fl. oz./A product (0.55 lb ai/A) to sugarbeets, from cotyledon stage up to 10 leaf stage. A second application of up to 30 fl. oz./A (0.55 lb ai/A) will be needed to control later emerging weeds. Consult Weed List B for weed species controlled. Optimum control is obtained when weeds are 1 inch or less in height or diameter. Yearly maximum use rate is 60 fl. oz. product per acre (1.1 lbs ai/A).

#### IMPORTANT

- To avoid reduced performance of Refer® 280 SL, **DO NOT** apply when heavy dew, fog, or mist/rain are present
- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- Make a cultivation 5 days before or 5 days after application of Refer® 280 SL
- Early season weed control is necessary for best harvest
- If sugarbeets are injured or adversely affected by environmental stress or conditions (for example excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) or prior herbicide application, weed control can be reduced
- Weeds that emerge after Refer® 280 SL has been applied will not be controlled, as Refer® 280 SL does not exhibit residual activity. If crop experiences a rain event within 4 hours of application, retreatment may be necessary, however after 4 hours, Refer® 280 SL is rainfast.

**Tank Mixes:** To support product performance, Refer® 280 SL can be mixed with other herbicides registered for use on sugarbeets. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix.

**Spray Additives:** If necessary, drift control agents can be used with Refer® 280 SL. **DO NOT** use surfactants. If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb/A to Refer® 280 SL can enhance results. Choose appropriate rate based on temperatures and environmental conditions, the probability of leaf burn, or tank mixes. Use of an antifoam agent is suggested.

**CROP RESTRICTIONS**

- Within a 1 year period, up to 2 applications of Refer® 280 SL may be made at a maximum rate of 30 fl. oz./A (0.55 lb ai/A).
- A second application may be made a minimum of 10 days after the first application.
- Do not exceed the max yearly application rate of 60 fl. oz. / A (1.1 lbs ai/A).
- Do not apply more than 30 fl. oz. / A (0.55 lb ai/A) in a single application.
- Preharvest interval is 60 days.
- Refer® 280 SL is not to be applied through any type of irrigation system
- Sugarbeets treated with Refer® 280 SL cannot be cut for hay or grazed
- Rotation crop plantback in sugarbeet field treated with Refer® 280 SL is 120 days after last application for all crops except wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale (70 day plantback restriction) or corn, cotton, soybeans, canola and sugar beets LibertyLink crops (0 day plantback restriction)

**FALLOW FIELDS USE DIRECTIONS**

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

**USE RATE AND TIMING**

Consult Weed List B for appropriate application rate based on weed type and size.

Use 22 or 29 fl. oz./A (0.4 lb – 0.53 lb ai/A) on fallow fields for control of target weed species.

Mix Refer® 280 SL with ammonium sulfate for application to fallow fields.

**Restrictions:** Per year, do not apply more than 29 fl. oz./A (0.53 lb a.i./A) of Refer® 280 SL to fallow fields. Do not apply more than 1 application per year.

**IMPORTANT**

**Tank Mixes:** To support product performance, Refer® 280 SL can be mixed with other herbicides registered for use in fallow fields. 2,4-D, atrazine or glyphosate are advised tank mix partners. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mix. When using Refer® 280 SL in a tank mix, additional surfactant is not required.

**WEED LIST B**

**For Canola; Cotton; Sweet, Field and Popcorn; Soybeans; Fallow Fields**

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

<b>Broadleaf Weeds (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)</b>					
<b>Weed Species</b>	<b>22 fl. oz./A</b>	<b>29-43' fl. oz./A</b>	<b>Weed Species</b>	<b>22 fl. oz./A</b>	<b>29-43' fl. oz./A</b>
Amaranth, Palmer <sup>4</sup> ( <i>Amaranthus palmeri</i> )	N	C	Morningglory, sharppod ( <i>Ipomoea cordatotriloba</i> )	C	C
Anoda, spurred ( <i>Anoda cristata</i> )	C	C	Morningglory, smallflower ( <i>Jacquemontia tamnifolia</i> )	C	C
Beggarweed, Florida ( <i>Desmodium tortuosum</i> )	C	C	Morningglory, tall ( <i>Ipomoea purpurea</i> )	C	C
Black medic ( <i>Medicago lupulina</i> L.)	C	C	Mustard, wild ( <i>Sinapis arvensis</i> )	C	C
Blueweed, Texas ( <i>Helianthus ciliaris</i> DC.)	C	C	Nightshade, black ( <i>Solanum nigrum</i> )	C	C
Buckwheat, wild ( <i>Polygonum convolvulus</i> )	C	C	Nightshade, eastern black ( <i>Solanum ptycanthum</i> )	C	C
Buffalobur ( <i>Solanum cornutum</i> )	C	C	Nightshade, hairy ( <i>Solanum sarrachoides</i> )	C	C
Burcucumber ( <i>Sicyos angulatus</i> )	C	C	Pennycress ( <i>Thlaspi arvense</i> )	C	C
Canola, volunteer <sup>1</sup> ( <i>Brassica</i> spp.)	C <sup>1</sup>	C <sup>1</sup>	Pigweed, redroot ( <i>Amaranthus retroflexus</i> )	C	C
Catchweed bedstraw (cleavers) ( <i>Galium aparine</i> L.)	C	C	Pigweed, prostrate ( <i>Amaranthus blitoides</i> )	C	C
Carpetweed ( <i>Mollugo verticillata</i> )	C	C	Pigweed, spiny ( <i>Amaranthus spinosus</i> )	C	C
Chickweed, common ( <i>Stellaria media</i> )	C	C	Pigweed, smooth ( <i>Amaranthus hybridus</i> )	C	C
Cocklebur, common ( <i>Xanthium strumarium</i> )	C	C	Pigweed, tumble ( <i>Amaranthus albus</i> )	C	C
Copperleaf, hophornbeam ( <i>Acalypha ostryaefolia</i> )	C	C	Puncturevine ( <i>Tribulus terrestris</i> )	C	C
Cotton, volunteer <sup>1</sup> ( <i>Gossypium</i> spp.)	C <sup>1</sup>	C <sup>1</sup>	Purslane, common ( <i>Portulaca oleracea</i> )	C	C
Croton, tropic ( <i>Croton glandulosus</i> )	C	C	Pusley, Florida ( <i>Richardia scabra</i> )	S	C
Croton, woolly ( <i>Croton capitatus</i> )	C	C	Ragweed, common ( <i>Ambrosia artemisiifolia</i> )	C	C
Eclipta ( <i>Eclipta alba</i> )	C	C	Ragweed, giant ( <i>Ambrosia trifida</i> )	C	C
Devil's claw ( <i>Proboscidea Louisiana</i> )	C	C	Senna coffee ( <i>Cassia occidentalis</i> )	C	C
Fleabane, annual ( <i>Erigeron annuus</i> )	C	C	Sesbania, hemp ( <i>Sesbania herbacea</i> )	C	C

(continued)

Broadleaf Weeds (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)					
Weed Species	22 fl. oz./A	29-43 <sup>1</sup> fl. oz./A	Weed Species	22 fl. oz./A	29-43 <sup>1</sup> fl. oz./A
Galinsoga, hairy ( <i>Galinsoga ciliata</i> )	C	C	Shepherd's Purse ( <i>Capsella bursa-pastoris</i> )	C	C
Galinsoga, small flower ( <i>Galinsoga parviflora</i> )	C	C	Sicklepod (java bean) ( <i>Senna obtusifolia</i> )	C	C
Groundcherry, cutleaf ( <i>Physalis angulate</i> )	C	C	Sida, prickly ( <i>Sida spinosa</i> L.)	C	C
Geranium, cutleaf ( <i>Geranium dissectum</i> L.)	C	C	Smartweed, Pennsylvania ( <i>Polygonum pennsylvanicum</i> )	C	C
Hempnettle ( <i>Galeopsis</i> sp.)	C	C	Smellmelon ( <i>Cucumis melo</i> L. var. <i>Dudaim</i> )	C	C
Horsenettle, Carolina <sup>2</sup> ( <i>Solanum carolinense</i> )	C <sup>2</sup>	C <sup>2</sup>	Sowthistle, annual ( <i>Sonchus oleraceus</i> L.)	C	C
Jimsonweed ( <i>Datura stramonium</i> )	C	C	Soybeans, volunteer <sup>1</sup> ( <i>Glycine max</i> )	C <sup>1</sup>	C <sup>1</sup>
Knotweed ( <i>Polygonum spec.</i> )	C	C	Spurge, prostrate ( <i>Euphorbia humifusa</i> )	C	C
Kochia ( <i>Kochia scoparia</i> )	C	C	Spurge, spotted ( <i>Euphorbia maculate</i> L.)	C	C
Ladysthumb ( <i>Polygonum persicaria</i> )	C	C	Starbur, bristly ( <i>Acanthospermum hispidum</i> )	C	C
Lambsquarters, common <sup>4</sup> ( <i>Chenopodium album</i> )	C	C	Sunflower, common ( <i>Helianthus annuus</i> )	C	C
Mallow, common ( <i>Malva spec.</i> )	C	C	Sunflower, prairie ( <i>Corythucha pura</i> )	C	C
Mallow, Venice ( <i>Hibiscus trionum</i> )	C	C	Sunflower, volunteer ( <i>Girassol</i> )	C	C
Marestail <sup>3</sup> ( <i>Conyza Canadensis</i> )	S	C	Thistle, Russian <sup>2</sup> ( <i>Salsola kali</i> )	S <sup>2</sup>	C
Marshelder, annual ( <i>Iva annua</i> )	C	C	Velvetleaf <sup>4</sup> ( <i>Abutilon theophrasti</i> )	C	C
Morningglory, entireleaf ( <i>Ipomoea hederacea</i> var. <i>intergriuscula</i> )	C	C	Waterhemp, common ( <i>Amaranthus rudis</i> )	N	C
Morningglory, ivyleaf ( <i>Ipomoea hederacea</i> )	C	C	Waterhemp, tall ( <i>Amaranthus tuberculatus</i> )	N	C
Morningglory, pitted ( <i>Ipomoea lacunose</i> )	C	C			

**C = Control; N = Not Advised; S = Suppression**

<sup>1</sup> If volunteer crops are LibertyLink from the previous season, Refer<sup>®</sup> 280 SL will not control them

<sup>2</sup> For control, a sequential application may be needed

<sup>3</sup> Apply on marestail that is 6" in height, for best results

<sup>4</sup> For best control, make application to lambsquarters, Palmer amaranth and velvetleaf between dawn and 2 hours prior to sunset.

\*California ONLY: In cotton, Refer<sup>®</sup> 280 SL can be applied 3 times per year at a rate of 29 fl. oz./A (0.53 lb ai/A). For use on canola, field corn, popcorn, soybeans and fallow fields a use rate of 30 – 43 fl. oz./A (0.55 – 0.79 lb ai/A) can be used if weeds are particularly large, or if weed pressure is high due to environmental conditions preventing timely use of Refer<sup>®</sup> 280 SL. If applying a maximum application rate greater than 29 fl. oz./A (0.53 lb ai/A), the maximum yearly application rate is not to exceed 72 fl. oz./A (1.32 lbs ai/A).

Biennial and Perennial Weeds (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)	
For control of the biennial and perennial weeds listed below, apply tank mix partners or sequential applications of Refer <sup>®</sup> 280 SL.	
Alfalfa ( <i>Medicago sativa</i> L.)	Milkweed, common* ( <i>Asclepias syriaca</i> )
Bermudagrass ( <i>Cynodon dactylon</i> )	Milkweed, honeyvine* ( <i>Ampelamus albidus</i> )
Bindweed, field ( <i>Convolvulus arvensis</i> L.)	Muhly, wirestem* ( <i>Muhlenbergia frondosa</i> )
Bindweed, hedge ( <i>Calystegia sepium</i> )	Nightshade, silverleaf ( <i>Solanum elaeagnifolium</i> )
Bluegrass, Kentucky ( <i>Poa pratensis</i> L.)	Nutsedge, purple* ( <i>Cyperus rotundus</i> )
Blueweed, Texas ( <i>Helianthus ciliaris</i> DC.)	Nutsedge, yellow* ( <i>Cyperus ferax</i> )
Bromegrass, smooth ( <i>Bromus inermis</i> )	Orchardgrass ( <i>Dactylis glomerata</i> L.)
Burdock ( <i>Arctium</i> sp.)	Poinsettia, wild ( <i>Euphorbia heterophylla</i> L.)
Bursage, woolyleaf ( <i>Ambrosia grayi</i> )	Pokeweed ( <i>Phytolaccaceae</i> )
Chickweed, mouse-ear ( <i>Cerastium vulgatum</i> L.)	Quackgrass* ( <i>Agropyron repens</i> )
Clover, red ( <i>Trifolium pretense</i> L.)	Sowthistle, perennial ( <i>Sonchus arvensis</i> L.)
Dandelion ( <i>Taraxacum officinale</i> )	Thistle, bull ( <i>Cirsium vulgare</i> )
Dock, smooth ( <i>Rumex spec.</i> )	Thistle, Canada ( <i>Cirsium arvense</i> )
Dogbane, hemp* ( <i>Apocynum cannabinum</i> )	Timothy* ( <i>Phleum pretense</i> L.)
Goldenrod, gray* ( <i>Solidago nemoralis</i> )	Wormwood, biennial ( <i>Artemisia biennis</i> )
Johnsongrass, rhizome ( <i>Sorghum halepense</i> )	

\*Suppression Only

**Grass Weeds (including biotypes resistant to ALS, Auxin, Glyphosate, HPPD, PPO and Triazine)**

Weed Species	22 fl. oz./A	29-43' fl. oz./A	Weed Species	22 fl. oz./A	29-43' fl. oz./A
Barley, volunteer <sup>3</sup>	C	C	Millet, wild-proso ( <i>Panicum miliaceum L.</i> )	C	C
Barnyardgrass ( <i>Echinochloa spec.</i> )	C	C	Millet, proso volunteer ( <i>Milium vernale</i> )	C	C
Bluegrass, annual ( <i>Poa annua L.</i> )	C	C	Oat, wild <sup>2</sup> ( <i>Avena fatua</i> )	C	C
Corn, volunteer <sup>1</sup> ( <i>Zea mays L.</i> )	C	C	Panicum, fall ( <i>Panicum dichotomiflorum</i> )	C	C
Crabgrass, large <sup>2</sup> ( <i>Digitaria sanguinalis</i> )	C	C	Panicum, Texas ( <i>Panicum texanum</i> )	C	C
Crabgrass, smooth <sup>2</sup> ( <i>Digitaria ischaemum</i> )	C	C	Rice, red ( <i>Oryza sativa L.</i> )	C	C
Cupgrass, woolly ( <i>Eriochloa villosa</i> )	C	C	Rice, volunteer <sup>1</sup> ( <i>Oryza sativa</i> )	C	C
Foxtail, bristly ( <i>Setaria verticillate</i> )	C	C	Sandbur, field <sup>2</sup> ( <i>Cenchrus pauciflorus</i> )	S	C
Foxtail, giant ( <i>Setaria faberi</i> )	C	C	Shattercane ( <i>Sorghum vulgare PERS.</i> )	C	C
Foxtail, green ( <i>Setaria viridis</i> )	C	C	Signalgrass, broadleaf ( <i>Brachiaria platyphylla</i> )	C	C
Foxtail, robust purple ( <i>Setaria viridis</i> )	C	C	Sprangletop ( <i>Leptochloa spec.</i> )	C	C
Foxtail, yellow <sup>2</sup> ( <i>Pennisetum glaucum</i> )	C	C	Sorghum, volunteer ( <i>Sorghum sp.</i> )	C	C
Goosegrass <sup>3</sup> ( <i>Eleusine indica</i> )	C	C	Stinkgrass ( <i>Eragrostis cilianensis</i> )	C	C
Johnsongrass, seedling ( <i>Sorghum halepense</i> )	C	C	Wheat, volunteer <sup>2</sup> ( <i>Triticum spec.</i> )	C	C
Junglerice ( <i>Echinochloa colonum</i> )	C	C	Witchgrass ( <i>Panicum virgatum L.</i> )	C	C

**C = Control; N = Not Advised; S = Suppression**

<sup>1</sup>Volunteer corn or rice will be best controlled with a timeline cultivation 7-10 days following application, and/or an additional treatment 10 – 21 days after initial application. If volunteer crops are LibertyLink from the previous season, Refer<sup>®</sup> 280 SL will not control them

<sup>2</sup>Treat before tiller initiation for optimum control of crabgrass, field sandbur, wild oats or yellow foxtail

<sup>3</sup>For control, a sequential application may be needed

\*California ONLY: In cotton, Refer<sup>®</sup> 280 SL can be applied 3 times per year at a rate of 29 fl. oz./A (0.53 lb ai/A). For use on canola, field corn, popcorn, soybeans and fallow fields a use rate of 30 – 43 fl. oz./A (0.55 – 0.79 lb ai/A) can be used if weeds are particularly large, or if weed pressure is high due to environmental conditions preventing timely use of Refer<sup>®</sup> 280 SL. If applying a maximum application rate greater than 29 fl. oz./A (0.53 lb ai/A), the maximum yearly application rate is not to exceed 72 fl. oz./A (1.32 lbs ai/A).

**BURNDOWN USE DIRECTIONS  
ALL STATES EXCEPT CALIFORNIA**

Refer<sup>®</sup> 280 SL can be applied prior to planting or emergence of conventional or LibertyLink canola, corn, sweet corn, cotton, soybean or sugarbeet, to act as a burndown agent for existing weed species.

**USE RATE AND TIMING**

Apply as indicated in the charts, below.

**Burndown in Conventional Sugarbeets**

Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
29 - 36 fl. oz./A (0.53 lb – 0.66 lb ai/A)	None	36 fl. oz./A (0.66 lb ai/A)

Apply at least 29 fl. oz. A of Refer<sup>®</sup> 280 SL (0.53 lb ai/A) just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer<sup>®</sup> 280 SL., a single application of up to 36 fl. oz./A (0.66 lb ai/A) can be made.

**Restrictions:**

- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per burndown application.
- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

**Burndown in Conventional Canola, Corn, Sweet Corn, Soybeans**

Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
29 - 43 fl. oz./A (0.53 lb – 0.79 lb ai/A)	None	43 fl. oz./A (0.79 lb ai/A)

Apply at least 29 fl. oz./A of Refer<sup>®</sup> 280 SL just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer<sup>®</sup> 280 SL., a single application of up to 43 fl. oz./A (0.79 lb ai/A) can be made.

**Restrictions:**

- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) per burndown application.
- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

**Burndown in Liberty Link Canola, Corn, Sweet Corn, Soybeans, Sugarbeet**

Crop	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
Soybean, Corn, Sweet corn	29 - 43 fl. oz./A (0.53 lb – 0.79 lb ai/A)	29 - 43 fl. oz./A (0.53 lb – 0.79 lb ai/A) (2 applications max.)	87 fl. oz./A (1.6 lb ai/A)
Canola	29 - 43 fl. oz./A (0.53 lb – 0.79 lb ai/A)	29 fl. oz./A (0.53 lb ai/A) (2 applications max.)	87 fl. oz./A (1.6 lb ai/A)
Sugarbeet	29-36 fl. oz./A (0.53 lb – 0.66 lb ai/A)	29 fl. oz./A (0.53 lb ai/A) (1 application)	60 fl oz./A (1.1 lb ai/A)

**Restrictions:**

- For Liberty Link soybean, corn, sweet corn and canola - do not apply more than 43 fl. oz./A (0.79 lb ai/A) per burndown application. For Liberty Link sugarbeet – do not apply more than 36 fl. oz./A (0.66 lb ai/A) per burndown application.
- For Liberty Link soybean, corn, sweet corn and canola - do not apply more than 43 fl. oz./A (0.79 lb ai/A) per year for burndown. For Liberty Link sugarbeet – do not apply more than 36 fl. oz./A (0.66 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

**Burndown in Conventional and Liberty Link Cotton**

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

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum Use Rate per Year
TIMING 1	30 – 43 fl. oz./A (0.55 lb – 0.79 lb ai/A)	22-29 fl. oz./A (1 application)* (0.4 lb – 0.53 lb ai/A)	72 fl. oz./A (1.32 lb ai/A)
TIMING 2	29 fl. oz./A (0.53 lb ai/A)	22 – 29 fl. oz./A (2 applications)* (0.4 lb – 0.53 lb ai/A)	87 fl. oz./A (1.6 lb ai/A)

\* In season application is made via hooded sprayer in non-LibertyLink cotton. Apply at least 29 fl. oz./ of Refer® 280 SL (0.53 lb ai/A) just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer® 280 SL., a single application of up to 43 fl. oz./A (0.79 lb ai/A) can be made. Yearly maximum use rate is 72 fl. oz./A (1.32 lb ai/A) (including all application timings) when a single application higher than 29 fl. oz./A (0.53 lb ai/A) is made.

**Restrictions:**

- For conventional and Liberty Link cotton - do not apply more than 43 fl. oz./A (0.79 lb ai/A) per burndown application.
- For conventional and Liberty Link cotton - do not apply more than 43 fl. oz./A (0.79 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

**IMPORTANT**

- For best results, make sure spray consistently and fully covers weeds, and apply to emerged weeds that are young and actively growing and which are less than 3" in height
- For enhanced performance of Refer® 280 SL, apply during warm and sunny weather, and high humidity
- If weeds are affected by environmental stress or application is made under stressful or wet conditions (for example excessive rainfall, fog, heavy dew, cool temperatures, cloudiness, drought, pest pressure, etc.) weed control may be reduced

**Spray Additive:** If weeds are under stress or if more persistent weeds (including velvetleaf or lambsquarters) are present, addition of Ammonium Sulfate (AMS) at a rate of 1.5 to 3 lb/A to Refer® 280 SL can enhance results. Choose appropriate rate based on temperatures and environmental conditions, the probability of leaf burn, or tank mixes. Use of an antifoam agent is suggested. Use care when adding additional crop oils or surfactants, as the risk of an adverse crop response can be increased.

**BURNDOWN USE DIRECTIONS  
CALIFORNIA ONLY**

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

**USE RATE AND TIMING**

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



#### Burndown in Canola, Corn, Sugarbeets

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
TIMING 1	29 fl. oz./A (0.53 lb ai/A)	None	36 fl. oz./A (0.66 lb ai/A)
TIMING 2	Up to 36 fl. oz./A (0.66 lb ai/A)	None	36 fl. oz./A (0.66 lb ai/A)

Apply at least 29 fl. oz./A of Refer® 280 SL (0.53 lb ai/A) just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer® 280 SL., a single application of up to 36 fl. oz./A (0.66 lb ai/A) can be made.

#### Restrictions:

- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per burndown application.
- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

#### Burndown in Soybeans

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum use rate per year
TIMING 1	29 fl. oz./A (0.53 lb ai/A)	22 – 29 fl. oz./A (0.4 lb – 0.53 lb ai/A)	65 fl. oz./A (1.2 lbs ai/A)
TIMING 2	Up to 36 fl. oz./A (0.66 lb ai/A)	22 – 29 fl. oz./A (0.4 lb – 0.53 lb ai/A)	65 fl. oz./A (1.2 lbs ai/A)

Apply at least 29 fl. oz./A of Refer® 280 SL (0.53 lb ai/A) just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer® 280 SL., a single application of up to 36 fl. oz./A (0.66 lb ai/A) can be made. For soybeans, an additional in-season application up to 29 fl. oz./A (0.53 lb ai/A) can be made.

#### Restrictions:

- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per burndown application.
- Do not apply more than 36 fl. oz./A (0.66 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

#### Burndown in Cotton

Use Pattern	Use Rate: Burndown	Use Rate: In Season	Cumulative Maximum Use Rate per Year
TIMING 1	29 fl. oz./A (0.53 lb ai/A)	22 – 29 fl. oz./A (2 applications)* (0.4 lb – 0.53 lb ai/A)	87 fl. oz./A (1.6 lbs ai/A)
TIMING 2	30 – 43 fl. oz./A (0.55 – 0.79 lb ai/A)	22-29 fl. oz./A (1 application)* (0.4 lb – 0.53 lb ai/A)	72 fl. oz./A (1.32 lbs ai/A)

\* In season application is made via hooded sprayer in non-LibertyLink cotton. Apply at least 29 fl. oz./A of Refer® 280 SL (0.53 lb ai/A) just before planting or emergence. If weeds are large or weed pressure is high, due to environmental conditions preventing timely use of Refer® 280 SL., a single application of up to 43 fl. oz./A (0.79 lb ai/A) can be made. Yearly maximum use rate is 72 fl. oz./A (1.32 lbs ai/A) (including all application timings) when a single application higher than 29 fl. oz./A (0.53 lb ai/A) is made.

#### Restrictions:

- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) per burndown application.
- Do not apply more than 43 fl. oz./A (0.79 lb ai/A) per year for burndown.
- Do not make more than 1 burndown application per year.

#### IMPORTANT

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

#### POTATO VINE DESICCATION USE DIRECTIONS

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

#### USE RATE AND TIMING

Apply Refer® 280 SL at the rate of 21 fl. oz./A (0.38 lb ai/A). Make only one application once the potato vine enters its natural senescence period. **DO NOT** split the application. If a particular potato variety has a heavy or dense vine, an application of another desiccation product may be necessary for total desiccation of the potato vine.

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

**IMPORTANT:**

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

**CROP RESTRICTIONS:**

- Per year, do not apply more than 21 fl. oz./A (0.38 lb ai/A) of Refer® 280 SL to potato vines.
- Make only one application once the potato vine enters its natural senescence period.
- Preharvest interval is 9 days.
- This product cannot be applied to potatoes grown for seed.

Crop rotation and plantback intervals after application of Refer® 280 SL for potato vine desiccation are as follows:

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

**CANOLA SEED PROPAGATION USE DIRECTIONS**

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

	Refer® 280 SL Use Rate	Canola Growth Stage
APPLICATION 1	29 fl. oz./A* (0.53 lb ai/A)	Cotyledon stage up to early bolt stage (BBCH 18-30; just prior to stem elongation / bolting (8 or more leaves) through beginning of stem elongation (no internode))
APPLICATION 2	29 fl. oz./A* (0.53 lb ai/A)	
APPLICATION 3	29 fl. oz./A* (0.53 lb ai/A)	

\*California ONLY: Use 22 fl. oz./A (0.4 lb ai/A)

**CANOLA SEED PROPAGATION USE RESTRICTIONS**

- Do not make more than 3 applications of Refer® 280 SL to canola per year.
- Do not apply more than 29 fl. oz. / A (0.53 lb ai/A) per application.
- Do not apply more than 87 fl. oz./A (1.6 lb ai/A) per year. **In California:** Do not apply more than 22 fl. oz. / A (0.4 lb ai/A) per application or apply more than 66 fl. oz. / A (1.2 lbs ai/A) per year.
- Preharvest interval is 65 days.
- Refer® 280 SL is not to be applied through any type of irrigation system.
- Treated canola seed cannot be used for food, feed or oil purposes.

**CORN, COTTON, AND SOYBEAN SEED PROPAGATION USE DIRECTIONS**

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

**CORN**

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

	Refer® 280 SL Use Rate	Additive*	Corn Growth Stage
APPLICATION 1	22 fl. oz./A (0.4 lb ai/A)	AMS – 3 lbs./A	V3 – V4 (3 to 4 developed collars)
APPLICATION 2	22 fl. oz./A (0.4 lb ai/A)	AMS – 3 lbs. /A	V6 to V7

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

**Crop Restrictions:**

- Within a 1 year period, up to 2 applications of Refer® 280 SL may be made at a maximum rate of 22 fl. oz./A (0.4 lb ai/A) per application.
- Do not exceed the max yearly application rate of 44 fl. oz. / A (0.8 lb ai/A).
- Wait at least 10 days between applications.

## COTTON

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

### TIMING 1

	Refer® 280 SL Use Rate	Cotton Growth Stage
APPLICATION 1	32 - 43 fl. oz./A (0.59 lb - 0.79 lb ai/A)	Emergence, up to early bloom
APPLICATION 2	29 fl. oz./A (0.53 lb ai/A)	

#### Crop Restrictions:

- Within a 1 year period, up to 2 applications of Refer® 280 SL may be made at a maximum rate of 43 fl. oz./A (0.34 lb ai/A) per application.
- Do not exceed the max yearly application rate of 72 fl. oz. / A (1.26 lbs ai/A).
- Wait at least 10 days between applications.

### TIMING 2

	Refer® 280 SL Use Rate	Cotton Growth Stage
APPLICATION 1	29 fl. oz./A (0.53 lb ai/A)	Emergence, up to early bloom
APPLICATION 2	29 fl. oz./A (0.53 lb ai/A)	
APPLICATION 3	29 fl. oz./A (0.53 lb ai/A)	

#### Crop Restrictions:

- Within a 1 year period, up to 3 applications of Refer® 280 SL may be made at a maximum rate of 29 fl. oz./A (0.53 lb ai/A) per application.
- Do not exceed the max yearly application rate of 87 fl. oz. / A (1.59 lbs ai/A).
- Wait at least 10 days between applications.

## SOYBEANS

To pick out resistant soybean segregates, apply Refer® 280 SL as indicated in the chart below. A second application, at least 5 days later, may be used, if needed. **In California:** A second application, at least 10 days later, may be used, if needed.

	Refer® 280 SL Use Rate	Soybean Growth Stage
APPLICATION 1	29 - 43 fl. oz./A* (0.53 lb - 0.79 lb ai/A)	Third trifoliolate stage
APPLICATION 2	29 - 43 fl. oz./A* (0.53 lb - 0.79 lb ai/A)	Up to (but not including) bloom

\*California ONLY: Use 22 fl. oz. / A (0.4 lb ai/A)

#### Crop Restrictions:

- Within a 1 year period, up to 2 applications of Refer® 280 SL may be made at a maximum rate of 43 fl. oz./A (0.97 lb ai/A) per application. **In California:** Within a 1 year period, up to 2 applications of Refer® 280 SL may be made at a maximum rate of 22 fl. oz./A (0.4 lb ai/A) per application.
- Do not exceed the max yearly application rate of 86 fl. oz. / A (1.57 lbs ai/A). **In California:** Do not exceed the max yearly application rate of 44 fl. oz./A (0.8 lb ai/A).
- Wait at least 10 days between applications.

## 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. Do not exceed storage temperature of 125° F. If storage temperature for bulk Refer® 280 SL is below 32° F, do not pump material until its temperature exceeds 32° F. Protect against direct sunlight.

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

### CONTAINER HANDLING:

#### ***Nonrefillable plastic containers less than or equal to 5 gallons***

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### CONDITIONS OF SALE AND LIMITED WARRANTY

The Directions for Use are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of Summit Agro USA, LLC or the SELLER. To the extent consistent with applicable law, all such risks shall be assumed by the buyer. Summit Agro USA, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. SUMMIT AGRO USA, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SUMMIT AGRO USA, LLC AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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

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EPA 20190624

GLUFOSINATE-AMMONIUM GROUP 10 HERBICIDE

# Refer<sup>®</sup> 280 SL

Herbicide

<b>ACTIVE INGREDIENT:</b>	
Glufosinate-ammonium .....	24.5%
<b>OTHER INGREDIENTS</b> .....	75.5%
<b>TOTAL</b> .....	100.0%

2.34 pounds of active ingredient per U.S. gallon.

## KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

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

FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <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 do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>NOTE TO PHYSICIAN</b>	
If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration.	
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact <b>Chemtrec</b> at <b>1-800-424-9300</b> for emergency medical treatment information 24 hrs. per day.	

See label booklet for additional Precautionary Statements and Directions for Use.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

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

## STORAGE AND DISPOSAL

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SummitAgro<sup>USA</sup>

**Distributed by:**  
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240 Leigh Farm Road, Suite 215  
Durham, NC 27707

Net Contents **2.5 gals**

PEEL BACK BOOK HERE