

# OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

July 1, 2025

Brien O'Loughlin Regulatory Consultant APEX Agro, LLC c/o Pyxis Regulatory Consulting, Inc. 535 Dock St, Ste 211, Tacoma, WA 98402

Subject: PRIA Label Amendment – Label amendment to add already approved uses

Product Name: GLUPEX280SL

EPA Registration Number: 103636-5

Application Date: 09/25/2024 Case Number: 00631588

Dear Brien O'Loughlin,

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

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

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

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or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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

If you have any questions, please contact Francisco Llarena-Arias at llarena-arias.francisco@epa.gov.

Sincerely,

Francisco Llarena-Arias
Acting for Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
U.S. Environmental Protection Agency

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

# **{BOOKLET FRONT PANEL}**

Jul 01, 2025
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 103636-5

GLUFOSINATE GROUP 10 HERBICIDE

# **GLUPEX 280SL**

A non-selective herbicide for post-emergence broadcast use on canola, sweet corn[\*], field corn, cotton, soybean, and sugar beet[\*] designated as LibertyLink® or glufosinate resistant. GLUPEX 280SL may be used for weed control in non-LibertyLink® or non-glufosinate resistant cotton when applied with a hooded sprayer in-crop. GLUPEX 280SL may also be applied as a broadcast burndown application before planting or prior to emergence of canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet[\*] designated as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet. GLUPEX 280SL may be used for post-emergence weed control on olives, listed tree, vine and berry crops, and tropical and subtropical fruits[\*]. GLUPEX 280SL may be applied as a preplant burndown or post-emergence weed control on cucurbits[\*] and fruiting vegetables[\*]. GLUPEX 280SL may be applied as a post-emergence weed control in grass grown for seed production†. GLUPEX 280SL may also be applied for potato vine desiccation. [\*Not for use in California.] †Only for use in Idaho, Oregon, and Washington

ACTIVE INGREDIENT:	WT	. BY %
Glufosinate ammonium*		24.5%**
OTHER INGREDIENTS		75.5%
TOTAL:	1	00.0%

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

# 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
IF IN EYES:	<ul> <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> </ul>
	Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	Can a posser senter of asser immediately for a saument davise.
	Have person sip a glass of water if able to swallow.
	DO NOT induce vomiting unless told to by a poison control center or doctor.
	DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
	NOTE TO DUVOICIAN

#### 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.

#### **EMERGENCY NUMBERS**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL (800) 424-9300. For non-emergency information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST or at http://npic.orst.edu.

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

Manufactured [For][by]: APEX Agro, LLC PO Box 1005 Fulshear, TX 77441 EPA Reg. No.: 103636-5 EPA Est. No.:

Net Contents:

[Lot/Batch code/number]

{Note to reviewer: Lot or Batch number may appear on label or printed directly on packaging.}

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

# {INSIDE BOOKLET}

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

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

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

# All Applicators and other handlers must wear:

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

# Applicators using ground boom equipment with open cabs to treat cotton must wear:

- Long-sleeved shirt, long pants
- Shoes, and socks
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils

# Mixer/loaders supporting ground boom applications to corn, canola, soybean, cotton, citrus fruit, pome fruit, stone fruit, and olives must wear:

- Long-sleeved shirt, long pants
- Shoes, and socks
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils

# **User Safety Requirements**

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

#### **ENGINEERING CONTROL STATEMENT**

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

# **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

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

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

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing. These methods

also reduce pesticide 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 advised.

#### PHYSICAL OR CHEMICAL HAZARDS

DO NOT use with or store near oxidizing agents since hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

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

**DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Not for Use in Nassau and Suffolk Counties in New York State.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains 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 interval. 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.

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

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

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

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The application for trimming and edging, industrial, recreational and public areas, and farmsteads are not within the scope of the WPS.

Keep children and pets out of treated areas until sprays have dried.

# IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT

GLUPEX 280SL may be applied as a burndown treatment prior to planting of canola, sweet corn[\*], field corn, cotton, soybean, sugar beet, fruiting vegetable, cucurbits, olives, trees, vines, berries, tropical and subtropical fruits listed on this label or after planting but prior to emergence of canola, corn, sweet corn[\*], cotton, soybean, and sugar beet.

Post-emergence row crop applications of GLUPEX 280SL may be made only to crops not sensitive to the active ingredient in this product. To the extent consistent with applicable law, APEX Agro, LLC does not warrant the use of this product on crops other than those designated as LibertyLink® or glufosinate resistant to safely withstand the application of GLUPEX 280SL.

The basis of selectivity of GLUPEX 280SL in crops is the presence of a gene in LibertyLink® or glufosinate resistant crops which results in a plant that is not sensitive to the active ingredient of GLUPEX 280SL. Crops not containing this gene will be sensitive to GLUPEX 280SL and severe injury and/or death may occur. **DO NOT** 

allow spray to contact foliage or green tissue of desirable vegetation other than the LibertyLink® or glufosinate resistant crops.

GLUPEX 280SL may be applied to any type of cotton using a hooded sprayer.

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

[\*Not for use in California.]

# MANDATORY SPRAY DRIFT MANAGEMENT

- 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, does not release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are advised with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

# **ADVISORY SPRAY DRIFT**

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

# **Spray Drift Management:**

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

# Importance of Droplet Size:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! (See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.)

# **Techniques for Controlling Droplet Size:**

- **Volume** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A

#### HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.

• **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

# **Controlling Droplet Size - Aircraft**

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

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

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

**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.

#### PRODUCT INFORMATION

Read the entire Directions for Use section before using this product.

GLUPEX 280SL 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 on LibertyLink® or glufosinate resistant canola, LibertyLink® or glufosinate resistant sweet corn[\*], LibertyLink® or glufosinate resistant field corn, LibertyLink® or glufosinate resistant cotton, and LibertyLink® or glufosinate resistant soybean, and on olives, trees, vines, berries, tropical and subtropical fruits, cucurbits, fruiting vegetables, and grass grown for seed production. GLUPEX 280SL may be applied for potato vine desiccation. GLUPEX 280SL may also be applied as a broadcast

burndown application before planting or prior to emergence of canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet[\*] designed as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet. [\*Not for use in California.]

GLUPEX 280SL is only foliar active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply GLUPEX 280SL to actively growing weeds as described in the **WEED CONTROL FOR ROW CROPS** section to get maximum weed control. Uniform thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

GLUPEX 280SL 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.

Application needs to be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.

Consult your local Cooperative Extension Service or APEX Agro, LLC representative for guidelines on the optimum application timing for GLUPEX 280SL in your region.

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

**Restriction:** To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application.

# **ROTATIONAL CROP RESTRICTIONS\***

Rotational crop planting intervals following application of GLUPEX 280SL are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Crop To Be Planted	Minimum Rotation Interval (Days) After Last GLUPEX 280SL Application
Canola, Sweet Corn, Corn, Cotton, Soybeans, Sugar beets,	0
Fruiting Vegetables**, and Cucurbits**	(May be planted at any time.)
Cover Crops***	7
Transplanted Perennial Crops on label (bushberries group 13-07B, citrus group 10-10, olives, pome fruit group 11-10, stone fruit group 12-12, tree nuts group 14-12, fruit, grape (table, wine and raisins), hops, and tropical and subtropical fruits 23B/24A/24B)	14
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

<sup>\*</sup>See **Application Directions for Potato Vine Desiccation** for Rotational Crop Restrictions specifically after GLUPEX 280SL applications to potatoes.

\*\*\* Planting of cover crops for conservation purposes may be planted in fields previously treated with GLUPEX 280SL as long as these cover crops are not grazed by livestock nor harvested for food. For best results, **DO NOT** plant cover crops less than 7 days after an application of GLUPEX 280SL nor before ½ inch of rainfall or irrigation has occurred. Planting sooner than this may result in stand reduction. Planting of crops listed in the **Rotational Crop Restrictions** that follow the listed planting intervals and other restrictions are considered a rotational crop and therefore may be harvested

# WEED RESISTANCE MANAGEMENT

GLUPEX 280SL is a Group 10 Herbicide, i.e., a glutamine synthetase inhibitor. Any weed population may contain or develop plants naturally resistant to glufosinate and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

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

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

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

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

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible, incorporate multiple weed-control practices including mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible, **DO NOT** allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as
  a foundation in a weed-control program. DO NOT use more than two applications of this or any other
  herbicide with the same mechanism of action within a single growing season unless mixed with an
  herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control
  weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

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

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

#### APPLICATION AND MIXING PROCEDURES

**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 Tables for proper application rates. GLUPEX 280SL needs to be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 PSI and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly advised 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 needs to be used so that thorough spray coverage will be obtained. DO NOT use raindrop nozzles. See the SPRAY DRIFT MANAGEMENT section of this label for additional information on proper application of GLUPEX 280SL.

# **Aerial Application**

Poor coverage will result in reduced weed control. For optimal weed control, apply GLUPEX 280SL in a minimum of 10 gallons per acre. See the **SPRAY DRIFT MANAGEMENT** section of this label for additional information on proper application of GLUPEX 280SL.

# **Adjuvant Instructions**

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

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

# **COMPATIBILITY TESTING**

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

- 1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1 quart jar.
- 2. For each pound of dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3. For each 16 fl. oz. of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 16 fl. oz. of GLUPEX 280SL 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 uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, **DO NOT** use the mixture in a spray tank.
- 7. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **STORAGE AND DISPOSAL** section of this label.

#### MIXING INSTRUCTIONS

# **Tank Mix Instructions**

GLUPEX 280SL may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. 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.

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

GLUPEX 280SL must be applied with properly calibrated and clean equipment. GLUPEX 280SL is formulated to mix readily in water. Prior to adding GLUPEX 280SL 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 GLUPEX 280SL with water to make a finished spray solution as follows:

- 1. Fill the spray tank half full with water.
- 2. Start agitation.
- 3. If mixing with a flowable/wettable powder tank mix partner: Prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
- 4. Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
- 5. If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 6. Complete filling the spray tank with water.
- 7. Add the proper amount of GLUPEX 280SL and continue agitation.
- 8. If foaming occurs, use a silicone based antifoam agent.

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

If tank mix partners specified 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 re-suspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

# **CLEANING INSTRUCTIONS**

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

After using GLUPEX 280SL, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink® or glufosinate resistant. 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.

# WEED CONTROL FOR ROW CROPS

Rates in ounces of formulated product per acre for the control of weeds as shown in the weed control tables. In weed populations with mixed species, apply at a rate needed for the species targeting less than three inch weeds.

{Note to Reviewer: On the final label, throughout the Directions for Use and where applicable table headings may be repeated and/or [ [(] continued [)] ] added to indicate where a text group continues to subsequent page.}

# **BROADLEAF WEED CONTROL**

Weed Species	C = Control NR = Not Recommended S = Suppression		Weed Species	C = Control NR = Not Recommended S = Suppression	
	22 Fl. Oz./Acre (0.40 lb. a.i./A)	29-43 Fl. Oz./Acre (0.53-0.79 lb. a.i./A)		22 Fl. Oz./Acre (0.40 lb. a.i./A)	
Amaranth, Palmer	NR	C	Morningglory, sharppod	С	С
Anoda, spurred	С	С	Morningglory, smallflower	С	С
Beggarweed, Florida	С	С	Morningglory, tall	С	С
Black, medic	С	С	Mustard, wild	С	С
Blueweed, Texas	С	С	Nightshade, black	С	С
Buckwheat, wild	С	С	Nightshade, eastern black	С	С
Buffalobur	С	С	Nightshade, hairy	С	С
Burcucumber	С	С	Pennycress (stinkweed)	С	С
Canola, volunteer <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	Pigweed, redroot	С	С
Catchweed bedstraw (cleavers)	С	С	Pigweed, prostrate	С	С
Carpetweed	С	С	Pigweed, spiny	С	О
Chickweed, common	С	С	Pigweed, smooth	С	С
Cocklebur, common	С	С	Pigweed, tumble	С	С
Copperleaf, Hophornbeam	С	С	Puncturevine	С	С
Cotton, volunteer <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	Purslane, common	С	С
Croton, tropic	С	С	Pusley, Florida	S	С
Croton, woolly	С	С	Ragweed, common	С	С
Eclipta	С	С	Ragweed, giant	С	С
Devil's claw	С	С	Senna, coffee	С	С
Fleabane, annual	С	С	Sesbania, hemp	С	С

C	C	Shepherd's Purse	C	C
С	С	Sicklepod (java bean)	С	С
С	С	Sida, prickly	С	С
С	С	Smartweed,	С	С
		Pennsylvania		
С	С	Smell melon	С	С
C <sup>2</sup>	C <sup>2</sup>	Sowthistle, annual	С	С
С	С	Soybeans, volunteer <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>
С	С	Spurge, prostrate	С	С
С	С	Spurge, spotted	С	С
С	С	Starbur, bristly	С	С
С	С	Sunflower, common	С	С
С	С	Sunflower, prairie	С	С
С	С	Sunflower, volunteer	С	С
S <sup>3</sup>	C <sub>3</sub>	Thistle, Russian <sup>2</sup>	S <sup>2</sup>	C <sup>2</sup>
С	С	Velvetleaf	С	С
С	С	Waterhemp, common	NR	С
С	С	Waterhemp, tall	NR	С
С	С			
	C C C C C C C C C C C C C C C C C C C	C C C C C C C C C C C C C C C C C C C	C C Sicklepod (java bean) C C Sida, prickly C C Smartweed, Pennsylvania C Smell melon C² C² Sowthistle, annual C C C Soybeans, volunteer¹ C C C Spurge, prostrate C C Spurge, spotted C C Starbur, bristly C C C Sunflower, common C C Sunflower, volunteer C C Velvetleaf C C Velvetleaf C C Waterhemp, common C C Waterhemp, tall	C C Sicklepod (java bean) C C C Sida, prickly C C C Smartweed, C Pennsylvania C C Smell melon C C C Sowthistle, annual C C C C Soybeans, volunteer¹ C¹ C C Spurge, prostrate C C C Spurge, spotted C C C Starbur, bristly C C C C Sunflower, common C C C C Sunflower, prairie C C C C Sunflower, volunteer C C C C Sunflower, volunteer C C C C Sunflower, volunteer C C C C C Sunflower, volunteer C C C C C C C Sunflower, volunteer C C C C C C C C C C C C C C C C C C

<sup>&</sup>lt;sup>1</sup> Volunteer LibertyLink® or glufosinate resistant crops from the previous season will not be controlled.

# **GRASS WEED CONTROL**

	C = Contro	I		C = Contro		
	NR = Not Recommended			NR = Not Recommended		
Weed Species			Weed Species	S = Suppre	S = Suppression	
-	22 FI.	29-43 Fl.	-	22 Fl.	29-43 Fl.	
	Oz./Acre	Oz./Acre		Oz./Acre	Oz./Acre	
	(0.40 lb.	(0.53-0.79 lb.		(0.40 lb.	(0.53-0.79 lb.	
	a.i./A)	a.i./A)		a.i./A)	a.i./A)	
Barley, volunteer³	C <sup>3</sup>	C <sup>3</sup>	Millet, wild proso	С	С	
Barnyardgrass	С	С	Millet, proso volunteer	С	С	
Bluegrass, annual	С	С	Oat, wild <sup>2</sup>	C <sup>2</sup>	C <sup>2</sup>	
Corn, volunteer <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	Panicum, fall	С	С	
Crabgrass, large <sup>2</sup>	C <sup>2</sup>	C <sup>2</sup>	Panicum, Texas	С	С	
Crabgrass, smooth <sup>2</sup>	C <sup>2</sup>	C <sup>2</sup>	Rice, red	С	С	
Cupgrass, woolly	С	С	Rice, volunteer <sup>1</sup>	C <sup>1</sup>	C <sup>1</sup>	
Foxtail, bristly	С	С	Sandbur, field <sup>2</sup>	S <sup>2</sup>	C <sup>2</sup>	
Foxtail, giant	С	С	Shattercane	С	С	
Foxtail, green	С	С	Signalgrass, broadleaf	С	С	
Foxtail, robust purple	С	С	Sprangletop	С	С	
Foxtail, yellow <sup>2</sup>	C <sup>2</sup>	C <sup>2</sup>	Sorghum, volunteer	С	С	
Goosegrass <sup>3</sup>	C <sup>3</sup>	C <sup>3</sup>	Stinkgrass	С	С	
Johnsongrass, seedling	С	С	Wheat, volunteer <sup>2</sup>	C <sup>2</sup>	C <sup>2</sup>	
Junglerice	С	С	Witchgrass	С	С	

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

May require sequential applications for control.
 For optimum control, apply GLUPEX 280SL on 6" marestail.

<sup>&</sup>lt;sup>2</sup> For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to initiation.

<sup>&</sup>lt;sup>3</sup> A sequential application may be necessary for control.

# Biennial and Perennial Weeds\*\*

For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of GLUPEX 280SL are specified (29 fl. oz./A (0.53 lb. a.i./A) followed by 43 fl. oz./A (0.79 lb. a.i./A)).

Alfalfa	Clover, Alsike	Nutsedge, purple		
Artichoke, Jerusalem	Clover, red	Nutsedge, yellow		
Bermudagrass	Dandelion*	Orchardgrass		
Bindweed, field	Dock, smooth*	Poinsettia, wild*		
Bindweed, hedge	Dogbane, hemp	Pokeweed		
Bluegrass, Kentucky	Goldenrod, gray*	Quackgrass		
Blueweed, Texas	Johnsongrass, rhizome*	Sowthistle, perennial		
Bromegrass, smooth	Milkweed, common*	Thistle, Bull*		
Burdock	Milkweed, Honeyvine	Thistle, Canada		
Bursage, Woolyleaf	Muhly, wirestem*	Timothy*		
Chickweed, Mouse ear	Nightshade, silverleaf*	Wormwood, biennial		
*Suppression Only.				
**See the Application <b>DIRECTIONS FOR USE ON COTTON</b> section of this label for additional use rates.				

# CANOLA, SWEET CORN, FIELD CORN, COTTON, SOYBEAN, SUGAR BEETS BURNDOWN

GLUPEX 280SL may be applied as a burndown treatment prior to planting or prior to emergence of canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet[\*] designated as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[\*], field corn, cotton, soybean, or sugar beet. For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of GLUPEX 280SL. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. [\*Not for use in California.]

Crops	Application Directions
Canola, Sweet	If environmental conditions prevent timely applications, a single application may be
Corn[*], and Field	made of up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL. No additional
Corn	applications of GLUPEX 280SL may be made post-emergence to the crop during the
	year.
Cotton	If environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL. If more than 29 fl. oz./A (0.53 lb. a.i./A) are used in any single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings.
Soybean	If environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL. If 29-43 fl. oz./A (0.53-0.79 lb. a.i./A) are used in a single burndown application, one additional in season application may be made at up to 29 fl. oz./A (0.53 lb. a.i./A). The yearly total may not exceed 87 fl. oz./A (1.59 lbs. a.i./A), including all application timings.
Sugar Beets <sup>[**]</sup>	If environmental conditions prevent timely applications, a single application may be made of up to 36 fl. oz./A (0.66 lb. a.i./A) of GLUPEX 280SL. No additional applications of GLUPEX 280SL may be made post-emergence to the crop during the year.
[*Not for use in Califor	rnia.]
**Not for use on Libe	rtyLink® or glufosinate resistant sugar beets in California.]

Crop (Conventional)	Burndown	In Season Applications	Yearly Max
Cotton Use Pattern 1	29 fl. oz./A (0.53 lb. a.i./A)	2 applications at 29 fl. oz./A (0.53 lb. a.i./A) <sup>1</sup> Make second application 10 days after the first application.	87 fl. oz./A (1.59 lbs. a.i./A)
Cotton Use Pattern 2	30 – 43 fl. oz./A (0.55-0.79 lb. a.i./A)	1 application at 29 fl. oz./A (0.53 lb. a.i./A) <sup>1</sup>	72 fl. oz./A (1.32 lbs. a.i./A)

Canola, Soybean, Sweet Corn[*], Field Corn Use Pattern	29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	None	43 fl. oz./A (0.79 lb. a.i./A)
Sugar Beets	29 – 36 fl. oz./A (0.53-0.66 lb. a.i./A)	None	36 fl. oz./A (0.66 lb. a.i./A)

LibertyLink® or glufosinate resistant cotton OR with hooded sprayer for non LibertyLink® or nonglufosinate resistant varieties (see Cotton use directions).

[\*Not for use in California.]

Crop (LibertyLink® or glufosinate resistant	Burndown	In Season Applications (LibertyLink® or glufosinate	Yearly Max
Varieties Only)	00.5	resistant varieties only)	07.6
Cotton Use Pattern 1	29 fl. oz./A	1 to 2 applications at	87 fl. oz./A
	(0.53 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	(1.59 lbs. a.i./A)
		Make second application 10	
		days after the first application.	
Cotton Use Pattern 2	30 – 43 fl. oz./A	1 application at 29 fl. oz./A	72 fl. oz./A
	(0.55-0.79 lb. a.i./A)	(0.53 lb. a.i./A)	(1.32 lbs. a.i./A)
	29 – 43 fl. oz./A	1 to 2 applications at	87 fl. oz./A
Canola	(0.53-0.79 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	(1.59 lbs. a.i./A)
		Make second application at	
		least 10 days after the first	
		application.	
Field Corn, Soybean	29 – 43 fl. oz./A	Up to 2 applications at 29 - 43	87 fl. oz./A
-	(0.53-0.79 lb. a.i./A)	fl. oz./A (0.53-0.79 lb. a.i./A)	(1.59 lbs. a.i./A)
		For soybeans, make second	
		application at least 5 days after	
		the first application.	
		For field corn, make second	
		application at least 7 days after	
		first application.	
Sweet Corn[*]	22 fl. oz./A	1 to 2 applications at	44 fl. oz./A
	(0.40 lb. a.i./A)	22 fl. oz./A (0.40 lb. a.i./A)	(0.80 lb. a.i./A)
	,	Make second application at	,
		least 7 days after the first	
		application.	
Sugar Beets[*]	29 – 36 fl. oz./A	1 application at 29 fl. oz./A	60 fl. oz./A
	(0.53-0.66 lb. a.i./A)	(0.53 lb. a.i./A)	(1.10 lbs. a.i./A)
[*Not for use in Californi	a.]		

# **SUGAR BEETS**

[(Not for use in California.)]

**THOROUGH SPRAY COVERAGE IS VERY IMPORTANT.** Apply GLUPEX 280SL only to sugar beets labeled as LibertyLink® or glufosinate resistant. GLUPEX 280SL works best when weeds are actively growing. A cultivation may be made at least 5 days before a GLUPEX 280SL application or 5 days after a GLUPEX 280SL application.

# **Application Timing**

Applications of GLUPEX 280SL on sugar beets may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet. GLUPEX 280SL is a foliar active material with no soil residual activity.

Apply to young and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights, refer to the **WEED CONTROL FOR ROW CROPS** section.

GLUPEX 280SL will have an effect on weeds that are larger than the specified 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. GLUPEX 280SL is rainfast 4 hours after application, therefore rainfall within 4 hours may necessitate retreatment. For best results, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

# **Application Rates**

Apply 29 - 36 fluid ounces per acre (0.53 - 0.66 lb. a.i./A) depending on weed species, size and density per weed chart. If a second application is needed, make the second application in a minimum of 10 days after the first application. The maximum annual rate of GLUPEX 280SL on sugar beets is 60 fl. oz./A (1.10 lbs. a.i./A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (including dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

# **Adjuvants**

Ammonium sulfate (AMS) may be used at 1.5 to 3.5 lbs./A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

# Surfactants/Oils

The use of additional surfactants or crop oils in tank mixes with GLUPEX 280SL may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

# **Nozzle Spray Quality**

Use medium to coarse nozzles. GLUPEX 280SL is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See SPRAY DRIFT MANAGEMENT section for more detailed information.

# **Use Restrictions on Sugar Beets**

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

#### **CANOLA**

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

# **Application Rate and Timing**

For best results, apply to emerged, young actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of GLUPEX 280SL. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of GLUPEX 280SL 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.

Apply GLUPEX 280SL at 22 - 29 fl. oz./A (0.40 - 0.53 lb. a.i./A) per application. A second application of GLUPEX 280SL may be needed to control weeds that have not yet emerged at the time of application.

#### **Use Restrictions on Canola**

- **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.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. a.i./A) in a single application for in crop use.
- **DO NOT** make more than 1 application for burndown use for all crops.
- If GLUPEX 280SL was used in a burndown application in non-glufosinate resistant canola, DO NOT make post-emergence applications.
- DO NOT make more than 2 in crop applications per year with a minimum 10-day retreatment interval.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of GLUPEX 280SL per year.
- **DO NOT** apply GLUPEX 280SL within 65 days of harvesting canola.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply GLUPEX 280SL if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply this product through any type of irrigation system.

Refer to the "ROTATIONAL CROP RESTRICTIONS" section under the "PRODUCT INFORMATION" heading of this label for the appropriate rotational crop plant back intervals.

#### **Spray Additives**

GLUPEX 280SL 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. Use of additional surfactants or crop oils may increase risk of crop response.

#### **Tank Mix Instructions for Use on Canola**

GLUPEX 280SL at 22 fl. oz./A (0.40 lb. a.i./A) plus AMS may be used in tank mix combination with certain herbicides for improved control of larger than labeled grasses. 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. The AMS rate may be reduced to 1.5 lbs./A when GLUPEX 280SL is tank mixed with a reduced rate of one of the grass herbicides specified below.

# Tank Mix Partners for GLUPEX 280SL on Invigor LibertyLink® or glufosinate resistant Canola Clethodim Quizalofop-p-ethyl Sethoxydim

# APPLICATION RATE AND TIMING FOR CANOLA FOR LIBERTYLINK® OR GLUFOSINATE RESISTANT SEED PROPAGATION

[(Not for use in California.)]

Up to three applications of GLUPEX 280SL at up to 29 fl. oz./A (0.53 lb. a.i./A) per application may be made to canola for LibertyLink® or glufosinate resistant seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18-30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

# Use Restrictions on Canola for LibertyLink® or glufosinate resistant Seed Propagation

- **DO NOT** apply more than 29 fl. oz./A (0.53 lbs. a.i./A) in a single application.
- DO NOT apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of GLUPEX 280SL per year.
- **DO NOT** apply more than 3 applications of GLUPEX 280SL per year with a minimum 10-day retreatment interval.
- DO NOT apply GLUPEX 280SL beyond the early bolting stage or within 65 days of harvesting canola seed.
- DO NOT use treated canola seed for food, feed or oil purposes.
- **DO NOT** apply GLUPEX 280SL if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).

DO NOT apply this product through any type of irrigation system.

#### **SWEET CORN**

[(Not for use in California.)]

Apply GLUPEX 280SL only to corn labeled as LibertyLink® or glufosinate resistant.

#### **Application Timing**

Applications for GLUPEX 280SL on sweet corn may be made from emergence until sweet corn is 24" tall or in the V-6 stage of growth (i.e., 6 developed collars), whichever comes first. Apply at a rate of 22 fl. oz./A (0.40 lb. a.i./A). GLUPEX 280SL must be applied with ammonium sulfate (AMS) for use on sweet corn. Two applications of GLUPEX 280SL can be made to sweet corn in a year.

# **Use Restrictions on Sweet Corn**

- **DO NOT** apply more than 22 fl. oz./A (0.40 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 22 fl. oz./A (0.40 lb a.i./A) in a single application.
- **DO NOT** apply more than 44 fl. oz./A (0.80 lb. a.i./A) of GLUPEX 280SL on sweet corn per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- DO NOT apply more than 2 applications of GLUPEX 280SL to sweet corn per year with a minimum 7day retreatment interval.
- **DO NOT** apply GLUPEX 280SL within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- If GLUPEX 280SL was used in a burndown application, no post-emergence applications may be made to the crop.
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply GLUPEX 280SL if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply this product through any type of irrigation system.

Refer to the "ROTATIONAL CROP RESTRICTIONS" section under the "PRODUCT INFORMATION" heading of this label for the appropriate rotational crop plant back intervals.

See "Directions for Use on Field Corn and Silage Corn" for Application Methods, Mixing Instructions, and Weed Control Tables.

#### Tank Mix Instructions for Use on Sweet Corn

GLUPEX 280SL may be tank mixed with tembotrione, mesotrione, atrazine, or halosulfuron. When using GLUPEX 280SL in tank mix combinations, carefully follow the "Directions for Use" labeling of the selected partner. 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.

# FIELD CORN AND SILAGE CORN

Apply GLUPEX 280SL only to corn labeled LibertyLink® or glufosinate resistant. Uniform thorough spray coverage is necessary to achieve consistent weed control.

# **Application Rate and Timing**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of GLUPEX 280SL. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of GLUPEX 280SL on corn may be made with over the top broadcast or drop nozzles from emergence until corn is 24 inches tall or in the V-6 stage of growth (i.e., 6 developed collars), whichever comes first. For corn 24 inches to 36 inches tall only apply GLUPEX 280SL using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks. Applications of GLUPEX 280SL following the use of soil applied insecticides will not injure corn.

Apply GLUPEX 280SL at 29 – 43 fl. oz./A (0.53 – 0.79 lb. a.i./A) per application. A second application of GLUPEX

280SL or a tank mix application with a residual herbicide will be needed to control weeds that have not yet emerged at the time of application.

# Use Restrictions on Field Corn and Silage Corn

- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb a.i./A) in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of GLUPEX 280SL on corn per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 2 applications of GLUPEX 280SL to corn per year with a minimum 10-day retreatment interval.
- **DO NOT** apply GLUPEX 280SL within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- If GLUPEX 280SL was used in a burndown application, no post-emergence applications may be applied to the crop.
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply GLUPEX 280SL if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the "**ROTATIONAL CROP RESTRICTIONS**" section under the "**PRODUCT INFORMATION**" heading of this label for the appropriate rotational crop plant back intervals.

# **Spray Additives**

For corn and sweet corn, GLUPEX 280SL must be applied with ammonium sulfate (AMS). It is advised to use only fine feed grade or spray grade AMS at 3 lbs. per acre (17 lbs./100 gallons). When temperatures exceed 85°F, the rate of AMS can be reduced to 1.5 lbs. per acre (8.5 lbs./100 gallons) to reduce potential leaf burn. Use of additional surfactants or crop oils may increase risk of crop response.

#### **Tank Mix Instructions for Use on Corn**

Certain herbicide tank mixes may aid in the performance of GLUPEX 280SL. No additional surfactant is needed with any tank mix partner. 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.

Tank Mix Partners for GLUPEX 280SL on LibertyLink® or glufosinate resistant Corn

2,4-D	Dimethenamide-P	Pendimethalin <sup>1</sup>
Acetochlor	Flumetsulam	Primisulfuron-methyl
Atrazine	Glyphosate	Prosulfuron
Carfentrazone-ethyl	Halosulfuron-methyl	S-metolachlor <sup>2</sup>
Clopyralid potassium	Mesotrione	Tembotrione
Dicamba	Metolachlor <sup>2</sup>	Theincarbazone-methyl
Difluenzopyr	Nicosulfuron	Topramezone

<sup>&</sup>lt;sup>1</sup> Tank mixing with pendimethalin may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail, and volunteer corn.

#### Corn Insecticide Tank Mix Partners for GLUPEX 280SL

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

Beta-Cyfluthrin Lamba-Cyhalothrin

# COTTON

Uniform thorough spray coverage is necessary to achieve consistent weed control. GLUPEX 280SL may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to LibertyLink® or glufosinate resistant cotton. This product may be applied post-emergence to non-LibertyLink® or non-glufosinate resistant cotton, varieties or cultivars by using equipment designed to minimize contact of the spray with the

<sup>&</sup>lt;sup>2</sup> It is advised that these products are tank mixed at half the use rate with GLUPEX 280SL to reduce risk of crop response.

cotton foliage. See the **Application Methods on Non-LibertyLink® or non-glufosinate resistant Cotton** section for selection of shielding equipment. Severe injury or death may result if the GLUPEX 280SL contacts the foliage or stems of cotton NOT labeled as LibertyLink® or glufosinate resistant.

# **Application Rate and Timing**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of GLUPEX 280SL. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimum yield, early season weed removal is important.

Apply GLUPEX 280SL to cotton from emergence up to the early bloom stage at 29 fl. oz./A (0.53 lb. a.i./A). If environmental conditions prevent a timely herbicide application, a single application of up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL may be made to cotton. If more than 29 fl. oz./A (0.53 lb. a.i./A) are used in any single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings. See Restrictions to the Directions for use on Cotton below for additional information.

Refer to the **WEED CONTROL FOR ROW CROPS** section of this label for selection of the proper rate dependent upon weed species present and size. In weed populations with mixed species, select the highest rate required to control all the species. Volunteer LibertyLink® or glufosinate resistant crop plants (corn, cotton, soybeans, sugar beets) from the previous season will not be controlled by applications of GLUPEX 280SL. A repeat application of GLUPEX 280SL 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 Instructions for Use on Cotton to select suitable tank mix partners.

Use Pattern	1 <sup>st</sup> Application	<b>2<sup>nd</sup> Application</b> Minimum 10 days up to 14 days after 1 <sup>st</sup> application	<b>3<sup>rd</sup> Application</b> Minimum 10 days up to 14 days after 2 <sup>nd</sup> application	Yearly Maximum
Option 1	32 - 43 fl. oz./A	29 fl. oz./A	None	72 fl. oz./A
	(0.58-0.79 lb. a.i./A)	(0.53 lb. a.i./A)		(1.32 lbs. a.i./A)
Option 2	29 fl. oz./A (0.53 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	87 fl. oz./A (1.59 lbs. a.i./A)

# **Use Restrictions on Cotton**

- **DO NOT** apply GLUPEX 280SL to cotton in Florida South of Tampa (Florida Route 60), or in Hawaii (except for test plots or breeding nurseries).
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) per application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) per application for in-crop use.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 3 applications per year when using reduced rates with a minimum 10-day retreatment interval.
- DO NOT apply GLUPEX 280SL within 70 days prior to cotton harvest.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of GLUPEX 280SL at up to 43 fl. oz./A (0.79 lb. a.i./A) may be made to cotton. **DO NOT** apply more than 43 fl. oz. (0.79 lb. a.i./A) of GLUPEX 280SL in a single application under this use scenario. If a single application greater than 29 fl. oz. (0.53 lb. a.i./A) is made, a subsequent application not to exceed 29 fl. oz. (0.53 lb. a.i./A) may be made to cotton. The yearly total use rate under this scenario may not exceed 72 fl. oz./A (1.32 lbs. a.i./A) of GLUPEX 280SL. Sequential applications need to be made at least 10 days apart.
- DO NOT apply this product through any type of irrigation system.

Refer to the "ROTATIONAL CROP RESTRICTIONS" section under the "PRODUCT INFORMATION" heading of this label for the appropriate rotational crop plant back intervals.

# Application Methods - LibertyLink® or glufosinate resistant Cotton

Refer to the **WEED CONTROL FOR ROW CROPS** section 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. For ground application, apply GLUPEX 280SL to LibertyLink® or glufosinate resistant cotton as an overthe-top foliar spray directed to the lower one-third of the cotton stand.

# Application Methods - Non-LibertyLink® or non-glufosinate resistant Cotton

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

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

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

Band Width in Inches Row Width in Inches	X	Broadcast Rate per Acre	=	Amount of Banded Product needed per Acre
Band Width in Inches Row Width in Inches	Х	Broadcast Spray Volume per Acre	=	Banded Spray Volume needed per Acre

#### **Post-Harvest**

GLUPEX 280SL may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL 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 (0.53 lb. a.i./A) is used in a single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings. Refer to the "ROTATIONAL CROP RESTRICTIONS" section of this label for appropriate rotational crop information.

# **Tank Mix Instructions for Use on Cotton**

Certain tank mixes may aid in the performance of GLUPEX 280SL. No additional surfactant is needed with any tank mix partner. GLUPEX 280SL may be applied in tank mix combination 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. 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.

**LibertyLink®** or glufosinate resistant Cotton – For LibertyLink® or glufosinate resistant cotton, S-Metolachlor/Metolachlor or Pyrithiobac-sodium may be tank mixed with GLUPEX 280SL and applied over the top post-emergence to enhance weed control and/or provide residual control.

**All Cotton Types** – The following herbicides may be tank mixed with GLUPEX 280SL for hooded spray application to enhance weed control and/or provide residual weed control.

# Post-Emergence Over-The-Top Tank Mix Partners for GLUPEX 280SL on LibertyLink® or glufosinate resistant Cotton

Clethodim	Metolachlor	Sethoxydim
Fenoxaprop-p-ethyl	Pyrithiobac-sodium	
Fluazifop-P-butyl	Quizalofop-p-ethyl	

# **SOYBEANS**

Apply GLUPEX 280SL only to soybean designated as LibertyLink® or glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **Application Rate and Timing**

For best results apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of GLUPEX 280SL. Weed control may be reduced when applications are

made to weeds under stress due to drought or cool temperatures. Adding ammonium sulfate with GLUPEX 280SL may improve weed control if weeds are under stress. For optimal yield, early season weed removal is important.

Applications of GLUPEX 280SL on soybeans may be made from emergence up to but not including the bloom growth stage. Apply GLUPEX 280SL to LibertyLink® or glufosinate resistant soybeans from emergence up to but not including the bloom growth stage at 29 to 43 fl. oz./A. (0.53 to 0.79 lb. a.i./A). See weed chart to determine rate. If environmental conditions prevent a timely herbicide application, a single application of up to 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL may be made to soybeans followed by one additional application at maximum of 43 fl. oz./A (0.79 lb. a.i./A) with a yearly maximum of 87 fl. oz./A (1.59 lbs. a.i./A). GLUPEX 280SL may be applied alone or in a tank mix application with a residual herbicide to control weeds that have not yet emerged at the time of application.

Although timely post applications of GLUPEX 280SL can provide complete weed control, residual herbicides at burndown planting, or tank mixed with GLUPEX 280SL help ensure optimal weed management, particularly if environmental conditions delay timely post applications. Residual herbicides can also reduce early season weed competition and are a key element of good weed resistance management practices.

Use Pattern Rate Ranges				
1 <sup>st</sup> Application 2 <sup>nd</sup> Application Yearly Maximum				
	Minimum of 5 days after 1st Application			
29 – 43 fl. oz./A	29 – 43 fl. oz./A	87 fl. oz./A		
(0.53-0.79 lb. a.i./A)	(0.53-0.79 lb. a.i./A)	(1.59 lbs. a.i./A)		

# **Use Restrictions on Soybeans**

- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL in a single application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) of GLUPEX 280SL in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of GLUPEX 280SL on soybeans per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** make more than 3 applications per year (including burndown) when using reduced rates with a minimum 5-day retreatment interval.
- DO NOT apply GLUPEX 280SL within 70 days of harvesting soybean seed.
- **DO NOT** graze the treated crop or cut for hay.
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- DO NOT apply GLUPEX 280SL if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the "ROTATIONAL CROP RESTRICTIONS" section under the "PRODUCT INFORMATION" heading of this label for the appropriate rotational crop plant back intervals.

# Tank Mix Instructions for Use on Soybeans

Certain herbicide tank mixes may complement GLUPEX 280SL. No additional surfactant is needed with any tank mix partner. 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.

Tank Mix Partners for GLUPEX 280SL in LibertyLink® or glufosinate resistant Soybeans

Acifluorfen	Flumioxazin	Quizalofop-p-ethyl
Clethodim	Fomesafen	Saflufenacil
Chlorimuron	Imazamox	Sethoxydim
Cloransulam-methyl	Imazethapyr	S-Metolachlor
Fenoxaprop-p-butyl	Lactofen	Thifensulfuron
Fluazifop-P-butyl	Metolachlor	
Flumiclorac	Pyroxasulfone	

# CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

GLUPEX 280SL may be applied to select out susceptible "segregates" of canola, corn, cotton, and soybean that aren't LibertyLink® or glufosinate resistant.

Canola: GLUPEX 280SL may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that **DO NOT** carry a LibertyLink® or glufosinate resistant gene and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the LibertyLink® or glufosinate resistant gene will be severely injured or killed if treated with this herbicide. See **Directions for Use on Canola** for use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Canola**".

**Corn:** Inbred lines (plants not possessing the LibertyLink® or glufosinate resistant gene) will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of LibertyLink® or glufosinate resistant corn segregates, GLUPEX 280SL may be applied at 22 fl. oz./A (0.40 lb. a.i./A) plus AMS at 3 lbs./A (17 lbs./100 gallons) when corn is in the V-3 to V-4 stage of growth (i.e., 3 to 4 developed collars). A second treatment of 22 fl. oz./A (0.40 lb. a.i./A) plus AMS at 3 lbs./A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall. Sequential applications need to be at least 10 days apart. When temperatures exceed 85°F, the rate of AMS can be reduced to 1.5 lbs./A (8.5 lbs./100 gallons) to reduce potential leaf burn. See **Directions for Use on Corn** for further information on use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Sweet Corn"** and "**Use Restrictions on Field Corn and Silage Corn"**.

**Cotton:** GLUPEX 280SL may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that **DO NOT** carry the LibertyLink® or glufosinate resistant gene and as such, can be applied to remove susceptible segregates during cotton seed propagation.

Breeding material not possessing the LibertyLink® or glufosinate resistant gene will be severely injured or killed if treated with this herbicide. See **Directions for Use on Cotton** for use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Cotton**".

**Soybean:** For the selection of LibertyLink® or glufosinate resistant soybean (segregates), GLUPEX 280SL may be applied at up to 29 to 43 fl. oz./A (0.53-0.79 lb. a.i./A) when soybean is in the third trifoliate stage. A second treatment of 29 to 43 fl. oz./A (0.53-0.79 lb. a.i./A) may be applied up to but not including the bloom growth stage of soybean. Sequential applications need to be at least 5 days apart. See **Directions for Use on Soybean** for further information on use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Soybeans**".

# LISTED TREE, VINE, AND BERRY CROPS

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

#### **Registered Crops**

Bushberry Crop Subgroup 13-07B – Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these

Citrus (Crop Group 10-10) – lemon, orange (sour, sweet), grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, Satsuma, citron, citrus hybrids, tangor, and cultivars, varieties and/or hybrids of these

#### Olives

Pome Fruit (Crop Group 11-10) – apple, pear (oriental), crabapple, loquat, mayhaw, quince, azarole, medlar, tejocote, cultivars, varieties and/or hybrids of these

Stone Fruit (Crop Group 12-12) – apricot, cherry (sweet, tart), peach, nectarine, plum (Chickasaw, damson, Japanese), plumcot, prune (fresh), capulin, jujube, sloe, and cultivars, varieties and/or hybrids of these

Tree Nuts (Crop Group 14-12) – almond, beechnut, Brazil nut, butternut, cashew, chestnut, chinquapin, hazelnut (filbert), hickory nut, macadamia nut (bush nut), pecan, pistachio, walnut, black, walnut, English

Fruit, small, vine climbing, except fuzzy kiwifruit (Crop Subgroup 13-07F) – Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

# **Application Rate and Timing**

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

Apply GLUPEX 280SL as a directed spray to control undesirable vegetation in tree, vine, and berries listed on this label. Apply as a broadcast, banded or spot treatment application depending on the situation to control weeds listed under the heading Weeds Controlled in Tree, Vine, and Berry crops. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of GLUPEX 280SL may be necessary to control plants generating from underground parts or seed.

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

# **Application Methods - Broadcast Applications**

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

Weed Size and Stage	GLUPEX 280SL Rate
Weeds < 3" in height	48 fl. oz./A (0.88 lb. a.i./A)
Weeds < 6" in height pre-tiller grasses	56 fl. oz./A (1.02 lbs. a.i./A)
Weeds > 6" in height, and or/grasses that have tillered	56 – 82 fl. oz./A (1.02-1.50 lbs. a.i./A)

# **Application Methods - Banded Spray Applications**

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

Band Width in Inches

Row Width in Inches

X Rate per Acre Broadcast = Amount of Herbicide Needed for Treatment

# **Application Methods - Spot or Directed Spray Applications**

For spot or directed spray applications by backpack sprayers only (no mechanically pressured handgun applications allowed), mix GLUPEX 280SL at 1.7 fl. oz. of product (0.03 lb. a.i./A) per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use.

Weeds Controlled in Tree, Vine, and Berry Crops

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

Fiddleneck	Marestail	Ragweed, giant		
Filaree	Mayweed	Redmaids		
Filaree, redstem	Morningglory, entireleaf	Shepherd's Purse		
Grass Weeds			·	
Barnyardgrass	Crabgrass, smooth	Junglerice	Shattercane	
Bluegrass, annual	Cupgrass, woolly	Oat, wild	Sprangletop	
Brome, ripgut	Foxtail, giant	Panicum, fall	Stinkgrass	
Bromegrass, downy	Foxtail, green	Panicum, Texas	Wheat, volunteer	
Canarygrass	Foxtail, yellow	Rush, toad**	Windgrass	
Chess, soft	Goosegrass	Ryegrass, annual*	Witchgrass	
Crabgrass, large	Johnsongrass, seedling	Sandbur, field		
Biennial and Perennia	l Weeds			
Aster, white heath	Dallisgrass	Mustard, tansy	Rubus spp.	
Bindweed, field	Dandelion	Nutsedge, purple	Spurge, leafy	
Bindweed, hedge	Dock, curly	Nutsedge, yellow	Thistle, bull	
Bluegrass, Kentucky	Dogbank, hemp	Onion, wild	Thistle, musk	
Bromegrass, smooth	Fescue	Orchardgrass	Torpedograss	
Bulrush**	Goldenrod, gray	Paragrass	Vaseygrass	
Burdock	Guineagrass	Plantain	Woodsorrel	
Canada thistle	Horsetail	Poison ivy/oak	Yarrow, common	
Clover, alsike	Love grass	Quackgrass		
Clover, red	Mugwort	Rocket, yellow		
Clover, white	Mullein, common	Rose, wild		
* Apply to annual ryegrass prior to 3 inches in height.				

# **Use Restrictions on Tree, Vine, and Berry Crops**

- **DO NOT** exceed the maximum single application rate of 82 fl. oz./A (1.50 lbs. a.i./A).
- DO NOT apply more than 164 fl. oz. of GLUPEX 280SL per acre (3 lbs. a.i./A) to berry bushes and stone fruit in a 12-month period.
- **DO NOT** apply more than 246 fl. oz. (4.5 lbs. a.i./A) of this product per acre to tree nuts, vines, pome fruit, citrus, and olives in a 12-month period.
- **DO NOT** make more than 2 applications at a maximum rate of 82 fl. oz. per acre (1.5 lbs. a.i./A) per application to berry bushes and stone fruit.
- DO NOT make more than 3 applications at a maximum rate of 82 fl. oz. per acre (1.5 lbs. a.i./A) per application to tree nuts, vines, pome fruits, citrus, and olives.
- **DO NOT** graze, harvest, and/or feed treated orchard cover crops to livestock.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product aerially to tree, berry, or vine crops.
- **DO NOT** apply this product within 14 days of nut, fruit, berry, or grape harvest.
- Separate sequential applications by at least 14 days in citrus fruits, pome fruits, and olives.
- Separate sequential applications by at least 28 days in stone fruit.
- Separate sequential applications by at least 14 days in berry bushes.
- **DO NOT** make spot spray applications to suckers, as tree injury may occur.
- **DO NOT** make spot or directed spray applications to tree or vine trunk as injury may occur.
- DO NOT allow spray to contact trunks other than those that have callused, mature brown bark or are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.

# **Sucker Control with GLUPEX 280SL**

GLUPEX 280SL will reduce or eliminate sucker growth when applied to suckers that are young, green, and uncallused. For sucker control, apply a split application approximately 4 weeks apart at 56 fl. oz. of product/A (1.02 lbs. a.i./A). Coverage of all sucker foliage is necessary for optimum control. Suckers must not exceed 12 inches in length.

# Tank Mix Partner Instructions for Use on Tree, Vine, and Berry Crops

GLUPEX 280SL does not provide residual weed control or control of unexposed plant parts. Certain herbicide

Indicates suppression.

tank mixes may aid in the performance of GLUPEX 280SL or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. 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.

Diuron	Norflurazon	Terbacil
Flumioxazin	Oryzalin	
Napropamide	Simazine	

# TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, EDIBLE PEEL

[(Not for use in California.)]

Apply GLUPEX 280SL to the tropical and subtropical fruits listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **Registered Crops**

Tropical and Subtropical, Medium to large fruit, edible peel Crop Subgroup 23B – Achachairú; ambarella; arazá; babaco; bilimbi; borojó; cajou, fruit; cambucá; carob; cashew apple; ciruela verde; davidson's plum; feijoa; fig; gooseberry, Indian; guava; guava, cattley; guava, Para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; imbé; imbu; jaboticaba; jujube, Indian; kwai muk; mangaba; Marian plum; mombin, Malayan; mombin, purple; monkeyfruit; nance; natal plum; noni; papaya, mountain; persimmon, Japanese; pomerac; rambai; rose apple; sentul; starfruit; Surinam cherry; tamarind; uvalha; cultivars, varieties, and hybrids of these commodities.

# **Application Rate and Timing**

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

# **Postemergence-directed Application**

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

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

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

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

# **Crop-specific Restrictions**

- **DO NOT** apply more than 82 fl. oz./A of GLUPEX 280SL (1.50 lbs. a.i./A of glufosinate) in a single application.
- **DO NOT** apply more than a maximum cumulative amount of 246 fl. oz./A of GLUPEX 280SL (4.50 lbs. a.i./A of glufosinate) from sequential applications in tropical and subtropical fruits per year.

- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- For spot applications, apply as needed for the desired weed control but **DO NOT** exceed the equivalent of 1.50 lbs. a.i./A (1.88 fl. oz. per 1000 square feet) per application or 4.50 lbs. a.i./A (5.65 fl. oz. per 1000 square feet) from applications per year.
- DO NOT apply this product aerially to tropical and subtropical fruits.
- Pre-Harvest Interval (PHI): 1 day.

# TROPICAL AND SUBTROPICAL FRUITS, SMALL AND MEDIUM TO LARGE FRUIT, INEDIBLE PEEL

[(Not for use in California.)]

Apply GLUPEX 280SL to the tropical and subtropical fruits listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **Registered Crops**

Tropical and Subtropical, Small fruit, inedible peel Crop Subgroup 24A – Aisen; bael fruit; Burmese grape; cat's-eyes; ingá; longan; lychee; madras-thorn; manduro; matisia; mesquite; mongongo, fruit; pawpaw, small-flower; satinleaf; Sierra Leone-tamarind; Spanish lime; velvet tamarind; wampi; white star apple; cultivars, varieties, and hybrids of these commodities.

Tropical and Subtropical, Medium to large fruit, smooth, inedible peel Crop Subgroup 24B – Abiu; akee apple; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; banana; banana, dwarf; binjai; canistel; cupuacú; etambe; jatobá; kei apple; langsat; lanjut; lucuma; mabolo; mango; mango, horse; mango, Saipan; mangosteen; paho; papaya; pawpaw, common; pelipisan; pequi; pequia; persimmon, American; plantain; pomegranate; poshte; quandong; sapote, black; sapote, green; sapote, white; sataw; screw-pine; star apple; tamarind-of-the-Indies; wild loquat; cultivars, varieties, and hybrids of these commodities.

# **Application Rate and Timing**

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

#### **Postemergence-directed Application**

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

GLUPEX 280SL may also be applied as a banded or spot treatment to target emerged weeds.

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

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

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

# **Crop-specific Restrictions**

- **DO NOT** apply more than 82 fl. oz./A of GLUPEX 280SL (1.50 lbs. a.i./A of glufosinate) in a single application.
- **DO NOT** apply more than a maximum cumulative amount of 246 fl. oz./A of GLUPEX 280SL (4.50 lbs. a.i./A of glufosinate) from sequential applications in tropical and subtropical fruits per year.
- Maximum number of applications per year: 3
- Separate sequential applications by at least 30 days.
- For spot applications, apply as needed for the desired weed control but **DO NOT** exceed the equivalent of 1.50 lbs. a.i./A (1.88 fl. oz. per 1000 square feet) per application or 4.50 lbs. a.i./A (5.65 fl. oz. per 1000 square feet) from applications per year.
- **DO NOT** apply this product aerially to tropical and subtropical fruits.
- Pre-Harvest Interval (PHI): 1 day.

#### **CUCURBITS**

[(Not for use in California.)]

Apply GLUPEX 280SL to the cucurbits listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **Registered Crops**

Melon Crop Subgroup 9A – Citron melon; muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); watermelon

Squash/Cucumber Crop Subgroup 9B – Chayote (fruit); Chinese waxgourd (Chinese preserving melon); cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese ocra); *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash)

# **Application Rate and Timing**

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

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

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

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

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

**Table 1: Minimum Planting Intervals Direct-seeding** 

Minimum Planting Interval (days)				
Required between GLUPEX 280SL Application and Direct-seeding of Cucurbits				
Soil Toyture1	Amount of Precipitation <sup>2</sup>			
Soil Texture <sup>1</sup>	≥0.5 inch	<0.5 inch		
Fine	3	14		
Medium 3				
Course 7		21		

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

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

# **Table 2: Minimum Planting Intervals Transplanting**

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Minimum Planting Interval (days)		
Required between GLUPEX 280SL		
Application and Transplanting of Cucurbits		
Soil Toyture1	Amount of	Precipitation <sup>2</sup>
Soil Texture <sup>1</sup>	≥0.5 inch	<0.5 inch
All Soils	14	21

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

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

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

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

**Planting Interval.** When applied prior to seeding or transplanting over the top of plastic mulch, GLUPEX 280SL may damage cucurbits which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of GLUPEX 280SL and direct seeding or transplanting. Additionally, ensure that at least ½ inch of precipitation (either rainfall or overhead irrigation) has occurred prior to direct seeding or transplanting. Precipitation is needed to wash GLUPEX 280SL off the plastic and prevent damage to the crop. If less than ½ inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of GLUPEX 280SL. Regardless of precipitation occurring, **DO NOT** direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

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

For postemergence control of emerged weeds present between rows of established cucurbits, apply GLUPEX 280SL at 29 {Alternate text:} [32] to 62 fl. oz./A up to 14 to 30 days before harvest (see crop-specific PHI statements in Crop-specific Restrictions). GLUPEX 280SL must be applied by hooded sprayer in a directed band between rows to protect the crop from spray contact. **DO NOT** allow spray solution or spray drift to contact the crop foliage or fruit or crop injury will occur.

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

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

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

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

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

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

#### **Sequential Application**

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

# **Crop-specific Restrictions**

- **DO NOT** apply more than 62 fl. oz./A of GLUPEX 280SL (1.17 lbs. a.i./A of glufosinate) in a single application.
- DO NOT apply more than a maximum cumulative amount of 87 fl. oz./A of GLUPEX 280SL herbicide (1.59 lbs. a.i./A of glufosinate) from sequential applications in cucurbits per year.
   {Optional text:} [DO NOT apply more than a maximum cumulative amount of 62 fl. oz./A of GLUPEX 280SL (1.17 lbs. a.i./A of glufosinate) from sequential applications in cucurbits per year.]
- Maximum number of applications per crop cycle: 3 when using reduced rates.
- Separate sequential applications by at least 7 (Alternate text:) [14] days.
- For postemergence applications, **DO NOT** apply this product aerially to cucurbits.
- Pre-Harvest Interval (PHI) in melons: 30 days.
- Pre-Harvest Interval (PHI) in cucumbers, gourds, pumpkin, and squashes: 14 days.

# FRUITING VEGETABLES

[(Not for use in California.)]

Apply GLUPEX 280SL to the fruiting vegetables listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **Registered Crops**

Tomato Crop Subgroup 8-10A – Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

Pepper/Eggplant Croop Subgroup 8-10B – African eggplant; bell pepper; eggplant; Martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

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

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

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

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

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

**Planting Interval.** Depending on soil texture and amount of precipitation after application, an interval between GLUPEX 280SL application and planting of fruiting vegetables is required or crop injury may occur. See Table 3 for minimum planting intervals for direct-seeded fruiting vegetables, and Table 4 for transplanted fruiting vegetables.

**Table 3: Minimum Planting Intervals Direct-seeding** 

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Minimum Planting Interval (days)		
Required between GLUPEX 280SL		
Application and Direct-seeding of Fruiting Vegetables		
Soil Texture <sup>1</sup>	Amount of Precipitation <sup>2</sup>	
	≥0.5 inch	<0.5 inch
Fine	2	14
Medium	3	14
Course	7	21

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

**Table 4: Minimum Planting Intervals Transplanting** 

Minimum Planting Interval (days)		
Required between GLUPEX 280SL		
Application and Transplanting of Fruiting Vegetables		
Cail Taytura1	Amount of F	Precipitation <sup>2</sup>
Soil Texture <sup>1</sup>	≥0.5 inch	<0.5 inch
All Soils	14	21

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

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

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

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

**Planting Interval.** When applied prior to seeding or transplanting over the top of plastic mulch, GLUPEX 280SL may damage fruiting vegetables which come in direct contact with herbicide remaining on the plastic. Allow at least 3 days between application of GLUPEX 280SL and direct seeding or transplanting. Additionally, ensure that at least ½ inch of precipitation (either rainfall or overhead irrigation) has occurred prior to direct seeding or transplanting. Precipitation is needed to wash GLUPEX 280SL off the plastic and prevent damage to the crop. If less than ½ inch of precipitation occurs, **DO NOT** seed or transplant within 27 days after the application of GLUPEX 280SL herbicide. Regardless of precipitation occurring, **DO NOT** direct seed or transplant into or within 6 inches of holes in the plastic mulch that exist at the time of application.

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

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

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

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

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

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

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

{Optional text:} [When crop is grown on flat beds, **DO NOT** spray within 6 inches of running vines.] {Optional text:} [Note: in geographies where hooded sprayers are not available, use precision directed spray application equipment with nozzles adjusted to prevent spray contact with crop plants.]

# **Sequential Application**

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

# **Crop-specific Restrictions**

- **DO NOT** apply more than 62 fl. oz./A of GLUPEX 280SL (1.17 lbs. a.i./A of glufosinate) in a single application.
- **DO NOT** apply more than a maximum cumulative amount of 87 fl. oz./A of GLUPEX 280SL (1.59 lbs. a.i./A of glufosinate) from sequential applications in fruiting vegetables per year.
- **DO NOT** apply more than 43 fl oz/A in a single application as a preplant application. {Optional text:} [**DO NOT** apply more than a maximum cumulative amount of 62 fl. oz./A of GLUPEX 280SL (1.17 lbs. a.i./A of glufosinate) from sequential applications in fruiting vegetables per year.]
- Maximum number of applications per year: 3 when using reduced rates
- Separate sequential applications by at least 7 (Alternate text:) [14] days.
- For postemergence applications, **DO NOT** apply this product aerially to fruiting vegetables.
- Pre-Harvest Interval (PHI): 30 days

# **GRASSES GROWN FOR SEED PRODUCTION**

For use only in grass grown for seed production in Idaho, Oregon, and Washington.

GLUPEX 280SL may be applied only to the following grasses grown for seed production: perennial ryegrass and tall fescue.

IMPORTANT CROP SAFETY INFORMATION, READ BEFORE USING THIS PRODUCT. When used on grass grown for seed production, this product may lead to crop injury, loss, or damage. Because of the risk of crop failure to perform or crop damage, to the extent consistent with applicable law, all such use is at the user and/or grower's risk, APEX Agro, LLC recommends that the user and/or growers test this product in order to determine its suitability for such intended use. APEX Agro, LLC makes this product available to the end user and/or grower solely to the extent the benefit and utility, in the sole opinion of the user and/or grower, outweigh the potential injury associated with the use of this product. The decision to use or not to use this herbicide must be made by each individual user and/or grower on the basis of possible crop injury from this product, the severity and type of weed infestation, the cost of alternative weed controls, and other factors. To the extent consistent with applicable law, APEX Agro, LLC makes no warranties express or implied with respect to tank mixtures of GLUPEX 280SL with other herbicides or adjuvants to grasses grown for seed production.

# **Application Timing and Rate**

Apply GLUPEX 280SL in a single broadcast application either in the fall or in the spring or in sequential broadcast applications (fall followed by spring if additional weed control is required in the spring). For best weed control and crop safety, apply GLUPEX 280SL when the grass seed crop is actively growing to minimize potential for crop injury.

#### Fall Application

If severe weed pressure exists in newly established grass seedling stands, broadcast apply GLUPEX 280SL

herbicide at 10 fl. oz./A after the 1st tiller of the crop is established, but **DO NOT** exceed this rate. In stablished grass stands fields with a minimum of 4 tillers, apply GLUPEX 280SL at 16.5 to 20 fl. oz./A. **DO NOT** apply after December 1 in either seedling or established grass stands. Apply GLUPEX 280SL in a minimum of 20 gallons per acre of water at 30 to 40 psi.

# **Spring Application**

Broadcast apply GLUPEX 280SL at 16.5 to 20 fl. oz./A to actively growing grass stands in the 4 to 6 tiller growth stage. **DO NOT** make applications after April 1 except when severe weed pressure necessitates control.

# **Additional Weeds Controlled or Suppressed**

Bromus species (suppression only)
Manna Grass
Poa annua
Poa trivialis

# **Crop-specific Restrictions**

- **DO NOT** apply more than 20 fl. oz./A of GLUPEX 280SL (0.366 lb ai/A of glufosinate) in a single application.
- **DO NOT** apply more than a maximum cumulative amount of 40 fl. oz./A of GLUPEX 280SL (0.73 lb ai/A of glufosinate) from sequential applications in grass seed per year.
- Maximum number of applications per year: 2
- Separate sequential applications by at least 60 days.
- **DO NOT** broadcast apply GLUPEX 280SL on bentgrass, fine fescue, orchardgrass, or Poa species grown for seed production.
- Preharvest Interval (PHI) or Pregrazing Interval (PGI) to livestock for GLUPEX 280SL-treated grass forage and hay 90 days.
- There is no required Preharvest Interval (PHI) to grass seed harvest.
- Straw remaining after grass seed harvest may be fed to or grazed by livestock.
- **DO NOT** apply aerially or through any type of irrigation system in grass grown for seed production.
- **DO NOT** apply GLUPEX 280SL when grass grown for seed production is stressed due to drought, heat, frost, flooding, poor fertility, diseases, insects, or other reason.

### **Crop-specific Precautions**

• Stunting of grass grown for seed production may occur following application and, in some instance, seed yields may be adversely affected.

#### **HOPS**

[(Not for use in California.)]

Apply GLUPEX 280SL to hops. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

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

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

# Postemergence-directed Application

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

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

Sequential Applications. Apply GLUPEX 280SL at a minimum of 25 days apart. Regrowth may occur due to

the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of GLUPEX 280SL may be necessary to control plants generating from underground parts or seed.

Weed Size and Stage	GLUPEX 280SL Rate (fl. oz./A)
Weeds < 3 inches in height and hop sucker control	32 to 55
Weeds < 6 inches in height pre-tiller grasses	56 to 82

# **Crop-specific Restrictions**

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

# POTATO VINE DESICCATION

# **Application Rate and Timing**

Apply GLUPEX 280SL at the beginning of natural senescence of potato vines. Apply 21 fl. oz./A (0.38 lb. a.i./A). **DO NOT** split this application or apply more than one application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20 to 100 gpa) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply GLUPEX 280SL with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

#### **Use Restrictions in Potato Vine Desiccation**

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

# **FALLOW FIELDS OR POST-HARVEST**

GLUPEX 280SL may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **WEED CONTROL FOR ROW CROPS** section of this label. Applications may be made in fallow fields, post-

harvest, prior to planting or emergence of any crop listed on this label.

Apply GLUPEX 280SL at 22 (0.40 lb. a.i./A) or 29 fl. oz./A (0.53 lb. a.i./A) to fallow fields to control specific weeds. GLUPEX 280SL must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are advised with GLUPEX 280SL to enhance total weed control. When using GLUPEX 280SL in tank mix combinations, follow the precautions and directions for use of the most restrictive label. See the **Application** and **Mixing Procedures** section of this label for additional information on how to apply this product. See the **PRODUCT INFORMATION** section of this label for rotational crop restrictions.

#### **Use Restrictions in Fallow Fields or Post-Harvest**

- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. a.i./A) in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) per year.
- DO NOT make more than 3 applications per year.
- DO NOT make sequential applications sooner than 14 days apart.

# **NON-CROP USES**

GLUPEX 280SL controls annual and perennial weeds in non-crop areas defined below in the "Where to Apply" section. Applications may be made on a broadcast, banded or spot treatment basis depending on the situation. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from underground parts or seed.

# When to Apply

GLUPEX 280SL is a foliar-active material. Best results are obtained when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest rate directed. GLUPEX 280SL must be applied at the labeled rate in the "How to Apply" section. Repeat applications of GLUPEX 280SL or tank mixes of GLUPEX 280SL plus one or more appropriate residual herbicide(s) listed on this label will be needed to control weeds emerging from underground parts or seeds.

#### **How to Mix**

GLUPEX 280SL must be mixed with water to make finished spray solution as follows:

Fill the spray tank with the required amount of water.

Add the proper amount of product, then mix thoroughly.

# **How to Apply**

# **Spot or Directed Applications**

This product may be used as a spot or directed spray application using 0.4 to 0.75 fl. oz./gal. of water (0.007 - 0.014 lb. a.i./gal. of water) depending upon the weed and stage of growth as shown in the following sections. Spray undesirable vegetation foliage on a spray-to-wet basis. Ensure uniform and complete coverage. Use a coarse spray. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

# **Broadcast or Boom Applications**

Apply 12 - 38 fl. oz./A (0.22 - 0.69 lb. a.i./A) depending upon the weed and stage of growth as shown in the following sections. Use a minimum of 40 gallons of water per acre with a minimum of 30 PSI spray pressure.

# **Aerial Applications**

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage. Applications under conditions which cause drift of this product will result in damage to any vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

# **Tank Mix Directions for Non-crop Uses**

GLUPEX 280SL is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate. 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.

Tank mix applications of GLUPEX 280SL plus the following herbicides are advised for broad-spectrum post-emergence and pre- emergence weed control:

Butroxydim	Isoxaben	Oxadiazon
Diglycolamine salt of 3,6-dichloro-o-anisic Acid	Norflurazon	Pendimethalin
Isopropylamine salt of imazapyr	Oryzalin	Prodiamine

A compatibility test must be conducted with any potential tank mix partner with GLUPEX 280SL, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below: Fill the jar three-quarters full with water.

Add the appropriate amount of herbicide in the following order: (a) dry flowable, (b) wettable powder, (c) aqueous suspensions, (d) flowables, (e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.

After adding ail ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oily film on the jar or other signs of incompatibility.

If the compatibility test shows signs of incompatibility, **DO NOT** tank mix the product tested with GLUPEX 280SL.

# For the Following Weeds Controlled by GLUPEX 280SL Apply: Spot Application:

Apply 0.75 fl. oz./gal. of water (0.014 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.25 fl. oz./ gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

# **Broadcast Application:**

Apply 40 fl. oz./A (0.73 lb. a.i./A) when the weed height or diameter is less than 6 inches. Apply 56 fl. oz./A (1.02 lb. a.i./A) when the weed height or diameter is 6 inches or greater.

Jimsonweed Kochia London rocket	Marestail Purslane Shepherd's purse
London rocket	
	Shepherd's purse
Malva (little mallow)	Smartweed
Green Foxtail	Stinkgrass
Johnsongrass (rhizome)	Windgrass
Lovegrass	Yellow Foxtail
Shattercane	
Smallflower Alexandergrass	
	Green Foxtail Johnsongrass (rhizome) Lovegrass Shattercane

# For the Following Weeds Controlled by GLUPEX 280SL Apply: Spot Application:

Apply 1.25 fl. oz./gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.75 fl. oz./gal. of water (0.032 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

#### **Broadcast Application:**

Apply 56 fl. oz./A (1.02 lbs. a.i./A) when the weed height or diameter is less than inches tall. Apply 80 fl. oz./A (1.46 lbs. a.i./A) when the weed height or diameter is 8 inches or greater.

Broadleaf Weeds		
Annual sowthistle	Lambsquarters	Tansy mustard
Bindweed	Leafy spurge	Velvetleaf
Buffalobur	Mugwort	Vervain
Burdock	Musk thistle	Virginia copperleaf
Canada thistle	Nettle	White heath aster
Curly dock	Nightshade	Wild buckwheat
Dandelion	Pennycress	Wild mustard

Dogbane (hemp)	Pigweed, redroot	Wild onion
Field growwell	Plantain	Wild rose
Fleabane	Prickly lettuce	Wild turnip
Goldenrod	Ragweed	Wood sorrel
Horsetail	Russian thistle	Yellow rocket
Grasses and Sedges		
Annual bluegrass	Downy bromegrass	Ryegrass
Bahiagrass	Fescue	Sandbur
Barley	Guineagrass	Smooth bromegrass
Bermudagrass	Kentucky bluegrass	Torpedograss
Carpetgrass	Nutsedge	Vaseygrass
Crabgrass	Paragrass	Wheat
Dallisgrass	Quackgrass	Wild oat

#### **Additional Use Directions**

Use higher rates within the directed rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions including drought or when average temperatures are below 50°F. The addition of 8.5 to 17 pounds of ammonium sulfate (spray grade) per 100 gallons of water (1 to 2% by weight) or 2 to 4 pounds of ammonium sulfate per acre may improve the level of weed control.

# Use on Woody Species[\*]

When applied as labeled, GLUPEX 280SL will provide control, partial control, or suppression of certain perennial woody weed species. Apply 64 - 192 fl. oz./A (1.19 - 3.51 lbs. a.i./A). Use the higher specified rates per acre of this product when conditions are not optimum for spray penetration, including when vegetation growth is heavy or dense. Lower specified rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

# [\*Not for use in California]

Blackberry	Rubus spp.	Poison ivy	Toxicodendron radicans
Deer brush	Ceanothus integerrimus	Poison oak	Toxicodendron toxicarium
Douglas fir	Pseudotsuga menziesii	Roundleaf greenbrier	Smilax rotundifolia
Gallberry	llex spp.	Salmonberry	Rubus spectabilis
Hazel	Corylus spp.	Sweet gum	Liquidambar styraciflua
Honeysuckle	Lonicera spp.	Sumac	Rhus spp.
Huckleberry	Gaylussacia spp.	Thimbleberry	Rubus parviflorus
Maple	Acer spp.	Trumpetcreeper	Campsis radicans
Multiflora rose	Rosa multiflora	Vine maple	Acer circinatum
Oak	Quercus spp.	Western red cedar	Thuja plicata
Pine	Pinus spp.		

# Where to Apply Trimming and Edging

GLUPEX 280SL may be used for trimming and edging landscape areas including around individual trees and shrubs, landscape beds, foundations, fences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. For control of weeds emerging from seed, the use of GLUPEX 280SL in a tank mix with pre-emergence herbicides is advised. If spraying in areas adjacent to desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

# Conservation Reserve Program (CRP)[\*]

This product can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres. For selective applications with broadcast spray equipment, apply 48 to 56 fl. oz./A (0.88 to 1.0 lb. ai/A) of this product in early spring before desirable CRP grasses, including crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant.

# [\*Not for use in California]

# Wildlife Food Plots[\*]

This product may be used as a site preparation treatment prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling.

[\*Not for use in California]

# Farmsteads, Recreational and Public Areas

When applied as a spot or directed spray application, this product controls annual and perennial weeds listed on this label in areas including areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, roadsides, schools, parking lots, tank farms, pumping stations, and parks. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

# Dormant Bermudagrass (Not for use on Residential Turf/Turfgrass/Lawns)

GLUPEX 280SL may be used to control winter annual weeds in well-established ornamental dormant hybrid or common Bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply GLUPEX 280SL at a rate of 40 – 80 fl. oz./A (0.73 – 1.46 lbs. a.i./A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by GLUPEX 280SL section of this label for selecting specified rates. Applications of GLUPEX 280SL may also be used to suppress or control undesirable biennial or perennial weeds. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed green-up may occur.

#### **Ornamentals and Christmas Trees**

When applied as specified by this label, this product may be used for the control of undesirable vegetation in site preparation prior to planting, around and within shade and greenhouses, and as a directed spray around containers and field-grown established ornamentals and Christmas trees.

# **Directed Spray Application:**

GLUPEX 280SL may be applied as a directed spray to control in-row weeds in field-grown woody plants. Refer to the How to Apply section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting.

#### **Site Preparation Application:**

This product may be used for pre-plant site preparation for the control of annual and perennial weeds listed on this label, in ornamental and Christmas tree plantings. Ornamentals and Christmas trees may be planted into the treated area after the restricted entry interval (REI) of 12 hours has elapsed. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

# **Greenhouse and Shade House Applications:**

GLUPEX 280SL may be used to control weeds in greenhouses and shade-houses. Apply GLUPEX 280SL as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation.

#### **Use Restrictions in Non-Crop Use**

- **DO NOT** apply more than 80 fl. oz./A (1.46 lbs. a.i./A) in a single broadcast or boom application.
- **DO NOT** apply more than 1.75 fl. oz./gal. of water (0.032 lb. a.i./gal. of water) in a single spot or directed application.
- **DO NOT** apply more than 240 fl. oz. (4.50 lbs. a.i./A) of this product per acre per year to non-crop areas except on dormant bermudagrass.
- On dormant bermudagrass, **DO NOT** apply more than 80 fl. oz. (1.46 lbs. a.i./A) per acre per year.
- **DO NOT** make more than 3 applications per year for broadcast or boom applications.
- DO NOT make more than 2 applications per year on dormant bermudagrass.
- Applications must be made at least 14 days apart in non-crop areas.
- DO NOT apply this product through any type of irrigation system.
- **DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result.
- DO NOT allow grazing of vegetation treated with this product.
- For spot or directed applications, **DO NOT** apply beyond runoff.

- For spot or directed applications, **DO NOT** spray during windy conditions.
- For aerial applications, DO NOT apply when winds are gusty or under conditions which favor drift on to desirable vegetation.
- **DO NOT** apply GLUPEX 280SL as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.
- For dormant bermudagrass, DO NOT apply to residential lawns.
- DO NOT use in greenhouses or shade houses containing edible crops.
- In greenhouses and shade houses, air circulation fans must be turned off during application.

# STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

**DO NOT** use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. 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 (Capacity Equal to or Less Than 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 formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment 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. **DO NOT** burn unless allowed by state and local ordinances.]

[[Nonrefillable Plastic Containers (Capacity Greater Than 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 formulation equipment. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. **DO NOT** burn unless allowed by state and local ordinances.]

[[Nonrefillable Plastic Containers (e.g., Intermediate Bulk Containers [IBC]) (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):] Nonrefillable container. **DO NOT** reuse or refill this container. Clean container promptly after emptying the contents from this container into formulation equipment and before final disposal using the following pressure rinsing procedure: Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure spray duration and/or spray volume. If the manufacturer's instructions are not available pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.]

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

#### LIMIT OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, APEX Agro, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO

OTHER EXPRESSED WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein. Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of the Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, applications to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

To the extent consistent with applicable law, this Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USE OR BUYER FOR THE QUANITTY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

To the extent consistent with applicable law, upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

[GLUPEX is a trademark of APEX Agro, LLC]

[EPA APPROVAL DATE]

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

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

GLUFOSINATE GROUP 10 HERBICIDE

# **GLUPEX 280SL**

ACTIVE INGREDIENT:	WT. BY %
Glufosinate ammonium*	24.5%**
OTHER INGREDIENTS	<u>75.5%</u>
TOTAL:	100.0%

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

# 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	
IF IN EYES:	<ul> <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>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul> <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>

#### **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. For non-emergency information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST or at http://npic.orst.edu.

# EMERGENCY NUMBERS

Have the product container or label with you when calling a poison control center or doctor or going for treatment. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL (800) 424-9300.

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

Manufactured [For][by]: EPA Reg. No.: 103636-5
APEX Agro, LLC EPA Est. No.:
PO Box 1005 Net Contents:
Fulshear, TX 77441 [Lot/Batch code/number]
{Note to reviewer: Lot or Batch number may appear on label or printed directly on packaging.}

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

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

#### **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 or rinsate.

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

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing. These methods also reduce pesticide 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 advised.

#### PHYSICAL OR CHEMICAL HAZARDS

**DO NOT** use with or store near oxidizing agents since hazardous chemical reaction may occur.

# STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

**DO NOT** use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. 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**

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Seed Disposal: To dispose of out of date or otherwise unmarketable seed from plants which have been treated with this product, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

[EPA APPROVAL DATE]

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