

264-829

09/26/2006

ACCEPTED 1/28

SEP 26 2006  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

# Liberty® 280 SL HERBICIDE

264-829

A NON-SELECTIVE HERBICIDE FOR USE ON COTTON, CORN, SOYBEAN AND CANOLA. MAY BE USED AS A ~~BROADCAST~~ APPLICATION, OVER THE TOP, TO COTTON, CORN, SOYBEAN AND CANOLA TOLERANT TO THE ACTIVE INGREDIENT IN THIS PRODUCT. TOLERANT COTTON, CORN, SOYBEAN AND CANOLA INCLUDES ONLY THOSE CROPS GROWN FROM SEED DESIGNATED AS LIBERTYLINK® OR WARRANTED BY BAYER CROPS SCIENCE AS BEING TOLERANT TO LIBERTY® 280 SL HERBICIDE. THIS HERBICIDE MAY ALSO BE USED FOR BOTH TOLERANT AND NON-TOLERANT COTTON WHEN APPLIED WITH A HOODED SPRAYER IN-CROP, OR AS A BROADCAST, PRE-PLANT BURNDOWN BEFORE PLANTING.

ACTIVE INGREDIENT: Glufosinate-ammonium*	24.5%**
OTHER INGREDIENTS:	75.5%
*CAS Number 77182-82-2, protected by U.S. Patent No 4,400,196	TOTAL 100.00%
**Equivalent to 2.34 pounds of active ingredient per U.S. gallon.	

EPA Reg No. 264-829

EPA Est. No. 264-MI-001  
EPA Est. No. 407-IA-2

## KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

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

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

IF IN EYES:	<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>Get medical attention if irritation develops or persists.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Wash skin immediately with plenty of soap and water.</li> <li>Get medical attention.</li> </ul>
IF SWALLOWED:	<ul style="list-style-type: none"> <li>Rinse mouth thoroughly with plenty of water.</li> <li>Do not induce vomiting.</li> <li>Get medical attention immediately.</li> </ul>

### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. Call 1-800-334-7577 for emergency medical treatment information.

### NOTE TO PHYSICIAN

If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration. Additionally, call 1-800-334-7577 immediately for further information.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

May be fatal if absorbed through skin. Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

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®  $\geq 14$  mils; chemical resistant footwear 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, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

**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 hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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 washwaters.

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

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

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature should not exceed 125°F. If storage temperature for bulk Liberty® 280 SL Herbicide is below 32°F, the material should not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

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

**CONTAINER DISPOSAL:** *[1 and 2½ Gallon Containers Only]*

Empty containers should be triple rinsed (or equivalent), then offer for recycling or reconditioning; 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.

*[15 Gallons, 60 Gallons, 120 Gallons & Bulk Containers Only]*

This is a sealed returnable container to be used only for Liberty® 280 SL Herbicide. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

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### 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.

#### AGRICULTURAL USE REQUIREMENTS

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

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

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

#### GENERAL INFORMATION

Liberty® 280 SL Herbicide is a water-soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds in cotton.

#### IMPORTANT CROP SAFETY INFORMATION

##### READ BEFORE USING THIS PRODUCT

Liberty® 280 SL Herbicide is for use only on cotton tolerant to the active ingredient in this product. Bayer CropScience recommends use only on cotton designated as LibertyLink® or warranted by Bayer CropScience as being tolerant to Liberty® 280 SL Herbicide.

The basis of selectivity of Liberty® 280 SL Herbicide in cotton is the presence of a gene in LibertyLink® or other Bayer CropScience warranted cotton varieties which results in a plant that is tolerant to the active ingredient of Liberty® 280 SL Herbicide. Cotton not containing this gene will not be tolerant to Liberty® 280 SL Herbicide and severe injury may result.

Liberty® 280 SL Herbicide is to be applied either to cotton tolerant to the active ingredient in Liberty® 280 SL Herbicide as a post-emergent, over-the-top or directed foliar spray; or to conventional or other transgenic cotton not tolerant to the active ingredient in Liberty® 280 SL Herbicide using a hooded sprayer.

Use of Liberty® 280 SL Herbicide on cotton not designated as LibertyLink® or not warranted by Bayer CropScience may result in severe crop injury and/or yield loss.

Do not allow spray to contact foliage or green tissue of desirable vegetation other than cotton tolerant to the active ingredient in this product. This product may injure or kill all green vegetation contacted by the spray other than LibertyLink® cotton or other cotton varieties warranted by Bayer CropScience.

Bayer CropScience does not warrant the crop safety or weed control of this product if used on cotton varieties other than those designated as LibertyLink® or warranted by Bayer CropScience to safely withstand the application of Liberty® 280 SL Herbicide.

#### SPRAY DRIFT

**SENSITIVE AREAS:** The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

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

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

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

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

**INFORMATION ON DROPLET SIZE:**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions below).

Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver **MEDIUM** spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver **COARSE** spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

**CONTROLLING DROPLET SIZE:**

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH:**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT:**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

**SWATH ADJUSTMENT:**

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

**WIND:**

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

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

**TEMPERATURE AND HUMIDITY:**

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

**TEMPERATURE INVERSIONS:**

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

**CLEANING INSTRUCTIONS**

Before using Liberty® 280 SL Herbicide, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Equipment should be thoroughly rinsed using a strong detergent solution.

After using Liberty® 280 SL Herbicide, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink® or warranted by Bayer CropScience. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

### APPLICATION DIRECTIONS FOR USE ON COTTON

Liberty® 280 SL Herbicide may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to LibertyLink® cotton or other cotton varieties or cultivars warranted by Bayer CropScience as tolerant to Liberty® 280 SL Herbicide. Liberty® 280 SL Herbicide may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts tolerance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate-ammonium tolerance gene will be severely injured or killed if treated with this herbicide.

This product may be applied post-emergence to non-tolerant cotton varieties or cultivars by using equipment designed to minimize contact of the spray with the cotton foliage. See the *Application Methods on Non-Tolerant Cotton* section for selection of shielding equipment. **SEVERE INJURY OR DEATH MAY RESULT IF THE LIBERTY® 280 SL HERBICIDE CONTACTS THE FOLIAGE OR STEMS OF COTTON NOT TOLERANT TO LIBERTY® 280 SL HERBICIDE.**

Liberty® 280 SL Herbicide is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply Liberty® 280 SL Herbicide to actively growing weeds as described in the *Applications Methods* section to get maximum weed control. **THOROUGH SPRAY COVERAGE IS NECESSARY FOR BEST HERBICIDAL PERFORMANCE.** Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

Liberty® 280 SL Herbicide is rainfast four (4) hours after application to most weed species; therefore, rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control. Do not apply when wind causes drift to off-site vegetation as injury may occur. Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures or extended periods of cloudiness. To maximize weed control, do not cultivate from 5 days before an application to 7 days after an application.

Refer to the *Rate Recommendation Tables for Weed Control in Cotton* section of this label for selection of the proper rate dependent upon weed species present and size. A repeat application of Liberty® 280 SL Herbicide or tank mixes with a residual herbicide will be needed to control weeds that have not emerged at the time of application. See the *Tank Mix Recommendations for Use on Cotton* to select suitable tank mix partners.

### RESTRICTIONS TO THE DIRECTIONS FOR USE ON COTTON

1. **DO NOT** apply Liberty® 280 SL Herbicide to cotton in Florida, South of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
2. Up to three applications of Liberty® 280 SL Herbicide may be made to cotton per season at a maximum application rate of 29 fluid ounces per acre. **Do Not** apply more than **87 fluid ounces** (including all application timings) to cotton per season under this application scenario. **Do Not** apply Liberty® 280 SL Herbicide at any rate of 29 fluid ounces or less within **70 days** of cotton harvest.
3. If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of Liberty® 280 SL Herbicide at up to 43 fluid ounces per acre may be made to cotton. **Do Not** apply more than 43 fluid ounces of Liberty® 280 SL Herbicide in a single application under this use scenario. **Do Not** make more than **one application** per season at any rate greater than 29 fluid ounces. If a single application greater than 29 fluid ounces is made, a single subsequent application **not to exceed 29 fluid ounces** may be made to cotton. **Do Not** harvest cotton within 70 days after the last application. The seasonal total use rate under this scenario may not exceed **72 fluid ounces** of Liberty® 280 SL Herbicide. **Do Not** apply Liberty® 280 SL Herbicide at any rate greater than **29 fluid ounces** per acre within 70 days prior to cotton harvest.
4. **DO NOT** apply this product through any type of irrigation system.

#### 5. Rotational Crop Restrictions

Rotational Crop Planting Intervals Following Application of Liberty® 280 SL Herbicide to Cotton. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application in Days)
Crops with a current Liberty®, Ignite®, or Finale® registration: All Cotton, LibertyLink® Corn, LibertyLink® Soybeans, LibertyLink® Rice, LibertyLink® Sugarbeets, LibertyLink® Canola	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat).	70
All Other Crops	180

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## MIXING INSTRUCTIONS

Liberty® 280 SL Herbicide must be applied with calibrated spray equipment. Liberty® 280 SL is formulated to mix readily in water. Prior to adding Liberty® 280 SL to the spray tank, ensure that the spray tank is thoroughly cleaned and free of other pesticides that may injure cotton (see *Cleaning Instructions*). See the *Tank Mix Recommendation for Use in Cotton* to select suitable tank mix partners and for directions for testing compatibility of tank mixtures.

Mix the finished spray solution as follows:

1. Fill the spray tank half-full with water.
2. Start agitation.
3. If mixing with a dry flowable/wettable powder tank mix partner, prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry of dry materials to the spray tank.
4. If mixing with a liquid tank mix partner, add the liquid tank mix partner.
5. Complete filling the spray tank with water.
6. Add Liberty® 280 SL Herbicide and continue agitation.
7. If foaming occurs, use a silicon-based anti-foam agent.

Ensure that all spray system lines including pipes, booms, and screens have the correct concentration of the spray solution by flushing out the system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming.

If a tank mix partner is added, maintain agitation until the contents of the tank is sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

## APPLICATION TO COTTON TOLERANT TO LIBERTY® 280 SL HERBICIDE

### APPLICATION TIMING TO TOLERANT COTTON

Liberty® 280 SL Herbicide may be applied to cotton tolerant to Liberty® 280 SL Herbicide (including cotton seed propagation) from emergence up to the early bloom stage. Up to 43 fluid ounces of Liberty® 280 SL Herbicide per acre may be applied per application. Up to 87 fluid ounces per acre may be applied per year.

### APPLICATION METHODS TO TOLERANT COTTON

Refer to the *Rate Recommendation Tables for Weed Control in Cotton* to select the proper application rate based upon the weeds present and their size. Uniform and thorough spray coverage is required to achieve consistent weed control.

**Ground Application:** Apply Liberty® 280 SL Herbicide to tolerant cotton as an over-the-top foliar spray or as a spray directed to the lower one-third of the cotton stand. Liberty® 280 SL Herbicide should be applied broadcast in a minimum of 15 gallons of water per acre. Use a spray volume of 20 to 40 gallons per acre for dense weed/crop canopies so that thorough spray coverage will be obtained. Use nozzles that will develop no coarser than a medium spray pattern. Typical nozzles include flat fans, extended range flat fans, and Turbo TeeJet®. If Turbo TeeJet spray tips are used, a spray pressure of 60 or more pounds per square inch will be required to get thorough coverage of the weed foliage. Flood-jet nozzles, raindrop nozzles, controlled droplet application equipment or air-assisted (air injection) spray equipment do not provide adequate coverage characteristics; and therefore, are not recommended because weed control is likely to be reduced.

Do not apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target as injury to off-site vegetation may occur. Apply Liberty® 280 SL Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern to avoid drift and insure thorough coverage of the weeds. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

**Aerial Application:** Apply Liberty® 280 SL Herbicide with aerial equipment in a minimum of 10 gallons of water and at a height of 10 to 14 feet above cotton. Nozzle outlets should be below the trailing edge of the wing to avoid areas of turbulence. Use low-drift nozzles such as CP low drift nozzles, straight streams, or narrow angle flat fans (45 degrees or less). Utilize setups that will develop a Medium spray category as defined by ASAE S-572. Select a nozzle pressure that will generate a Medium spray category based upon the selected air speed and nozzle type. (See *Spray Drift* section).

## APPLICATION TO COTTON VARIETIES NOT TOLERANT TO LIBERTY® 280 SL HERBICIDE

When applying to cotton *not tolerant* to Liberty® 280 SL Herbicide, use a hooded applicator designed to minimize exposure of the cotton stand to the spray as described in the *Application Methods To Non-Tolerant Cotton* section of this label. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Do not allow spray to contact foliage or stem of desirable vegetation. This product may injure or kill any green vegetation exposed to the spray.

### APPLICATION TIMING TO NON-TOLERANT COTTON

Apply Liberty® 280 SL Herbicide to cotton from emergence up to the early bloom stage. Refer to the *Rate Recommendation Tables for Weed Control in Cotton* to select the proper application rate based on weeds present and their size. Uniform, thorough spray coverage is important to achieve consistent weed control.

## APPLICATION METHODS TO NON-TOLERANT COTTON

Application of Liberty® 280 SL Herbicide to cotton varieties **not tolerant** to Liberty® 280 SL Herbicide requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. **EXTREME CARE MUST BE EXERCISED TO AVOID EXPOSURE OF THE DESIRABLE VEGETATION TO THE SPRAY.**

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

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

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

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

## PRE-PLANT BURNDOWN APPLICATION TIMING

Liberty® 280 SL Herbicide may be applied as a pre-plant burndown to fields being prepared for planting of Liberty® 280 SL Herbicide tolerant or non-tolerant cotton. Up to 43 fluid ounces of Liberty® 280 SL Herbicide per acre may be applied in a single application. If more than 29 fl oz/A is used in a single application, the seasonal total may not exceed 72 fl oz/A, including all application timings.

## POST-HARVEST

Liberty® 280 SL Herbicide may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fluid ounces of Liberty® 280 SL Herbicide per acre may be applied in a single application to control larger weeds growing in the crop at the time of harvest. If more than 29 fl oz/A is used in a single application, the seasonal total may not exceed 72 fl oz/A, including all application timings. Refer to the "Restrictions to the Directions for use on Cotton" section of this label for appropriate rotational crop information.

## RATE RECOMMENDATION TABLES FOR WEED CONTROL IN COTTON

Liberty® 280 SL is formulated with a surfactant to provide optimum herbicide performance. Apply Liberty® 280 SL Herbicide at rates from 22 to 29 fluid ounces per acre. The rate of Liberty® 280 SL Herbicide in fluid ounces of formulated product per acre to be used for the control of weeds at specific heights is shown in the following tables. Increase the rate to 29 fluid ounces per acre for weeds exceeding the maximum weed height controlled with 22 fluid ounces per acre. **If environmental conditions prevent timely applications, a single application of Liberty® 280 SL Herbicide at up to 43 fl oz/A may be made. If more than 29 fl oz/A is used in any single application, the seasonal total may not exceed 72 fl oz/A, including all application timings.** In weed populations with mixed species, select the highest rate required to control all the species. Volunteer LibertyLink® crop plants (corn, rice, cotton, soybeans, sugarbeets) from the previous season will not be controlled by applications of Liberty® 280 SL Herbicide.

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## Broadleaf Weeds Controlled by Liberty® 280 SL Herbicide

Weed Species	Maximum Weed Height (inches)	
	22 Fl. Oz./A	29 Fl. Oz./A
Amaranth, Palmer	3	4
Anoda, spurred	3	5
Beggarweed, Florida	3	5
Black medic	5	7
Blueweed, Texas	5	7
Buckwheat, wild	6	7
Buffalobur	6	7
Burcucumber	8	10
Carpetweed	4	6
Chickweed, common	6	8
Cocklebur, common	6	14
Cocklebur, common (ALS resistant)	6	14
Copperleaf, hophornbeam	4	6
Cotton, volunteer <sup>1,2</sup>	6	8
Croton, tropic	3	5
Croton, woolly	2	4
Eclipta	4	6
Devil's claw	2	4
Fleabane, annual	6	8
Galinsoga, hairy	6	8
Galinsoga, small flower	6	7
Groundcherry, cutleaf	4	5
Geranium, cutleaf	4	6
Horsenettle, Carolina <sup>3</sup>	2	4
Java bean	4	6
Jimsonweed	6	10
Knotweed	3	5
Kochia	4	6
Kochia (ALS resistant)	4	6
Ladysthumb	6	14
Lambsquarters, common	4	6
Lambsquarters, common (triazine resistant)	4	6
Mallow, common	4	6
Mallow, Venice	6	8
Marestail <sup>3</sup>	NR	6-12
Marshelder, annual	4	6
Morningglory, entireleaf	6	8
Morningglory, ivyleaf	6	8
Morningglory, pitted	6	8
Morningglory, sharppod	2	4
Morningglory, smallflower	4	6
Morningglory, tall	6	8
Mustard, wild	4	6
Nightshade, black	4	6

Weed Species	Maximum Weed Height (inches)	Maximum Weed Height (inches)
	22 Fl. Oz/A	29 Fl. Oz/A
Nightshade, eastern black	6	8
Nightshade, hairy	6	8
Pennycress	4	6
Pigweed, redroot	3	4
Pigweed, redroot (ALS resistant)	3	4
Pigweed, redroot (triazine resistant)	3	4
Pigweed, prostrate	3	4
Pigweed, spiny	3	4
Pigweed, smooth	3	4
Pigweed, tumble	3	4
Primrose, cutleaf evening	12	16
Puncturevine	4	6
Purslane, common	2	4
Pusley, Florida	*	3
Ragweed, common	6	10
Ragweed, common(ALS resistant)	6	10
Ragweed, giant	6	12
Ragweed, giant(ALS resistant)	6	12
Senna coffee	4	6
Sesbania, hemp	6	8
Shepherd's-Purse	6	8
Sicklepod	4	6
Sida, prickly	4	5
Smartweed, Pennsylvania	6	14
Smellmelon	4	6
Sowthistle, annual	6	8
Soybeans, volunteer <sup>1,2</sup>	6	8
Spurge, prostrate	2	4
Spurge, spotted	2	4
Starbur, bristly	4	6
Sunflower, common	6	14
Sunflower, common(ALS resistant)	6	8
Sunflower, prairie	3	5
Sunflower, volunteer	6	10
Thistle, Russian <sup>3</sup>	NR	6 - 12
Velvetleaf	3	4
Waterhemp, common	4	5
Waterhemp, common(ALS resistant)	4	5
Waterhemp, tall	4	5

\* Indicates suppression

<sup>1</sup> Volunteer LibertyLink® crops or soybeans from the previous season will not be controlled.

<sup>2</sup> Cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non- LibertyLink® crops.

<sup>3</sup> Two applications of Liberty® 280 SL Herbicide may be required for control of Carolina horsenettle.

<sup>4</sup> Marestalk may require sequential applications for complete control.

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## Grass Weeds Controlled by Liberty® 280 SL Herbicide

Weed Species	Maximum Weed Height (inches)	Maximum Weed Height (inches)
	22 Fl. Oz./A	29 Fl. Oz./A
Barnyardgrass	3	5
Bluegrass, annual	3	5
Corn, volunteer <sup>1,2</sup>	10	12
Crabgrass, large <sup>3</sup>	3	5
Crabgrass, smooth <sup>3</sup>	3	5
Cupgrass, woolly	6	12
Foxtail, bristly	6	8
Foxtail, giant	6	12
Foxtail, giant (ALS resistant)	6	12
Foxtail, green	6	12
Foxtail, robust purple	6	8
Foxtail, yellow <sup>3</sup>	3	5
Goosegrass <sup>4</sup>	2	3
Johnsongrass, seedling	3	5
Junglerice,	3	5
Millet, wild-proso	6	7
Millet, proso volunteer	6	7
Oat, wild	3	4
Panicum, fall	3	5
Panicum, Texas	4	6
Rice, red	4	6
Rice, volunteer <sup>1,2</sup>	4	6
Sandbur, field <sup>3</sup>	*	2
Shattercane	6	8
Shattercane(ALS resistant)	6	8
Signalgrass, broadleaf	3	5
Sprangletop	4	6
Sorghum, volunteer	6	8
Stinkgrass	4	6
Witchgrass	4	6

\* Indicates suppression

<sup>1</sup> Volunteer LibertyLink® crops from the previous season will not be controlled.

<sup>2</sup> A timely cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non- LibertyLink® crops.

<sup>3</sup> For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to tiller initiation.

<sup>4</sup> A sequential application may be necessary.

## INSTRUCTIONS FOR BIENNIAL/PERENNIAL WEEDS

Liberty® 280 SL Herbicide applied at 29 fluid ounces per acre may control or suppress the biennial and perennial weed species shown in the following table. Control of biennial and perennial weeds may be enhanced with a second application of Liberty® 280 SL Herbicide or by a tank mix with the herbicides specified on this label.

### Biennial and Perennial Weeds Controlled with Liberty® 280 SL Herbicide

Weed Species	29 Fluid Ounce/Acre	22 Fluid Ounce/Acre followed by 22 Fluid Ounce/Acre
Alfalfa	*	✓
Artichoke, Jerusalem	*	✓
Bermudagrass	*	✓
Bindweed, field	*	✓
Bindweed, hedge	*	✓
Bluegrass, Kentucky	*	✓
Bluestem, Texas	*	✓
Bromegrass, smooth	*	✓
Burdock	*	✓
Bursage, woollyleaf	*	✓
Chickweed, Mouse-ear	*	✓
Clover, Alsike	*	✓
Clover, red	*	✓
Dandelion	*	✓
Dock, smooth	*	✓
Dogbane, hemp	*	*
Goldenrod, gray	*	*
Johnsongrass, rhizome	*	✓
Milkweed, common	*	*
Milkweed, honeyvine	*	*
Nightshade, silverleaf	*	✓
Nutsedge, purple	*	*
Nutsedge, yellow	*	*
Orchardgrass	*	✓
Poinsettia, wild	*	✓
Pokeweed	*	✓
Thistle, bull	*	✓
Thistle, Canada	*	✓
Timothy	*	*

✓ Indicates control

\* Indicates suppression

#### TANK MIX RECOMMENDATIONS FOR USE ON COTTON

Liberty® 280 SL Herbicide may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Liberty® 280 SL Herbicide cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rate recommendations and other restrictions.

#### TOLERANT COTTON

For cotton *tolerant* to Liberty® 280 SL Herbicide, Dual Magnum® or STAPLE® Herbicide may be tank-mixed with Liberty® 280 SL Herbicide and applied over-the-top post-emergence to enhance weed control and/or provide residual control.

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#### ALL COTTON TYPES

The following herbicides may be mixed with Liberty® 280 SL Herbicide for hooded-spray application to enhance weed control and/or provide residual control:

Caparol® 4L Herbicide	Direx® 4L Herbicide	Prowl® 3.3EC Herbicide
Cotoran® 4L Herbicide	Direx® 80DF Herbicide	Staple® Herbicide
Cotoran® DF herbicide	Karmex® DF Herbicide	AIM™ Herbicide
Glyphosate	Pendimex™ 3.3 Herbicide	

#### COMPATIBILITY TESTING

If Liberty® 280 SL Herbicide is to be mixed with pesticide products labelled for cotton other than those listed above, test the compatibility of the intended tank mixture to mixing prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1-quart jar.
2. For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
3. For each 16 fluid ounces of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
4. For each 16 fluid ounces of Liberty® 280 SL Herbicide to be applied per acre, add 0.5 teaspoon to the jar.
5. After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
6. Let the mixture stand for 15 minutes, and evaluate the solution for uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, do not use the mixture in a spray tank.
7. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the *Storage and Disposal* section of this label.

### APPLICATION DIRECTIONS FOR USE ON FIELD CORN, SILAGE CORN AND SOYBEANS

**THOROUGH SPRAY COVERAGE IS VERY IMPORTANT.** Visual effects and control from Liberty® 280 SL Herbicide applications occur within 2 to 4 days after application under good growing conditions. Liberty® 280 SL Herbicide works best when weeds are actively growing. To maximize weed control, no cultivation should occur in the period from 5 days before an application to 5 days after an application of Liberty® 280 SL Herbicide.

#### APPLICATION TIMING

Liberty® 280 SL Herbicide is a foliar-active material with little or no soil-residual activity. Best results are obtained when applications are made to actively growing weeds. Weeds that emerge after application will not be controlled. Applications of Liberty® 280 SL Herbicide following the use of soil-applied insecticides will not injure corn.

Applications of Liberty® 280 SL Herbicide on corn may be made with over-the-top broadcast or drop nozzles from emergence through the 5<sup>th</sup> leaf collar growth stage (i.e. V-5, 5 developed collars). For corn in the V-5 growth stage (~24" tall), only apply Liberty® 280 SL Herbicide using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks.

Applications of Liberty® 280 SL Herbicide on soybeans may be made from emergence up to but not including the bloom growth stage.

Liberty® 280 SL Herbicide is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may necessitate retreatment or may result in reduced weed control. Applications should be made between dawn and two hours before sunset to avoid the possibility of reduced control of lambsquarters and velvetleaf. Do not apply when wind causes drift to off-site vegetation as injury may occur. Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Apply Liberty® 280 SL Herbicide at rates of 20 to 24 fluid ounces per acre. Refer to the *Rate Recommendation Tables for Weed Control* for selection of the proper rate dependent upon weed species and size. A repeat application of Liberty® 280 SL Herbicide or a tank mix application with a residual herbicide selected from the tank mix partners listed on this label will be needed to control weeds that have not yet emerged at the time of application.

#### RESTRICTIONS TO THE DIRECTIONS FOR USE ON FIELD CORN, SILAGE CORN AND SOYBEANS

1. **DO NOT** apply more than two applications of Liberty® 280 SL Herbicide to the corn or the soybean crop. **DO NOT** apply more than 44 fluid ounces of Liberty® 280 SL Herbicide per acre on corn or soybeans per growing season.
2. **DO NOT** apply Liberty® 280 SL Herbicide within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
3. **DO NOT** apply Liberty® 280 SL Herbicide within 70 days of harvesting soybean seed.
4. **DO NOT** harvest treated green soybean plants for forage and hay feed for livestock.
5. **Rotational Crop Restrictions**

Rotational Crop Planting Intervals Following Application of Liberty® 280 SL Herbicide to Corn and Soybean. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application in Days)
Crops with a current Liberty®, Ignite®, or Finale® registration: All Cotton, LibertyLink® Corn, LibertyLink® Soybeans, LibertyLink® Rice, LibertyLink® Sugarbeets, LibertyLink® Canola	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat).	70
All Other Crops	180

6. **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
7. **DO NOT** apply Liberty® 280 SL Herbicide if soybeans or corn show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
8. **DO NOT** apply this product through any type of irrigation system.
9. Volunteer LibertyLink® crop plants from the previous season will not be controlled by an application of Liberty® 280 SL Herbicide.

#### SPRAY ADDITIVES

For use on corn only, Liberty® 280 SL Herbicide must be applied with ammonium sulfate (AMS). It is recommended to use only fine feed grade or spray grade AMS at 3 pounds per acre (17 lbs/100 gallons). However, the rate of AMS can be reduced to 1.5 pounds per acre (8.5 lbs/100 gallons) under hot environmental conditions to reduce potential leaf burn.

Liberty® 280 SL Herbicide is formulated to provide optimum herbicidal performance. Use of additional surfactants or crop oils will not enhance weed control.

#### MIXING INSTRUCTIONS

Liberty® 280 SL Herbicide must be applied with properly calibrated and clean equipment. Liberty® 280 SL Herbicide is specially formulated to mix readily in water. Prior to adding Liberty® 280 SL Herbicide to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

Mix Liberty® 280 SL Herbicide with water to make a finished spray solution as follows:

1. Fill the spray tank half full with water.
2. Start agitation.
3. Prepare a slurry of the proper amount of dry flowable/wettable powder tank mix partners in a small amount of water.
4. Add the slurry of dry materials to the spray tank.
5. Add the appropriate amount of ammonium sulfate (AMS) (for corn use only) to the spray tank.
6. Add the proper amount of liquid tank mix partners.
7. Complete filling the spray tank with water.
8. Add the proper amount of Liberty® 280 SL Herbicide and continue agitation.
9. If foaming occurs, use a silicone-based antifoam agent.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of Liberty® 280 SL Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If tank mix partners recommended on this label are added, maintain good agitation at all times until contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

#### APPLICATION METHOD

Refer to the *Rate Recommendation Tables for Weed Control* in the following section for the proper application rates. Uniform, thorough spray coverage is important to achieve consistent weed control.

**Ground Application:** Liberty® 280 SL Herbicide should be applied broadcast in a minimum of 15 gallons of water per acre. Under dense weed/crop canopies, 20 to 40 gallons of water per acre should be used so that thorough spray coverage will be obtained.

Apply Liberty® 280 SL Herbicide using 80-degree or 110-degree flat-fan nozzles. Select a spray pressure between 30 to 60 pounds per square inch (psi) measured at the nozzle which will achieve a droplet size of about 300 microns. If Turbo TeeJet® spray tips are used, a spray pressure of 60 or more pounds per square inch will be required to get thorough coverage of the weed foliage. Flood-jet nozzles, raindrop nozzles, controlled droplet application equipment, or air-assisted spray equipment do not provide adequate coverage characteristics; and therefore, are not recommended because weed control is likely to be reduced.

DO NOT apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Liberty® 280 SL Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

**Aerial Application:** Use 24 fluid ounces of Liberty® 280 SL Herbicide per acre for aerial application. Do not apply more than 43 fl. oz. of Liberty® 280 SL Herbicide per acre per growing season. Poor coverage will result in reduced weed control. Liberty® 280 SL Herbicide should be applied in a minimum of 5 gallons per acre with spray nozzle tips and sufficient pressure to provide a uniform pattern and median droplet size of 350 to 450 microns. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application during conditions when uniform coverage cannot be obtained or where excessive spray drift may occur. Do not apply when wind causes drift to off-site vegetation.

#### **RATE RECOMMENDATION TABLES FOR WEED CONTROL IN CORN**

Apply Liberty® 280 SL Herbicide at rates of 20 to 24 fluid ounces per acre. Rates in ounces of formulated product per acre for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, apply at a rate needed for the species that requires the highest rate.

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Grass Weeds Controlled with Liberty® 280 SL Herbicide Plus Ammonium Sulfate in Corn

Weed Species	Maximum Weed Height or Diameter (Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Barnyardgrass	**	3	4
Bluegrass, annual	**	3	4
Corn, volunteer <sup>1,2</sup>	**	10	12
Crabgrass, large <sup>3</sup>	**	3	4
Crabgrass, smooth <sup>3</sup>	**	3	4
Cupgrass, woolly	4	6	8
Foxtail, bristly	3	6	8
Foxtail, giant	3	6	8
Foxtail, giant (ALS resistant)	3	6	8
Foxtail, green	3	6	8
Foxtail, robust purple	3	6	8
Foxtail, yellow <sup>3</sup>	**	3	4
Goosegrass <sup>4</sup>		2	3
Johnsongrass, seedling	2	3	8
Junglerice		3	5
Millet, wild-proso	2	6	7
Millet, proso volunteer	2	6	7
Oat, wild <sup>3</sup>	**	3	4
Panicum, fall	2	3	4
Panicum, Texas	2	4	5
Rice, red	2	4	5
Rice, volunteer <sup>1,2</sup>		4	6
Sandbur, field <sup>3</sup>	**	**	2
Shattercane	**	6	8
Shattercane (ALS resistant)	**	6	8
Signalgrass, broadleaf	2	3	5
Sprangletop	2	4	5
Sorghum, volunteer	**	6	7
Stinkgrass	2	4	5
Witchgrass	2	4	5

\*\* Indicates suppression

<sup>1</sup> Volunteer LibertyLink® crops from the previous season will not be controlled.

<sup>2</sup> A timely cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non-LibertyLink® crops.

<sup>3</sup> For best control of yellow foxtail, treat prior to tiller initiation.

<sup>4</sup> A sequential application may be necessary.

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Broadleaf Weeds Controlled with Liberty® 280 SL Herbicide Plus Ammonium Sulfate in Corn

Weed Species	Maximum Weed Height or Diameter		
	(Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Amaranth, Palmer <sup>4</sup>	**	3	6
Anoda, spurred		3	5
Beggarweed, Florida	**	4	5
Black medic	3	5	6
Blueweed, Texas		5	7
Buckwheat, wild	3	6	7
Buffalobur	3	6	7
Burcucumber	3	6	8
Carpetweed	**	4	6
Chickweed, common	3	6	7
Cocklebur, common	3	6	8
Cocklebur, common (ALS resistant)	3	6	8
Copperleaf, hophornbeam	2	4	6
Cotton, volunteer <sup>1,2</sup>		6	6
Croton, tropic		3	4
Croton, woolly		2	3
Eclipta	2	4	6
Devil's claw		2	3
Fleabane, annual	3	6	8
Galinsoga, hairy	3	6	8
Galinsoga, small flower	3	6	7
Groundcherry, cutleaf	2	4	5
Geranium, cutleaf	2	4	6
Horsenettle, Carolina <sup>3</sup>		2	3
Java bean	2	4	6
Jimsonweed	3	6	8
Knotweed		3	4
Kochia <sup>4</sup>	2	4	6
Kochia (ALS resistant) <sup>4</sup>	2	4	6
Ladysthumb	3	6	8
Lambsquarters, common <sup>4</sup>	2	4	6
Lambsquarters, common (triazine resistant) <sup>4</sup>	2	4	6
Mallow, common	**	4	6
Mallow, Venice	3	6	7
Marestail <sup>3</sup>	NR	NR	6-12
Marshelder, annual	**	4	6
Morningglory, entireleaf <sup>4</sup>	2	6	7
Morningglory, ivyleaf <sup>4</sup>	3	6	7
Morningglory, pitted <sup>4</sup>	2	6	7
Morningglory, sharppod <sup>4</sup>		2	3
Morningglory, smallflower <sup>4</sup>	2	4	6
Morningglory, tall <sup>4</sup>	3	6	7
Mustard, wild	3	4	6
Nightshade, black		4	6
Nightshade, eastern black	3	6	8

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Weed Species	Maximum Weed Height or Diameter (Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Nightshade, hairy	3	6	8
Pennycress	2	4	6
Pigweed, redroot <sup>4</sup>	2	3	4
Pigweed, redroot (ALS resistant) <sup>4</sup>	2	3	4
Pigweed, redroot (triazine resistant)	2	3	4
Pigweed, prostrate <sup>4</sup>	**	3	4
Pigweed, spiny <sup>4</sup>	**	3	4
Pigweed, smooth <sup>4</sup>	**	3	4
Pigweed, tumble <sup>4</sup>	**	3	4
Primrose, cutleaf evening		12	14
Puncturevine	**	4	6
Purslane, common		2	4
Pusley, Florida		**	3
Ragweed, common	3	6	8
Ragweed, common (ALS resistant)	3	6	8
Ragweed, giant	3	6	8
Ragweed, giant (ALS resistant)	3	6	8
Senna coffee		4	6
Sesbania, hemp	3	6	8
Shepherd's-Purse	3	6	8
Sicklepod	3	4	6
Sida, prickly	3	4	5
Smartweed, Pennsylvania	3	6	8
Smellmelon	2	4	6
Sowthistle, annual	3	6	7
Soybeans, volunteer <sup>1,2</sup>		6	8
Spurge, prostrate		2	4
Spurge, spotted		2	4
Starbur, bristly		4	6
Sunflower, common	3	6	8
Sunflower, common (ALS resistant)	3	6	8
Sunflower, prairie		3	5
Sunflower, volunteer	3	6	8
Thistle, Russian <sup>3</sup>	**	NR	6-12
Velvetleaf <sup>4</sup>	3	3	4
Waterhemp, common <sup>4</sup>	2	4	5
Waterhemp, common (ALS resistant) <sup>4</sup>	2	4	5
Waterhemp, tall <sup>4</sup>	2	4	5

\*\* indicates suppression

<sup>1</sup>Volunteer LibertyLink® crops from the previous season will not be controlled.

<sup>2</sup>Cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non-LibertyLink® crops.

<sup>3</sup>May require sequential applications for control.

<sup>4</sup>Tank mixing with atrazine may enhance weed control of this species.

NR Indicates not recommended.

18/28

Grass Weeds Controlled with Liberty® 280 SL Herbicide Plus Ammonium Sulfate in Soybean

Weed Species	Maximum Weed Height or Diameter (Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Barnyardgrass	**	3	4
Bluegrass, annual	**	3	4
Corn, volunteer <sup>1,2</sup>	**	10	12
Crabgrass, large <sup>3</sup>	**	3	4
Crabgrass, smooth <sup>3</sup>	**	3	4
Cupgrass, woolly	4	6	8
Foxtail, bristly	3	6	8
Foxtail, giant	3	6	8
Foxtail, giant (ALS resistant)	3	6	8
Foxtail, green	3	6	8
Foxtail, robust purple	3	6	8
Foxtail, yellow <sup>3</sup>	**	3	4
Goosegrass <sup>4</sup>		2	3
Johnsongrass, seedling	2	3	8
Junglerice		3	5
Millet, wild-proso	2	6	7
Millet, proso volunteer	2	6	7
Oat, wild <sup>3</sup>	**	3	4
Panicum, fall	2	3	4
Panicum, Texas	2	4	5
Rice, red	2	4	5
Rice, volunteer <sup>1,2</sup>		4	6
Sandbur, field <sup>3</sup>	**	**	2
Shattercane	**	6	8
Shattercane (ALS resistant)	**	6	8
Signalgrass, broadleaf	2	3	5
Sprangletop	2	4	5
Sorghum, volunteer	**	6	7
Stinkgrass	2	4	5
Witchgrass	2	4	5

\*\* Indicates suppression

<sup>1</sup> Volunteer LibertyLink® crops from the previous season will not be controlled.

<sup>2</sup> A timely cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non-LibertyLink® crops.

<sup>3</sup> For best control of yellow foxtail, treat prior to tiller initiation.

<sup>4</sup> A sequential application may be necessary.

19/28

Broadleaf Weeds Controlled with Liberty® 280 SL Herbicide Plus Ammonium Sulfate in Soybean

Weed Species	Maximum Weed Height or Diameter (Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Amaranth, Palmer	**	3	6
Anoda, spurred		3	5
Beggarweed, Florida	**	4	5
Black medic	3	5	6
Blueweed, Texas		5	7
Buckwheat, wild	3	6	7
Buffalobur	3	6	7
Burcucumber	3	6	8
Carpetweed	**	4	6
Chickweed, common	3	6	7
Cocklebur, common	3	6	8
Cocklebur, common (ALS resistant)	3	6	8
Copperleaf, hophornbeam	2	4	6
Cotton, volunteer <sup>1,2</sup>		6	6
Croton, tropic		3	4
Croton, woolly		2	3
Eclipta	2	4	6
Devil's claw		2	3
Fleabane, annual	3	6	8
Galinsoga, hairy	3	6	8
Galinsoga, small flower	3	6	7
Groundcherry, cutleaf	2	4	5
Geranium, cutleaf	2	4	6
Horsenettle, Carolina <sup>3</sup>		2	3
Java bean	2	4	6
Jimsonweed	3	6	8
Knotweed		3	4
Kochia	2	4	6
Kochia (ALS resistant)	2	4	6
Ladysthumb	3	6	8
Lambsquarters, common	2	4	6
Lambsquarters, common (triazine resistant)	2	4	6
Mallow, common	**	4	6
Mallow, Venice	3	6	7
Marestail <sup>3</sup>	NR	NR	6-12
Marshelder, annual	**	4	6
Morningglory, entireleaf	2	6	7
Morningglory, ivyleaf	3	6	7
Morningglory, pitted	2	6	7
Morningglory, sharppod		2	3
Morningglory, smallflower	2	4	6
Morningglory, tall	3	6	7
Mustard, wild	3	4	6
Nightshade, black		4	6
Nightshade, eastern black	3	6	8

Weed Species	Maximum Weed Height or Diameter (Inches)		
	20 Fl. Oz./A	22 Fl. Oz./A	24 Fl. Oz./A
Nightshade, hairy	3	6	8
Pennycress	2	4	6
Pigweed, redroot	2	3	4
Pigweed, redroot (ALS resistant)	2	3	4
Pigweed, redroot (triazine resistant)	2	3	4
Pigweed, prostrate	**	3	4
Pigweed, spiny	**	3	4
Pigweed, smooth	**	3	4
Pigweed, tumble	**	3	4
Primrose, cutleaf evening		12	14
Puncturevine	**	4	6
Purslane, common		2	4
Pusley, Florida		**	3
Ragweed, common	3	6	8
Ragweed, common (ALS resistant)	3	6	8
Ragweed, giant	3	6	8
Ragweed, giant (ALS resistant)	3	6	8
Senna coffee		4	6
Sesbania, hemp	3	6	8
Shepherd's-Purse	3	6	8
Sicklepod	3	4	6
Sida, prickly	3	4	5
Smartweed, Pennsylvania	3	6	8
Smellmelon	2	4	6
Sowthistle, annual	3	6	7
Soybeans, volunteer <sup>1,2</sup>		6	8
Spurge, prostrate		2	4
Spurge, spotted		2	4
Starbur, bristly		4	6
Sunflower, common	3	6	8
Sunflower, common (ALS resistant)	3	6	8
Sunflower, prairie		3	5
Sunflower, volunteer	3	6	8
Thistle, Russian <sup>3</sup>	**	NR	6-12
Velvetleaf	3	3	4
Waterhemp, common	2	4	5
Waterhemp, common (ALS resistant)	2	4	5
Waterhemp, tall	2	4	5

\*\* indicates suppression

<sup>1</sup>Volunteer LibertyLink® crops from the previous season will not be controlled.

<sup>2</sup>Cultivation 7 to 10 days after application and/or retreatment 10-21 days after the first application is recommended for controlling dense clumps of volunteer non-LibertyLink® crops.

<sup>3</sup>May require sequential applications for control.

NR Indicates not recommended.

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### INSTRUCTIONS FOR BIENNIAL/PERENNIAL WEEDS IN CORN AND SOYBEANS

Liberty® 280 SL Herbicide applied at 24 fluid ounces per acre will provide top-growth control or suppression of the biennial/perennial weed species shown in the following table. A second application of Liberty Herbicide 280 SL at 20 fluid ounces per acre or a tank mix with other herbicides selected from those listed on this label is required for control.

#### *Biennial/Perennial Weeds Suppressed or Controlled with Liberty® 280 SL Herbicide Plus Ammonium Sulfate*

Weed Species	24 Fluid Ounce/Acre	22 Fluid Ounce/Acre followed by 22 Fluid Ounce/Acre
Alfalfa	**	✓
Artichoke, Jerusalem	**	✓
Bermudagrass	**	✓
Bindweed, field	**	✓
Bindweed, hedge	**	✓
Bluegrass, Kentucky	**	✓
Blueweed, Texas	**	✓
Bromegrass, smooth	**	✓
Burdock	**	✓
Bursage, woollyleaf	**	✓
Chickweed, Mouse-ear	**	✓
Clover, Alsike	**	✓
Clover, red	**	✓
Dandelion	**	✓
Dock, smooth	**	✓
Dogbane, hemp	**	**
Goldenrod, gray	**	**
Johnsongrass, rhizome	**	✓
Milkweed, common	**	**
Milkweed, honeyvine	**	**
Muhly, wirestem	**	**
Nightshade, silverleaf	**	✓
Nutsedge, purple	**	**
Nutsedge, yellow	**	**
Orchardgrass	**	✓
Poinsettia, wild	**	✓
Pokeweed	**	✓
Quackgrass	**	**
Thistle, bull	**	✓
Thistle, Canada	**	✓
Timothy	**	**

✓ Indicates control

\*\* Indicates suppression

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### RATE RECOMMENDATION TABLE FOR WEED CONTROL IN CALIFORNIA

Apply Liberty® 280 SL Herbicide at rates of 14 to 24 fluid ounces per acre. Rates in ounces of formulated product per acre for the control of weeds in California at selected heights are shown in the following table. In weed populations with mixed species, apply at a rate needed for the species that requires the highest rate.

#### Weeds Controlled in California with Liberty® 280 SL Herbicide Plus Ammonium Sulfate

Weed Species	Maximum Weed Height (inches)		
	14 Fl. Oz./A	20 Fl. Oz./A	24 Fl. Oz./A
Barnyardgrass	**	3	4
Cocklebur, common	8	12	14
Cocklebur, common (ALS resistant)	8	12	14
Foxtail, bristly	4	6	8
Foxtail, giant	6	10	11
Foxtail, giant (ALS resistant)	6	10	11
Foxtail, green	6	10	11
Foxtail, robust purple	4	6	8
Foxtail, yellow	**	3 <sup>1</sup>	4 <sup>1</sup>
Henbit	**	2	4
Johnsongrass, seedling	2	6	8
Lambsquarters, common	2	4	5
Lambsquarters, common (triazine resistant)	2	4	5
Malva, common	**	2	4
Morningglory, entireleaf	2	6	7
Morningglory, ivyleaf	4	6	7
Morningglory, pitted	2	6	7
Morningglory, smallflower	2	4	5
Morningglory, tall	4	6	7
Nettle, burning	**	2	4
Nightshade, black	**	4	6
Panicum, fall	2	3	4
Pigweed, redroot	2	4	5
Pigweed, redroot (ALS resistant)	2	4	5
Pigweed, redroot (triazine resistant)	2	4	5
Pigweed, tumble	**	4	5
Purslane, common	**	2	4
Rice, Jungle	**	2	4
Sowthistle, annual	3	6	7
Sunflower, common	8	12	14
Sunflower, common (ALS resistant)	8	12	14
Sunflower, volunteer	6	8	9
Velvetleaf	3	5	6

\*\* indicates suppression

<sup>1</sup>. Yellow foxtail must be treated prior to tiller initiation for best results.

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**TANK MIX RECOMMENDATIONS FOR LIBERTY® 280 SL HERBICIDE**

Liberty® 280 SL Herbicide (alone and with a tank mix partner listed on this label) may be applied following any corn or soybean pre-plant incorporated or preemergence herbicide applications. When using Liberty® 280 SL Herbicide in tank mix combinations, carefully follow the "Direction of Use" labeling of the selected partner. Do not use a tank mix partner that has already been applied as a pre-plant incorporated or preemergence herbicide unless the "Directions of Use" labeling of that partner allows sequential applications of it to the same crop.

**Corn Tank Mix Herbicide Partners for Liberty® 280 SL Herbicide**

To enhance weed control and/or provide residual control in corn, Liberty® 280 SL Herbicide may be mixed with the following herbicides.

2,4-D	Confidence® Herbicide	Permit® Herbicide
Accent® Herbicide	Confidence® Xtra 5.6L Herbicide	Prowl® 3.3 EC Herbicide
Accent® Gold™ Herbicide	Distinct™ Herbicide	Pursuit® Herbicide
Atrazine	Dual II Magnum™ Herbicide	Python® WDG Herbicide
Banvel® Herbicide	Frontier® 6.0 Herbicide	Scorpion® III Herbicide
Basagran® Herbicide	FulTime™ Herbicide	Shotgun® Herbicide
Basis Gold® Herbicide	Guardman® Herbicide	Spirit® Herbicide
Beacon® Herbicide	Harness® Herbicide	Sterling™ Plus
Bicep Lite II Magnum® Herbicide	Harness® Xtra Herbicide	Stinger® Herbicide
Bicep II Magnum® Herbicide	Harness® Xtra 5.6L Herbicide	Surpass® EC Herbicide
Buctril® Herbicide	Hornet® Herbicide	Surpass® 100 Herbicide
Buctril® 4EC Herbicide	Laddok® S-12 Herbicide	Topnotch™ Herbicide
Buctril® + atrazine Herbicide	LeadOff™ Herbicide	Tough® 5 EC Herbicide
Callisto™ Herbicide	Lightning™ Herbicide	Volley™ Herbicide
Celebrity™ Herbicide	Marksman® Herbicide	
Clarity® Herbicide	NorthStar™ Herbicide	

Apply tank mixes of Lightning™ and Pursuit® only to corn designated as Clearfield™ tolerant and LibertyLink® or warranted by Bayer CropScience as being tolerant to Liberty® 280 SL Herbicide.

Applications of 2,4-D, Banvel® Herbicide, Celebrity™ Herbicide, Clarity® Herbicide, Distinct™ Herbicide, or Marksman® Herbicide, and NorthStar™ Herbicide to corn during periods of rapid growth may result in temporary leaning or green snap. If these symptoms occur, cultivation should be delayed until after corn is growing normally to avoid breakage. Tank mixing with Prowl® 3.3 EC Herbicide may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail, and volunteer corn.

**Corn Tank Mix Insecticide Partners for Liberty® 280 SL Herbicide**

To provide weed and insect control in corn, Liberty® 280 SL Herbicide may be mixed with the following insecticides:

Ambush® Insecticide	Furadan® 4F Insecticide	Pounce® 3.2EC Insecticide
Asana® XL Insecticide	Lorsban® 4E Insecticide	Warrior™ Insecticide
Baythroid® 2 Insecticide		

**Soybean Tank Mix Herbicide Partners for Liberty® 280 SL Herbicide**

To enhance weed control and/or provide residual control in soybeans, Liberty® 280 SL Herbicide may be mixed with the following herbicides:

Basagran® Herbicide	Poast Plus® Herbicide	Storm® Herbicide
Blazer® Herbicide	Prism® Herbicide	
Firstrate® Herbicide	Pursuit® Herbicide	
Flexstar® HL Herbicide	Raptor™ Herbicide	
Frontier® 6.0 Herbicide	Reflex® Herbicide	
Fusilade® DX Herbicide	Resource® Herbicide	
Fusion® Herbicide	Scepter® Herbicide	
Poast® HC Herbicide	Select® 2EC Herbicide	

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**APPLICATION DIRECTIONS FOR USE IN FIELD CORN SEED AND SOYBEAN SEED PROPAGATION**

Liberty® 280 SL Herbicide may be applied to select out susceptible "segregates", i.e., corn and soybean plants that are not tolerant to glufosinate-ammonium during seed propagation. Inbred lines, plants not possessing glufosinate-ammonium tolerance, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect corn and soybean plants from coming into contact with the herbicide application.

**Rate Recommendations for Seed Production**

**Corn:** For the selection of tolerant corn "segregates", Liberty®280 SL Herbicide may be applied at up to 24 fluid ounces per acre plus ammonium sulfate (AMS) at 3 pounds per acre when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars. A second treatment of 20 fluid ounces per acre plus AMS at 3 pounds per acre may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall.

**Soybeans:** For the selection of tolerant soybean "segregates", Liberty® 280 SL Herbicide may be applied at up to 24 fluid ounces per acre when soybean is in the third trifoliolate stage. A second treatment of 20 fluid ounces per acre may be applied up to but not including the bloom growth stage of soybean.

**APPLICATION DIRECTIONS FOR USE ON CANOLA**

To assure the optimum benefit from the use of Liberty® 280 SL Herbicide, apply when weeds are in an early stage of growth, before they stress the growth of canola. Apply as described in the "Application Methods" section to get maximum weed control.

**APPLICATION TIMING**

Applications of Liberty® 280 SL Herbicide on canola may be made from the cotyledon stage up to the early bolting stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity or yield. Liberty® 280 SL Herbicide is a foliar-active material with no soil-residual activity. For best results, apply to emerged, young actively growing weeds. Weeds that emerge after application will not be controlled. Liberty® 280 SL Herbicide will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced. Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. Liberty® 280 SL Herbicide is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

**RESTRICTIONS TO THE DIRECTIONS FOR USE ON CANOLA**

1. **DO NOT** use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia
2. **DO NOT** apply more than 49 ounces per acre of Liberty® 280 SL Herbicide for weed control on the canola crop per growing season.
3. **DO NOT** apply Liberty® 280 SL Herbicide within 65 days of harvesting canola.
4. **DO NOT** graze the treated crop or cut for hay.
5. **DO NOT** add surfactants or crop oils. Anti-foams or drift control agents may be added if needed.
6. **DO NOT** apply Liberty® 280 SL Herbicide if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
7. **DO NOT** apply this product through any type of irrigation system.
8. **DO NOT** tank mix Liberty® 280 SL Herbicide with other pesticides including herbicides unless recommended on this label.
9. **Rotational Crop Restrictions**

Rotational Crop Planting Intervals Following Application of Liberty® 280 SL Herbicide to Canola. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application in Days)
Crops with a current Liberty®, Ignite®, or Finale® registration: All Cotton, LibertyLink® Corn, LibertyLink® Soybeans, LibertyLink® Rice, LibertyLink® Sugarbeets, LibertyLink® Canola	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat).	70
All Other Crops	180

## SPRAY ADDITIVES

Liberty® 280 SL Herbicide must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Anti-foams or drift control agents may be added if needed.

## MIXING INSTRUCTIONS

Liberty® 280 SL Herbicide must be applied with properly calibrated and clean equipment. Liberty® 280 SL Herbicide is specially formulated to mix readily in water. Prior to adding Liberty® 280 SL Herbicide to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

Mix Liberty Herbicide with water to make a finished spray solution as follows:

1. Fill tank to one-half full with clean water.
2. Add the appropriate amount of AMS to the spray tank.
3. If tank mixing with a grass herbicide specified on this label, add the correct amount of the grass herbicide.
4. Add the correct amount of Liberty® 280 SL Herbicide.
5. Add the remaining amount of water, begin agitation, and spray out immediately.

The addition of an antifoaming agent may reduce foaming, especially when using soft water.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of Liberty® 280 SL Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If the tank mix partners recommended on this label are added, maintain good agitation at all times until contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

## APPLICATION METHODS

Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment. Uniform, thorough spray coverage is important to achieve consistent weed control.

**Ground application:** Refer to the *Rate Recommendation Tables for Weed Control in Canola* for proper application rates. DO NOT apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Liberty® 280 SL Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Liberty® 280 SL Herbicide should be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 pounds per square inch and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. **Under dense weed/crop canopies, a broadcast rate of 15-20 gallons of water per acre should be used so that thorough spray coverage will be obtained.** For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

**Aerial application:** Calibrate the spray equipment prior to use. Liberty® 280 SL Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200-350 micron size droplets. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Do Not apply when wind causes drift to off-site vegetation.

## RATE RECOMMENDATION TABLES FOR WEED CONTROL IN CANOLA

The rate of Liberty® 280 SL Herbicide in fluid ounces (pints) of formulated product per acre to be used for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, select the rate needed for all species present.

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**Grass Weeds Controlled with Liberty® 280 SL Herbicide at 24 fl. oz./A (1.5 pt./A)  
Plus Ammonium Sulfate**

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Barley, volunteer*	1-3 leaves (3")	A second application may be required
Foxtail, yellow	1-4 leaves (2")	Apply prior to tillering
Sandbur, field		
Oat, wild	1-4 leaves (4")	Maximum of 1 tiller; a second application may be required
Wheat, volunteer		
Corn, volunteer	1-4 leaves (6")	---
Barnyardgrass	1-5 leaves (3")	Maximum of 1 tiller
Crabgrass, large		
Crabgrass, smooth		
Millet, volunteer proso		
Millet, wild proso		
Panicum, fall		
Panicum, Texas		
Foxtail, giant	1-6 leaves (4")	Maximum of 2 tillers
Foxtail, green		
Cupgrass, woolly	1-8"	---

\* Suppression only

When used in tank-mix combination with Assure® II Herbicide at 4 to 5 fl. oz. per acre, Select® 2EC Herbicide at 2 to 3 fl. oz. per acre, or Poast® Herbicide at 6 to 8 fl. oz. per acre, Liberty® 280 SL Herbicide may be applied at 20 fl. oz. per acre plus ammonium sulfate to control grass weed species at the growth stage of weeds indicated in the table above. For improved control of heavy populations or larger than recommended volunteer wheat, volunteer barley, yellow foxtail, and wild oats, Liberty® 280 SL Herbicide at 24 fl. oz per acre can be tank mixed with Assure® II Herbicide, or Poast® Herbicide.

**Perennial Weeds Controlled with Liberty® 280 SL Herbicide at 24 fl. oz./A (1.5 pt./A)  
Plus Ammonium Sulfate**

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Quackgrass	1-4 leaves (4")	Top growth control; a second application may be required.
Sowthistle, perennial	1-6 leaves (4")	
Thistle, Canada		

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**Broadleaf Weeds Controlled with Liberty® 280 SL Herbicide at 24 fl. oz./A (1.5 pt./A)  
Plus Ammonium Sulfate**

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Buckwheat, wild	1-3 leaves	Up to 1" in height
Pigweed, redroot		Up to 2" in height
Carpetweed	1-4 leaves	Up to 2" in height
Lambsquarter, common		
Marshelder		
Ladysthumb		
Pigweed, smooth		Up to 3" in height
Pigweed, spiny		
Smartweed, Pennsylvania		
Velvetleaf		
Mustard, wild	1-5 leaves	Up to 3" in height
Buffalobur	1-6 leaves	Up to 3" in height
Chickweed, common		
Mallow, Venice		
Nightshade, eastern black		
Ragweed, giant		
Shepherd's purse		
Sowthistle, annual		
Cocklebur, common	1-8 leaves	Up to 5" in height
Ragweed, common		
Sunflower, common		
Kochia	1-2"	---
Thistle, Russian		---
Pigweed, prostrate	1-3"	---
Purslane, common		---
Waterhemp, tall		---
Wormwood, biennial		---
Pennycress, field		1-4"
Dandelion	1-6"	Diameter of rosette

For optimum canola yield, early weed removal and application prior to canola bolting is important. For optimum control of both early and late germinating grass and broadleaf weed species, Liberty® 280 SL Herbicide may be applied sequentially at 14 fl. oz./A to 1-3 leaf grass and 1-2" broadleaf weed species followed by a second application of 14 fl. oz./A 7-10 days later.

#### FALLOW FIELDS

Liberty® 280 SL Herbicide may be used as a substitute for tillage to control or suppress weeds in the grass, broadleaf and biennial/perennial weed tables in this label. Applications may be made in fallow fields. Refer to the *Application Methods* section of this labeling for appropriate application rates to control specific weeds. Liberty® 280 SL Herbicide must be applied with ammonium sulfate. Tank mixes with 2,4-D or glyphosate are recommended with Liberty® 280 SL Herbicide to enhance total weed control. When using Liberty® 280 SL Herbicide in tank mix combinations, follow the precautions and directions of use of the most restrictive label.

#### FARMSTEADS

When applied as recommended, this product controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, along fences, and general nonselective farmstead weed control. Refer to the *Application Methods* section of this labeling for appropriate application rates to control specific weeds.

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**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks 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 the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

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**Net Contents: 2.5 Gallons, 120 Gallons & Bulk**

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