U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
86203-33	10/22/24

Term of Issuance:
Unconditional

Name of Pesticide Product:
L-Glufosinate Liquid Formulation

Name and Address of Registrant (include ZIP Code):

Mitsui Chemicals Crop & Life Solutions, Inc.
c/o Landis International Inc.
PO Box 5126, Valdosta, GA 31603

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant and EPA's evaluation, the above-named pesticide product is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5). Mitsui Chemicals Crop & Life Solutions, Inc. must comply with all of the following terms and conditions:

Registration Term for Implementing Additional Mitigations from the Services

Continues page 2

Signature of Approving Official:

Nathan Mellor, Chief
Fungicide Herbicide Branch, Registration Division (7505T)

Date:
10/22/24

If, following formal consultation with FWS and NMFS, additional modifications are identified in any applicable Biological Opinion, EPA will notify Mitsui Chemicals Crop & Life Solutions, Inc. in writing within 45 calendar days of the issuance of the Biological Opinion of any necessary required changes. Within 30 calendar days of receiving EPA's notice, Mitsui Chemicals Crop & Life Solutions, Inc. must submit an amendment application incorporating the necessary changes, including amended labels. Alternatively, Mitsui Chemicals Crop & Life Solutions, Inc. may respond by submitting a request for voluntary cancellation of this product. If Mitsui Chemicals Crop & Life Solutions, Inc. fails to comply with this term, Mitsui Chemicals Crop & Life Solutions, Inc. has agreed in prior written acceptance of the terms that EPA may cancel the registration under an expedited process under FIFRA 6(e).

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

2. Make the following label changes before you release the product for shipment:

   - Revise the EPA Registration Number to read, "EPA Reg. No. 86203-33."

3. Submit one copy of the final printed label for the record before you release the product for shipment.

4. Develop, implement, and annually update an education and training program, with at least one written communication each year, to users of this product that includes information on:
   - Product use restrictions and mitigation measures to protect listed species and their designated critical habitats, including geographical use limitations; consulting with the Endangered Species Protection Bulletin (Bulletins Live! Two) and mitigation menu web site (https://www.epa.gov/pesticides/mitigation-menu); spray drift and nozzle selection; buffer requirements; runoff mitigation measures including selection of practices and determination of soil types; and reporting ecological incidents to Mitsui Chemicals Crop & Life Solutions.
   - How to follow a Herbicide Resistance Management Plan (HRM) as laid out in the labeling regarding field detection and remediation, education, evaluation, reporting, and best management practices (BMPs).

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 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.

In addition to Mitsui Chemicals Crop & Life Solutions's prior written acceptance of these terms, release of this product for shipment further confirms Mitsui Chemicals Crop & Life Solutions's acceptance of all terms and conditions listed above. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA Section 6, including cancellation under FIFRA 6(e) as described under paragraph 1. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 04/24/2024

If you have any questions, please contact Manjula Unnikrishnan at 202-566-2949 or at Unnikrishnan.manjula@epa.gov .

Enclosure

Glufosinate-P	Group 10	Herbicide

L-GLUFOSINATE LIQUID FORMULATION

Herbicide

L-GLUFOSINATE LIQUID FORMULATION herbicide is a nonselective herbicide that provides control of a broad spectrum of broadleaf and grassy weeds. **L-GLUFOSINATE LIQUID FORMULATION** may be applied as a broadcast burndown treatment prior to planting or prior to emergence of canola, corn (field and sweet), cotton, and soybean. **L-GLUFOSINATE LIQUID FORMULATION** may be used for postemergence weed control on glufosinate-resistant crops including glufosinate-resistant canola, glufosinate-resistant field corn, glufosinate-resistant sweet corn, glufosinate-resistant cotton, glufosinate-resistant soybeans and postemergence weed control on cotton with a hooded sprayer only.

Active Ingredient:

Glufosinate-P*……	10.26%**
Other Ingredients:……	89.74%
Total: ……...	**100.0%**

* CAS Number 35597-44-5

** Equivalent to 0.93 pounds of active ingredient per U.S. gallon.
Equivalent to 11.5% as sodium salt form

EPA Reg. No. 86203-XX **EPA Est. No.**

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

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

Net Contents:

Mitsui Chemicals Crop & Life Solutions, Inc.
Nihonbashi Dia Building
1-19-1, Nihonbashi
Chuo-ku, Tokyo, 103-0027, Japan

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to by a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes	• Hold eyes open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eyes. • Get medical attention if irritation develops or persists.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information on, call the National Pesticides Information Center at 1-800-858-7378 6:30 AM to 4:30 PM PACIFIC TIME (PT), seven days a week. During other times, call the poison control center 1-800-424-9300.	

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION. May be fatal if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Harmful if inhaled. Avoid breathing spray mist. Causes moderate eye irritation. 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.

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.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

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

USER SAFETY RECOMMENDATIONS

Users should:

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

Environmental Hazards

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

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing; these methods also reduce pesticide runoff. This pesticide is toxic to vascular plants and needs to be used strictly in accordance with the drift and runoff precautions on this label in order to minimize off-site exposures.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL, USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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.

Failure to follow directions and precautions on this label may result in crop injury, poor weed control, and/or illegal residues.

AGRICULTURAL USE REQUIREMENTS

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

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

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride ≥14 mils, or viton ≥14 mils.
- Shoes plus socks
- Protective eyewear (googles, face shield, and safety glasses)

Notify workers of the application by warning them orally and posting warning signs at entrances to treated areas.

IMPORTANT CROP SAFETY INFORMATION
READ BEFORE USING THIS PRODUCT

L-GLUFOSINATE LIQUID FORMULATION may be applied as a **burndown treatment prior to planting or prior to emergence** of canola, field corn, sweet corn, cotton, and soybean.

Postemergence row crop applications of **L-GLUFOSINATE LIQUID FORMULATION** may be made only to crops resistant to the active ingredient in this product. MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. does not warrant the use of this product on

crops other than those designated as **glufosinate-resistant** to safely withstand the application of **L-GLUFOSINATE LIQUID FORMULATION** to the extent consistent with applicable law.

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

L-GLUFOSINATE LIQUID FORMULATION may be applied to conventional or other transgenic cotton not resistant to the active ingredient in **L-GLUFOSINATE LIQUID FORMULATION** using a hooded sprayer.

Product Information

L-GLUFOSINATE LIQUID FORMULATION is a nonselective foliar herbicide that is used for burndown treatment and post-emergent control of a broad spectrum of broadleaf and grassy weeds. **L-GLUFOSINATE LIQUID FORMULATION** acts by inhibiting glutamine synthetase, which leads to poisoning in plants via the overproduction of ammonia. **L-GLUFOSINATE LIQUID FORMULATION** is registered for use as a burndown treatment prior to planting or prior to emergence of both conventional and **glufosinate-resistant** varieties of canola, field corn, sweet corn, cotton, and soybean; a postemergence weed control herbicide to be applied on glufosinate-resistant varieties of crops including **glufosinate-resistant** canola, **glufosinate-resistant** field corn, **glufosinate-resistant** sweet corn, **glufosinate-resistant** cotton, and **glufosinate-resistant** soybeans and postemergence weed control herbicide to be applied on cotton with a hooded sprayer only.

L-GLUFOSINATE LIQUID FORMULATION is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply **L-GLUFOSINATE LIQUID FORMULATION** to actively growing small weeds as specified in the **Weeds Controlled** section. **L-GLUFOSINATE LIQUID FORMULATION** is a contact herbicide and requires uniform, thorough spray coverage. Necrosis of leaves and young shoots occurs within 2 to 4 days after application under good growing conditions. Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION. L-GLUFOSINATE LIQUID FORMULATION** is rainfast 4 hours after application to most weed species; therefore, rainfall within 4 hours may result in reduced weed control. Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness. To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application. To avoid the possibility of reduced lambsquarters and velvetleaf control, applications must be made between dawn and 2

hours before sunset. Consult your local Cooperative Extension Service for guidelines on the optimum application timing for **L-GLUFOSINATE LIQUID FORMULATION** in your region.

Weeds Controlled

Rates in ounces of formulated product per acre for the control of weeds as shown in the weed control **Tables 1-3**. In weed populations with mixed species, apply at a rate needed for the species targeting less than three-inch weeds.

Table 1. Broadleaf Weeds Controlled

Common Name	Genus and Species Name	25 fl ozs/A (0.18 lbs ai/A)	33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)
		NR= Not recommended C = Control S = Suppression	
Amaranth, Palmer	*Amaranthus palmeri*	NR	C
Anoda, spurred	*Anoda cristata*	C	C
Beggarweed, Florida	*Desmodium tortuosum*	C	C
Back medic	*Medicago lupulina L.*	C	C
Blueweed, Texas	*Helianthus ciliaris DC.*	C	C
Buckwheat, wild	*Polygonum convolvulus*	C	C
Buffalobur	*Solanum cornutum*	C	C
Burcucumber	*Sicyos angulatus*	C	C
Canola, volunteer[1]	*Brassica spp.*	C[1]	C[1]
Carpetweed	*Mollugo verticillate*	C	C
Catchweed bestraw (cleavers)	*Galium aparine L.*	C	C
Chickweed, common	*Stellaria media*	C	C
Cocklebur, common	*Xanthium strumarium*	C	C
Copperleaf, hophornbeam	*Axalypha ostryaefolia*	C	C
Cotton, volunteer[1]	*Gossypium spp.*	C[1]	C[1]
Croton, tropic	*Croton glandulosus*	C	C
Croton, woolly	*Croton capitatus*	C	C
Devil's claw	*Proboscidea louisiana*	C	C
Eclipta	*Eclipta alba*	C	C
Fleabane, annual	*Erigeron annuus*	C	C
Galinsoga, hairy	*Galinsoga ciliate*	C	C
Galinsoga, smallflower	*Galinsoga parviflora*	C	C
Galinsoga, cutleaf	*Geranium dissectum L.*	C	C
Groundcherry, cutleaf	*Physalis angulata*	C	C
Hempnettle	*Galeopsis spp.*	C	C
Horsenettle, Carolina[2]	*Solanum carolinense*	C[2]	C[2]
Jimsonweed	*Datura stramonium*	C	C
Knotweed	*Polygonum spp.*	C	C
Kochia	*Kochia scoparia*	C	C
Ladysthumb	*Polygonum persicaria*	C	C
Lambsquarters, common	*Chenopodium album*	C	C
Mallow, common	*Malva spp.*	C	C
Mallow, Venice	*Hibiscus trionum*	C	C
Marestail[3]	*Conyza canadensis*	S	C

Table 1. Broadleaf Weeds Controlled

Common Name	Genus and Species Name	25 fl ozs/A (0.18 lbs ai/A)	33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)
		NR= Not recommended C = Control S = Suppression	
Marsh elder, annual	*Iva annua*	C	C
Morningglory, entireleaf	*Lpomoea hederacea var. integriuscula*	C	C
Morningglory, ivyleaf	*Lpomoea hederacea*	C	C
Morningglory, pitted	*Lpomoea lacunosa*	C	C
Morningglory, sharppod	*Lpomoea cordatotriloba*	C	C
Morningglory, smallflower	*Jacquamontia tamnifolia*	C	C
Morningglory, tall	*Lpomoea purpurea*	C	C
Mustard, wild	*Sinapis arvensis*	C	C
Nightshade, black	*Solanum nigrum*	C	C
Nightshade, eastern black	*Solanum ptycanthum*	C	C
Nightshade, hairy	*Solanum sarrachoides*	C	C
Pennycress	*Thlaspi arvense*	C	C
Pigweed, prostrate	*Amaranthus blithiodes*	C	C
Pigweed, redroot	*Amaranthus retroflexus*	C	C
Pigweed, smooth	*Amaranthus hybridus*	C	C
Pigweed, spiny	*Amaranthus spinosus*	C	C
Pigweed, tumble	*Amaranthus albus*	C	C
Puncturevine	*Tribulus terrestris*	C	C
Purslane, common	*Portulaca oleracea*	C	C
Pusley, Florida	*Richardia scabra*	S	C
Ragweed, common	*Ambrosia artemisiifolia*	C	C
Ragweed, giant	*Ambrosia trifida*	C	C
Senna, coffee	*Cassia occidentalis*	C	C
Sesbania, hemp	*Sesbania herbacea*	C	C
Shepherd's purse	*Capsella bursa-pastoris*	C	C
Sicklepod (java bean)	*Senna obtusifolia*	C	C
Sida, prickly	*Sida spinosa L.*	C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	C	C
Smell melon	*Cucumis melo L. var. dudaim*	C	C
Sowthistle, annual	*Sonchus oleraceus L.*	C	C
Soybeans, volunteer[1]	*Glycine max*	C[1]	C[1]
Spurge, prostrate	*Euphorbia humifusa*	C	C
Spurge, spotted	*Euphorbia maculate L.*	C	C
Starbur, bristly	*Acanthospermum hispidum*	C	C
Sunflower, common	*Helianthus annuus*	C	C
Sunflower, prairie	*Corythucha pura*	C	C
Sunflower, volunteer	*Helianthus annuus*	C	C
Thistle, Russian[2]	*Salsola kali*	S[2]	C[2]
Velvetleaf	*Abutilon thophrasti*	C	C
Waterhemp, common	*Amaranthus rudis*	NR	C
Waterhemp, tall	*Amaranthus tuberculatus*	NR	C

[1] Volunteer **glufosinate-resistant** crops from the previous season will not be controlled.
[2] May require sequential applications for control.
[3] For optimum control apply **L-GLUFOSINATE LIQUID FORMULATION** on 6-inch marestail.

Table 2. Grass Weeds Controlled

Common Name	Genus and Species Name	25 fl ozs/A (0.18 lbs ai/A)	33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)
		C = Control S = Suppression	
Barley, volunteer[3]	*Hordeum vulgare*	C[3]	C[3]
Barnyardgrass	*Echinochloa spp.*	C	C
Bluegrass, annual	*Poa annua L.*	C	C
Corn, volunteer[1]	*Zea mays L.*	C[1]	C[1]
Crabgrass, large[2]	*Digitaria sanguinalis*	C[2]	C[2]
Crabgrass, smooth[2]	*Digitaria ischaemum*	C[2]	C[2]
Cupgrass, woolly	*Eriochloa villosa*	C	C
Foxtail, bristly	*Setaria verticillata*	C	C
Foxtail, giant	*Setaria faberi*	C	C
Foxtail, green	*Setaria viridis*	C	C
Foxtail, robust purple	*Setaria viridis*	C	C
Foxtail, yellow[2]	*Setaria pumila*	C[2]	C[2]
Goosegrass[3]	*Eleusine indica*	C[3]	C[3]
Johnsongrass, seedling	*Sorghum halepense*	C	C
Junglerice	*Echinochloa colonum*	C	C
Millet, proso volunteer	*Milium vernale*	C	C
Millet, wild proso	*Panicum miliaceum L.*	C	C
Oat, wild[2]	*Avena fatua*	C[2]	C[2]
Panicum, fall	*Panicum dichotomiflorum*	C	C
Panicum, Texas	*Panicum texanum*	C	C
Rice, red	*Oryza sativa L.*	C	C
Rice, volunteer[1]	*Oryza sativa*	C[1]	C[1]
Sanbur, field[2]	*Cenchrus pauciflorus*	S[2]	C[2]
Shattercane	*Sorghum vulgare Pers.*	C	C
Signalgrass, broadleaf	*Brachiaria platyphylla*	C	C
Sorghum, volunteer	*Sorghum spp.*	C	C
Sprangletop	*Leptochloa spp.*	C	C
Stinkgrass	*Eragrostis cilianensis*	C	C
Wheat, volunteer[2]	*Triticum spp.*	C[2]	C[2]
Witchgrass	*Panicum virgatum L.*	C	C

[1] Volunteer **glufosinate-resistant** crops from the previous season will not be controlled.
[2] For best control of yellow foxtail, sandbur, crabgrass, wild oats, and volunteer wheat, treat prior to tiller initiation.
[3] A sequential application may be necessary for control.

Table 3. Biennial and Perennial Weeds Controlled

For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of L-GLUFOSINATE LIQUID FORMULATION can be made by crop (see crop sections).

Common Name	Genus and Species Name	37 to 50 fl ozs/A (0.27 to 0.36 lbs ai/A) C = Control S = Suppression
Alfalfa	*Medicago sativa L.*	C
Bermudagrass	*Cynodon dactylon*	C
Bindweed, field	*Convolvulus arvensis L.*	C
Bindweed, hedge	*Calystegia sepium*	C
Bluegrass, Kentucky	*Poa pratensis L.*	C
Blueweed, Texas	*Helianthus ciliaris DC.*	C
Bromegrass, smooth	*Bromus inermis*	C
Burdock	*Arctium spp.*	C
Bursage, woollyleaf	*Ambrosia grayi*	C
Chickweed, mouse-ear	*Cerastium vulgatum L.*	C
Clover, red	*Trifolium pretense L.*	C
Dandelion	*Taraxacum officinale*	C
Dock, smooth	*Rumex spp.*	S
Dogbane, hemp	*Apocynum cannabinum*	S
Goldenrod, gray	*Solidago nemoralis*	C
Johnsongrass, rhizome	*Sorghum halepense*	C
Milkweed, common	*Asclepias syriaca*	S
Milkweed, honeyvine	*Ampelamus albidus*	S
Muhly, wirestem	*Muhlenbergia frondosa*	S
Nightshade, silverleaf	*Solanum elaeagnifolium*	C
Nutsedge, purple	*Cyperus rotundus*	S
Nutsedge, yellow	*Cyperus ferax*	S
Orchardgrass	*Dactylis glomerata L.*	C
Poinsettia, wild	*Euphorbia heterophylla L.*	S
Pokeweed	*Phytolacca L.*	C
Quackgrass	*Agropyron repens*	C
Sowthistle, perennial	*Sonchus arvensis L.*	C
Thistle, bull	*Cirsium vulgare*	S
Thistle, Canada	*Cirsium arvense*	C
Timothy	*Phleum pretense L.*	S
Wormwood, biennial	*Artemisia biennis*	C

Use **Table 4** to determine the corresponding amounts of active ingredient (L-glufosinate free acid) from **L-GLUFOSINATE LIQUID FORMULATION** product use rates.

Table 4. Use Rate Equivalency for L-GLUFOSINATE LIQUID FORMULATION (0.93 lb ai/gallon)

Amount of L-GLUFOSINATE LIQUID FORMULATION (fl ozs/A)	**Amount of L-glufosinate free acid** (lbs ai/A)
25	0.18
33	0.24
34	0.25
37	0.27
50	0.36
83	0.60
100	0.73

Resistance Management

L-GLUFOSINATE LIQUID FORMULATION is a **Group 10** herbicide. Any weed population may contain or develop plants naturally resistant to **L-GLUFOSINATE LIQUID FORMULATION** and other **Group 10** herbicides. Weed species with resistance to **Group 10** may eventually dominate the weed population if **Group 10** herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **L-GLUFOSINATE LIQUID FORMULATION** or other **Group 10** herbicides. Appropriate resistance management strategies should be followed to mitigate or delay resistance. The following integrated weed management techniques are effective in reducing problems with herbicide resistant weed biotypes. It is best to use multiple practices to manage or delay resistance, as no single strategy is likely to be totally effective.

For resistance management, **L-GLUFOSINATE LIQUID FORMULATION** is a **Group 10** herbicide. Any weed population may contain or develop plants naturally resistant to (name of product) and other Group (mode of action group number) 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.

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

- Rotate the use of **L-GLUFOSINATE LIQUID FORMULATION** or other Group 10 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

- For further information or to report suspected resistance, contact MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. at +81-3-5290-2780.

For more information on weed resistance management, visit the Herbicide Resistance Action Committee (HRAC) on the web at http://www.hracglobal.com.

Application Instructions and Restrictions

Uniform thorough spray coverage is important to achieve consistent weed control with **L-GLUFOSINATE LIQUID FORMULATION. L-GLUFOSINATE LIQUID FORMULATION** is formulated to mix readily in water. Prior to adding **L-GLUFOSINATE LIQUID FORMULATION** to the spray tank, ensure that the spray tank is thoroughly clean, particularly if an herbicide with the potential to injure crops was previously used (see **Cleaning Spray Equipment**).

Ground Application
Apply early when weeds are small with directed rates as identified in the specific crop sections. Apply **L-GLUFOSINATE LIQUID FORMULATION** in a minimum of 15 gallons of water per acre. Increase to 20 gallons of water per acre if dense weed canopy exists.

Aerial Application
Apply early when weeds are small with directed rates as identified in the specific crop sections. Apply **L-GLUFOSINATE LIQUID FORMULATION** in a minimum of 10 gallons of water per acre. Poor coverage will result in reduced weed control. See the Mandatory Spray Drift Management section of this label for proper application of **L-GLUFOSINATE LIQUID FORMULATION.**

Table 5. State Restrictions

Use	Crop	Restriction
Glufosinate-Resistant Crops	Canola	**DO NOT** apply in Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia, or West Virginia. **DO NOT** use in Hawaii or Puerto Rico except for use on glufosinate-resistant canola for seed propagation.
	Field Corn	**DO NOT** apply in California. **DO NOT** use in Hawaii or Puerto Rico except for use on glufosinate-resistant field corn (field and silage) for seed propagation.
	Sweet Corn	**DO NOT** apply in California. **DO NOT** use in Hawaii or Puerto Rico except for use on glufosinate-resistant sweet corn for seed propagation.
	Cotton	**DO NOT** apply in counties south of Tampa Bay, Florida. **DO NOT** use in Hawaii or Puerto Rico except for use on glufosinate-resistant cotton for seed propagation.
	Soybean	**DO NOT** use in Hawaii or Puerto Rico except for use on glufosinate-resistant soybean for seed propagation.
Conventional and Non Glufosinate-Resistant Crops	Canola	**DO NOT** use in Hawaii or Puerto Rico.
	Field Corn	**DO NOT** use in California, Hawaii or Puerto Rico.
	Sweet Corn	**DO NOT** use in California, Hawaii, or Puerto Rico.
	Cotton	**DO NOT** use in counties south of Tampa Bay, Florida; Hawaii or Puerto Rico.
	Soybean	**DO NOT** use in Hawaii or Puerto Rico.
Seed Production	Canola	**DO NOT** apply in Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia, or West Virginia.
	Corn	**DO NOT** use in California.

Rotational Crop Restrictions

Rotational crop planting intervals following application of **L-GLUFOSINATE LIQUID FORMULATION** are listed below in **Table 6**. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Table 6. Rotational Crop Plant Back Intervals

Rotational Crop	**Plant-back Interval** (minimum rotational crop planting interval from last application)
Canola, Field Corn, Sweet Corn, Cotton, and Soybean	May be planted at any time
Brassica Leafy Vegetables, Leafy Vegetables, Root and Tuber Vegetables, and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 days
Other Crops	180 days

ENDANGERED SPECIES REQUIREMENTS: Before using this product, you must obtain any applicable Endangered Species Protection Bulletins (Bulletins) within six months prior to or on the day of application. To obtain Bulletins, go to Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins. When using this product, you must follow all directions and restrictions contained in any applicable Bulletin(s) for the area where you are applying the product, including any restrictions on application timing if applicable. It is a violation of Federal law to use this product in a manner inconsistent with its labeling, including this labeling instruction to follow all directions and restrictions contained in any applicable Bulletin(s). For general questions or technical help, call 1-844-447-3813, or email ESPP@epa.gov.

MANDATORY SPRAY DRIFT MITIGATIONS:

For Aerial and Ground Boom Applications:

- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Select nozzle and pressure that deliver medium or coarser spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with American Society of Agricultural & Biological Engineers standards 572.1 and 641 (ASABE S572 and S641).
- During application, the Sustained Wind Speed, as defined by the National Weather Service (standard averaging period of 2 minutes) must register between 3 and 15 miles per hour.
- Wind speed must be measured at the release height or higher, in an area free from obstructions such as trees, buildings, and farm equipment.
- Do not apply during temperature inversions.

For Aerial Application:

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft to minimize drift caused by wing tip or rotor blade vortices.
- Wind speed and direction must be measured on location using a windsock, an anemometer (including systems to measure wind speed or velocity on an aircraft), or an aircraft smoke system.
- When the wind speed is between 11-15 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- When the wind speed is between 11-15 miles per hour, applicators must use a minimum of ¾ swath displacement upwind at the downwind edge of the field. Otherwise, applicators must use a minimum of ½ swath displacement upwind at the downwind edge of the field.
- Do not release spray at a height greater than 10 ft above the crop canopy unless a greater application height is required for pilot safety.

For Ground Boom Application:

- 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.
- Wind speed and direction must be measured on location using a windsock or anemometer (including systems to measure wind speed or velocity using application equipment).

Mandatory Spray Drift Buffers

For aerial and ground applications, maintain a downwind buffer between the last spray row and the protection area as follows:

Application Method	Droplet Size Distribution (DSD)	Minimum Buffer Distance
Aerial	Medium	50 ft
Ground	Medium to Coarser	10 ft

Protection areas include all areas with the following exceptions which can be included in the buffer footage, provided that people are not present within the application exclusion zone during the application, and they will not be contacted by the pesticide, either directly or through drift (see 40 CFR 170.405(a) and 40 CFR 170.505(a)):

- Agricultural fields, including untreated portions of the treated field.
- Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and areas of bare ground from recent plowing or grading that are contiguous with the treated area.

- Buildings and their perimeters, silos, or other man-made structures with walls and/or roof.
- Areas maintained as a mitigation measure for runoff/erosion or drift control, such as vegetative filter strips (VFS), field borders, hedgerows, Conservation Reserve Program lands (CRP), and other mitigation measures identified by EPA on the mitigation menu.[1]
- Managed wetlands including constructed wetlands on the farm.
- On-farm contained irrigation water resources that are not connected to adjacent water bodies, including on-farm irrigation canals and ditches, water conveyances, managed irrigation/runoff retention basins, and tailwater collection ponds.

[1] *Growers must ensure that pesticide use does not cause degradation of the CRP habitat.*

Aerial Spray Drift Buffer Reduction Options:

- A 20% (i.e., 10-foot) reduction in the required wind-directional buffer distance can be made if the applicator selects a nozzle and pressure that deliver coarse or coarser droplets in accordance with ASABE s572.
- A 35% (i.e., 18-foot) reduction can be made if the applicator selects a nozzle and pressure that delivers coarse droplets and uses an oil emulsion drift reducing adjuvant that constitutes 2.5% of the volume of the finished spray tank mix.
  A reduction in the required wind-directional buffer distance can be made if a windbreak or shelterbelt (*e.g.,* trees or riparian hedgerows) between the application site and non-managed area is present and meets the criteria listed in the '**Windbreak-Shelterbelt Criteria**' section of this label. The reduction is 50% (*i.e.,* 25 feet) if the windbreak or shelterbelt meets the basic windbreak-shelterbelt criteria and is 75% (*i.e.,* 38 feet) if the windbreak or shelterbelt meets the advanced windbreak-shelterbelt criteria.
- The percent reduction in wind-directional buffer distances may be added if you use one droplet size buffer reduction option (coarse or coarse with an oil emulsion drift reducing adjuvant that constitutes 2.5% of the volume of the finished spray tank mix) and one windbreak-shelterbelt option (basic or advanced). The maximum buffer reduction that can be achieved by a combination of buffer reduction options is 100% (i.e., no drift buffer).

Ground Boom Spray Drift Buffer Reduction Options:

Any of the following options can reduce the ground buffer distance to 0 feet:

- Use of an oil emulsion drift reducing adjuvant that constitutes 2.5% of the volume of the finished spray tank mix.
- Application is made using an over-the-top hooded sprayer, as a layby application, or is made below the crop canopy using drop nozzles.
- Use of a row-middle hooded sprayer.
- If a windbreak or shelterbelt (*e.g.,* trees or riparian hedgerows) between the application site and non-managed area is present and meets the criteria listed in the **'Windbreak-Shelterbelt Criteria'** section of this label.

Windbreak-Shelterbelt Criteria:
Both basic and advanced windbreaks or shelterbelts (*e.g.,* trees or riparian hedgerows) between the application site and non-managed area must be present and meet the following criteria for 50% and 75% wind-directional buffer distance reductions, respectively:

- The windbreak or shelterbelt must be downwind between the pesticide application and the non-managed area.
- The windbreak or shelterbelt must run the full length of the treated area with no significant breaks in the vegetation.
- The windbreak or shelterbelt foliage must be sufficiently dense such that the non-managed area is not visible from the upwind side at the time of application.
- The windbreak or shelterbelt must be planted according to local/regional/federal conservation program standards; however, no state or federally listed noxious or invasive trees or shrubs should be planted.
- The windbreak or shelterbelt must be maintained such that their functionality is not compromised.
- For basic windbreaks (50% reduction)
    - The height of the trees in the windbreak or shelterbelt must be at the same height or above the release height of the application.
    - The windbreak must have a minimum of one row of trees and/or shrubs or a 4-foot-wide strip of non-woody vegetation.
    - A semi-permeable manmade structure, curtain, or netting that is raised prior to application can be used instead of a windbreak or shelterbelt. This structure must be downwind between the pesticide application and the non-managed area, cover the entire distance of field adjacent to non-managed area, and at the same height or higher as the release height of the application.

- For advanced windbreak-shelterbelt (75% reduction)
    - The height of the trees in the windbreak or shelterbelt must be at a height that is at least twice as high as the release height of the application.
    - The windbreak or shelterbelt must have a minimum of two or more rows of trees and/or shrubs with a mixture of vegetation types (*e.g.,* trees, shrubs, herbs), or that have 8 or more feet of depth for herbaceous (non-woody) vegetation.
    - A semi-permeable manmade structure, curtain, or netting that is raised prior to application can be used instead of a windbreak or shelterbelt. This structure must be downwind between the pesticide application and the non-managed area, cover the entire distance of field adjacent to non-managed area, and at a height that is at least twice as high as the release height of the application.

See "ADDITIONAL SPRAY DRIFT INFORMATION" section below for more details.

ADDITIONAL SPRAY DRIFT INFORMATION:

This section is intended to provide additional information for applicators to assist in implementing the mandatory spray drift mitigations above. THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. Be aware of nearby non-target sites and environmental conditions.

Importance of Droplet Size

An effective way to reduce spray drift is to apply large droplets. Consider the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground boom

- Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Consider using the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure – Using the lowest spray pressure recommended for the nozzle will produce the target spray volume and droplet size.
- Spray Nozzle – Consider using a spray nozzle that is designed for the intended application as well as using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles – Applicators should follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

Release Height – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.

Release Height – Aircraft

Higher release heights increase the potential for spray drift.

Hooded (or Shielded) Sprayers

Shielding the boom or individual nozzles can reduce spray drift. Consider using hooded sprayers. Applicators should verify that the shields are not interfering with the uniform deposition of the spray on the target area.

Temperature and Humidity

When making applications in hot and dry conditions, consider using larger droplets to reduce effects of evaporation.

Temperature Inversions

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

Wind

Drift potential generally increases with wind speed.
Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Measuring Wind Speed and Wind Direction

Applicators should check and acquire the predicted wind speed and direction for the application site within 12 hours prior to conducting applications to determine the time periods wind speed is likely to fall outside the applicable thresholds.

- Applicators should reassess wind speed and direction at the application site every 15 minutes while applications are in progress.
- Measuring wind speed and direction can be done by:
    - Relying on equipment on the application equipment that measures wind speed (*e.g.,* aerial equipment).
    - Using a tower anemometer with telemetry or handheld anemometer. Users should read user manual on how to calibrate, operate and interpret the output from an anemometer. Ground applicators should stop every 15 minutes to take a reading with a tower anemometer with telemetry or handheld anemometer. Some anemometers may have software that would allow users to view wind measurements in real time while making an application, and, those cases, applicators would not have to stop to take measurements.
    - Using a windsock. Wind can be estimated with a windsock using the strips on a windsock. The applicator should consult the user manual for the windsock on wind speed estimation and direction of wind. Applicators should look at the sock at least every 15 minutes to estimate wind speed and direction. The windsock should be pointed in the opposite direction of the windbreak and the non-managed area.

- Using an aircraft smoke system. Laying down several puffs of smoke along different lines using an aircraft smoke system can provide an accurate view of what the wind speed and direction for the application.
- Checking behind the spray rig at least every 15 minutes to see if the spray has changed direction from when the application started.

MANDATORY RUN OFF MITIGATION

- **DO NOT** apply when soils are saturated or above field capacity.
- **DO NOT** apply during rain.

You must achieve a minimum of three points for the crop uses listed on this label unless otherwise stipulated below. Applicators must access and search Bulletins Live! Two (BLT) at https://www.epa.gov/pesticides/bulletins within six months of the application to determine whether the application site falls within a Pesticide Use Limitation Area (PULA) that has a Bulletin in BLT. If you are located inside a PULA, follow the instructions in the bulletin.

If the application site is located outside a PULA, runoff/erosion mitigation is required for this product unless certain field/application parameters are present at the time of application (*i.e.*, subsurface or tile drains with controlled outlet, perimeter berm systems, irrigation tailwater return systems, spot treatment, etc). Access EPA's Mitigation Menu Website at www.epa.gov/pesticides/mitigation-menu for a full list of field/application parameters to evaluate whether your field is subject to runoff/erosion mitigation.

If the application does not meet the specified field/application parameters, a minimum of three points for the crop uses listed on this label must be achieved. The applicator must choose among the mitigation and/or mitigation relief measures on EPA's Mitigation Menu Website to meet or exceed these points before applying this product. The website includes the full menu of runoff/erosion mitigation and mitigation relief measures. The following are examples:

- Location in a very low, low, or medium runoff vulnerability county
- Field slope
- Soil incorporation
- Conservation tillage
- Vegetative strips
- Cover crop or continuous ground cover
- Irrigation water management
- Mulching
- Grassed waterway
- Vegetated ditch
- Constructed and natural wetlands
- Water retention systems
- Following recommendations from a runoff/erosion specialist or participating in a qualifying conservation program (see the www.epa.gov/pesticides/mitigation-menu for minimum elements).

To achieve mitigation points for the application, the mitigation and mitigation relief measures must be:

- Employed in accordance with the instructions and descriptions on EPA's Mitigation Menu Website.
- In place during the application unless a different timing (such as before or after application) is specifically provided in the measure's description on EPA's Mitigation Menu Website.

EPA may periodically update the Mitigation Menu Website, for example, by adding new mitigation measures or updating a mitigation measure description.

Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions. Triple rinse the equipment before and after applying **L-GLUFOSINATE LIQUID FORMULATION**.

TANK MIXING INFORMATION

L-GLUFOSINATE LIQUID FORMULATION 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. 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.

Compatibility Test for Tank Mix Products

Before mixing **L-GLUFOSINATE LIQUID FORMULATION** with other pesticide products always test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1-quart jar.
2. For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
3. For each 16 fl ozs of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
4. For each 16 fl ozs of **L-GLUFOSINATE LIQUID FORMULATION** to be applied per acre, add 0.5 teaspoon to the jar.
5. After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
6. Let the mixture stand for 15 minutes and evaluate the solution for uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, **DO NOT** use the mixture in a spray tank.

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

Tank Mixing Instructions

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

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

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

Tank Mix Active Ingredients

Atrazine
Clethodim
Dicamba
Diflufenzopyr
Diuron
Flumioxazin
Glyphosate
Indaziflam
Napropamide
Norflurazon
Oxyfluorfen
Oryzalin
Pendimethalin
Penoxsulam
Quizlofop-p-ethyl
Rimsulfuron
Saflufenacil
Sethoxydim
Simazine
Terbacil
Topramezone

ADJUVANTS

Ammonium sulfate (AMS) can be used with **L-GLUFOSINATE LIQUID FORMULATION**. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn. AMS can improve weed control of difficult to control weeds under difficult environmental conditions including low humidity or hard water. An anti-foam agent is advised.

PRODUCT USE RESTRICTIONS (ALL CROPS)

These restrictions are in addition to the crop specific restrictions.

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** when soils are saturated or above field capacity.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** during rain.
- **DO NOT** apply using chemigation.

CROP SPECIFIC INFORMATION

Read product information, mixing, application, weeds controlled and additive instructions in preceding sections of the label. Read and follow tank mix product labels for restrictions, precautions, instructions, and rotational crop restrictions.

Application Directions for Burndown Use for Glufosinate-Resistant Crops and Non Glufosinate-Resistant Crops

L-GLUFOSINATE LIQUID FORMULATION may be applied as a burndown treatment prior to planting or prior to emergence of canola, field corn, sweet corn, cotton, soybean, glufosinate-resistant canola, glufosinate-resistant field corn, glufosinate-resistant sweet corn, and glufosinate-resistant soybean, and glufosinate-resistant cotton.

This section is intended to describe directions for when burndown applications are made. For applications to crops without burndown uses see crop-specific Use Directions.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION**.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply a single burndown application of 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A) depending on crop, weed species and intention of post emergence application use. See application **Tables 7** and **8**.

Table 7. Application Directions and Restrictions for Glufosinate-Resistant Crops

Glufosinate-resistant Crop	Burndown	In-crop Applications	Maximum Number of Applications	Maximum Rate Per Year
Glufosinate-resistant Canola	1 application at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	Up to 2 applications at 25 to 33 fl ozs/A (0.18 to 0.24 lbs ai/A)	1 Burndown 2 In-crop	100 fl ozs/A (0.73 lbs ai/A)
Glufosinate-resistant Field Corn	1 application at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	Up to 2 applications at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	1 Burndown 2 In-crop	100 fl ozs/A (0.73 lbs ai/A)
Glufosinate-resistant Sweet Corn	1 application at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	Up to 2 applications at 25 fl ozs/A (0.18 lbs ai/A)	1 Burndown ***OR*** 2 In-crop	50 fl ozs/A (0.36 lbs ai/A)
Glufosinate-resistant Soybean	1 application at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	Up to 2 applications at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	1 Burndown 2 In-crop	100 fl ozs/A (0.73 lbs ai/A)
Glufosinate-resistant Cotton Use Scenario 1 (1 Post Emergence Applications)	1 application at 34 to 50 fl ozs/A (0.25 to 0.36 lbs ai/A)	1 application at 33 fl ozs/A (0.24 lbs ai/A)	1 Burndown 1 In-crop	83 fl ozs/A (0.60 lbs ai/A)
Glufosinate-resistant Cotton Use Scenario 2 (2 Post Emergence Applications)	1 application at 33 fl ozs/A (0.24 lbs ai/A)	2 applications at 33 fl ozs/A (0.24 lbs ai/A)	1 Burndown 2 In-crop	100 fl ozs/A (0.73 lbs ai/A)
Glufosinate-resistant Cotton Use Scenario 3 (3 Post Emergence Applications)	None	3 applications at 33 fl ozs/A (0.24 lbs ai/A)	No Burndown 3 In-crop	100 fl ozs/A (0.73 lbs ai/A)

Table 8. Application Directions and Restrictions for Non Glufosinate-Resistant Crops

Crop	Burndown	In-crop Applications	Maximum Number of Applications	Maximum Rate Per Year
Canola, Field Corn, Sweet Corn, Soybean	1 application at 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A)	None	1 Burndown No In-crop	50 fl ozs/A (0.36 lbs ai/A)
Cotton Use Scenario 1 (1 Post Emergence Application)	1 application at 34 to 50 fl ozs/A (0.25 to 0.36 lbs ai/A)	1 application at 33 fl ozs/A (0.24 lbs ai/A)	1 Burndown 1 In-crop	83 fl ozs/A (0.60 lbs ai/A)
Cotton Use Scenario 2 (2 Post Emergence Applications)	1 application at 33 fl ozs/A (0.24 lbs ai/A)	2 applications at 33 fl ozs/A (0.24 lbs ai/A)	1 Burndown 2 In-crop	100 fl ozs/A (0.73 lbs ai/A)
Cotton Use Scenario 3 (3 Post Emergence Applications)	None	3 applications at 33 fl ozs/A (0.24 lbs ai/A)	No Burndown 3 In-crop	100 fl ozs/A (0.73 lbs ai/A)

***** Post application in non glufosinate-resistant cotton can ONLY be applied with a hooded sprayer. See application directions for cotton for more information.

Adjuvant Directions

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of surfactants may be included. Refer to the surfactant label for more detailed information.

Spray Volume

- 15 GPA minimum. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Burndown Use for Glufosinate-Resistant Crops and Non Glufosinate-Resistant Crops

- Refer to **Tables 7 and 8** for Application Restrictions.
- Refer to **Table 5** for State Restrictions.
- **DO NOT** apply aerially in non-glufosinate resistant crops.
- **DO NOT** apply this product through any type of irrigation system.

Application Directions for Use on Glufosinate-Resistant Canola

Apply **L-GLUFOSINATE LIQUID FORMULATION** only to canola labeled as glufosinate-resistant.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from cotyledon up to early bolt stage of glufosinate-resistant canola.
- Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION**.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 25 to 50 fl ozs/A (0.18 to 0.36 lbs ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 7** for specific application directions and restrictions.

Application Use Rate with Tank Mix Partners

- Apply 25 to 33 fl ozs/A (0.18 to 0.24 lbs ai/A) depending on weed species, size and density per weed chart.
- Tank mix partners to enhance grass control e.g.: quizlofop-p-ethyl, clethodim, sethoxydim.
- If required, a second application up to 33 fl ozs/A (0.24 lbs ai/A) can be applied a minimum of 7 days after application.
- No additional surfactant is needed with any tank mix partner.
- The tank mix partner must be used in accordance with the label restrictions and precautions.
- **DO NOT** exceed label dosage rate on tank mix label. **L-GLUFOSINATE LIQUID FORMULATION** cannot be mixed with any product containing a label prohibition against such mixing.

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

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

Spray Volume

- 15 GPA minimum. If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Use on Glufosinate-Resistant Canola

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 65 days of harvesting glufosinate-resistant canola.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** if glufosinate-resistant canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).

- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application for burndown use.
- **DO NOT** make more than 1 application for burndown use per year.
- **DO NOT** apply more than 33 fl ozs/A (0.24 lbs ai/A) in a single application for in-crop use.
- **DO NOT** apply more than 3 applications per year when using the lowest application rate including burndown.
- Retreatment interval for in-crop use is a minimum of 7 days.
- If a burndown application is made, **DO NOT** apply more than 2 in-crop applications per year.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** per year through any combination of application.
- **DO NOT** apply this product through any type of irrigation system.
- Refer to **Table 5** for State Restrictions.

Refer to **Rotational Crop Restrictions** in **Table 6** of this label for the appropriate rotational crop plant-back intervals.

Application Directions for Use on Glufosinate-Resistant Field Corn and Glufosinate-Resistant Silage Corn

Apply **L-GLUFOSINATE LIQUID FORMULATION** only to corn labeled as glufosinate-resistant.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from emergence through V6 stage of growth.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION**.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 7** for specific application directions and restrictions.

Application Use Rate with Tank Mix Partners

- Apply 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** with labeled tank mix partners depending on weed species, size and density per weed chart.
- If required, a second application of 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) can be applied a minimum of 7 days after application.
- Tank mix partners e.g.: atrazine, dicamba + diflufenzopyr, dimethanmid-P, and topramexone.
- Tank mixes may aid in the performance of **L-GLUFOSINATE LIQUID FORMULATION**. Please refer to weed chart tables for a listing of weed species controlled at this rate.
- No additional surfactant is needed with any tank mix partner.
- The tank mix partner must be used in accordance with the tank mix label restrictions and precautions.
- **DO NOT** exceed label dosage rate on tank mix label. **L-GLUFOSINATE LIQUID FORMULATION** cannot be mixed with any product containing a label prohibition against such mixing.

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of additional surfactants or crop oils may increase the risk of crop response. Refer to surfactant label for more detailed directions.

Spray Volume

- 15 GPA minimum
- If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.

Rainfast

- 4 hours

Application Drop Nozzle Equipment

- Applications of **L-GLUFOSINATE LIQUID FORMULATION** on glufosinate-resistant corn may be made with drop nozzles from emergence until glufosinate-resistant corn is 36 inches tall. Avoid spraying into the whorl or leaf axils of the corn stalks.

Restrictions to the Directions for Use on Glufosinate-Resistant Field Corn and Glufosinate-Resistant Silage Corn

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** on glufosinate-resistant corn per year through any combination of application.
- **DO NOT** use nitrogen solutions as spray carriers.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application.
- **DO NOT** make more than 1 application for burndown use per year.
- **DO NOT** apply more than 3 applications per year when using reduced application rates including burndown.
- Retreatment interval for in-crop use is a minimum of 7 days.
- If a burndown application is made, **DO NOT** apply more than 2 in-crop applications per year.
- Refer to **Table 5** for State Restrictions.

Refer to **Rotational Crop Restrictions** in **Table 6** of this label for the appropriate rotational crop plant-back intervals.

Application Directions for Use Glufosinate-Resistant Sweet Corn

Apply **L-GLUFOSINATE LIQUID FORMULATION** only to sweet corn labeled as glufosinate-resistant.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from emergence through V6 stage of growth.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION.**
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 25 to 50 fl ozs/A (0.18 lbs to 0.36 ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 7** for specific application directions and restrictions.

Application Use Rate with Tank Mix Partners

- Apply 25 fl ozs/A (0.18 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** with labeled tank mix partners depending on weed species, size and density per weed chart.
- If required, a second application of 25 fl ozs/A (0.18 lbs ai/A) can be applied a minimum of 7 days after application.
- Tank mix partners e.g.: atrazine.
- Tank mixes may aid in the performance of **L-GLUFOSINATE LIQUID FORMULATION**. Please refer to weed chart tables for a listing of weed species controlled at this rate.
- No additional surfactant is needed with any tank mix partner.
- The tank mix partner must be used in accordance with the tank mix label restrictions and precautions.
- **DO NOT** exceed label dosage rate on tank mix label.
- **L-GLUFOSINATE LIQUID FORMULATION** cannot be mixed with any product containing a label prohibition against such mixing.

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of additional surfactants or crop oils may increase the risk of crop response. Refer to surfactant label for more detailed directions.

Spray Volume

- 15 GPA minimum
- If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Use on Glufosinate-Resistant Sweet Corn

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- If **L-GLUFOSINATE LIQUID FORMULATION** was used in a burndown application, no postemergence applications may be applied to the crop.

- **DO NOT** use nitrogen solutions as spray carriers.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** on sweet corn per year through any combination of application.
- **DO NOT** apply more than two in-crop applications of **L-GLUFOSINATE LIQUID FORMULATION** to sweet corn per year.
- Sequential applications must be at least 7 days apart.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application for burndown use.
- **DO NOT** apply more than 25 fl ozs/A (0.18 lbs ai/A) in a single application for in-crop use.
- Refer to **Table 5** for State Restrictions.

Refer to **Rotational Crop Restrictions** in **Table 6** of this label for the appropriate rotational crop plant-back intervals.

See application directions for use on field corn and silage corn for application methods, mixing instructions, and weed control tables.

Application Directions for Use on Glufosinate-Resistant Cotton

Apply **L-GLUFOSINATE LIQUID FORMULATION** only to cotton labeled as glufosinate-resistant.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from emergence up to early bloom.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION.**
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 7** for specific application directions and restrictions.

Glufosinate-resistant Cotton Tank Mix Instructions

- Certain herbicide tank mixes may aid in the performance of **L-GLUFOSINATE LIQUID FORMULATION** herbicide. **L-GLUFOSINATE LIQUID FORMULATION** may be

applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded.

- **L-GLUFOSINATE LIQUID FORMULATION** cannot be mixed with any product containing a label prohibition against such mixing.

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of additional surfactants or crop oils may increase the risk of crop response. Refer to surfactant label for more detailed directions.

Spray Volume

- 15 GPA minimum
- If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Use on Glufosinate-Resistant Cotton

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 70 days prior to cotton harvest.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) per application for burndown use.
- **DO NOT** apply more than 33 fl ozs/A (0.24 lbs ai/A) per application for in-crop use.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) per year.
- **DO NOT** apply more than 3 applications per year.
- **DO NOT** make more than 1 application for burndown use per year.
- If a burndown application is made, **DO NOT** apply more than 2 in-crop applications per year.
- **DO NOT** apply more than 3 in-crop applications per year.
- Retreatment interval for in-crop use is a minimum of 10 days.
- Refer to **Table 5** for State Restrictions.

Refer to **Rotational Crop Restrictions** in **Table 6** of this label for the appropriate rotational crop plant-back intervals.

Application Directions for Use on Non-glufosinate Resistant Cotton

Application of **L-GLUFOSINATE LIQUID FORMULATION** to cotton varieties **not labeled as** glufosinate-resistant requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from emergence up to early bloom.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION**.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 33 to 50 fl ozs/A (0.24 to 0.36 lbs ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 8** for specific application directions and restrictions.

Application with Tank Mix Partners

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

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of additional surfactants or crop oils may increase the risk of crop response. Refer to surfactant label for more detailed directions.

Spray Volume

- 15 GPA minimum

- If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Use on Non Glufosinate-Resistant Cotton

- **DO NOT** apply in-crop to non-glufosinate-resistant cotton except with a hooded sprayer.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply aerially in non-glufosinate resistant crops.

- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) per application for burndown use.
- **DO NOT** apply more than 33 fl ozs/A (0.24 lbs ai/A) per application for in-crop use.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) per year.
- **DO NOT** apply more than 3 applications per year.
- If a burndown application is made, **DO NOT** apply more than 2 in-crop applications per year.
- **DO NOT** make more than 1 application for burndown use per year.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 70 days prior to cotton harvest.
- **DO NOT** apply more than 3 in-crop applications per year.
- Retreatment interval for in-crop use is a minimum of 10 days.
- Refer to **Table 5** for State Restrictions.

Application Methods to Non Glufosinate-Resistant Cotton

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

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

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

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

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

Application Directions for Use on Glufosinate-Resistant Soybeans

Apply **L-GLUFOSINATE LIQUID FORMULATION** only to soybean designated as glufosinate-resistant.

Application Timing

- Apply to small and actively growing weeds, targeting less than 3-inch weeds in height.
- Apply from emergence up to bloom or R1 growth stage.
- Warm temperatures, high humidity, and bright sunlight improve the performance of **L-GLUFOSINATE LIQUID FORMULATION.**
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.
- To avoid the possibility of reduced lambsquarters, Palmer amaranth and velvetleaf control, applications must be made between dawn and 2 hours before sunset.

Application Use Rate

- Apply 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) depending on weed species, size and density per weed chart.
- Refer to **Table 7** for specific application directions and restrictions.

Application with Tank Mix Partners

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

Adjuvant

- 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.
- Anti-foam agent is advised.

Surfactants

- The use of additional surfactants or crop oils may increase the risk of crop response. Refer to surfactant label for more detailed directions.

Spray Volume

- 15 GPA minimum
- If dense canopy, large weeds or unfavorable growing conditions are present, increase water volume to a minimum of 20 GPA.

Rainfast

- 4 hours

Restrictions to the Directions for Use on Glufosinate-Resistant Soybeans

- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 70 days of harvesting glufosinate- resistant soybean seed.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** on glufosinate-resistant soybeans per year.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application.
- **DO NOT** apply more than 3 applications per year.
- **DO NOT** apply more than 1 application of 50 fl ozs/A (0.36 lbs ai/A) for burndown use per year.
- If a burndown application is made, **DO NOT** apply more than 2 in-crop applications per year.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based anti-foam agent may be added if needed.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** 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.
- Sequential applications must be at least 5 days apart.
- Refer to **Table 5** for State Restrictions.

Refer to **Rotational Crop Restrictions** in **Table 6** of this label for the appropriate rotational crop plant-back intervals.

Application Directions for Glufosinate-Resistant Canola, Corn (Field and Sweet), Cotton, and Soybean Seed Propagation

L-GLUFOSINATE LIQUID FORMULATION may be applied to select out susceptible "segregates," i.e., canola, corn (field and sweet), cotton, and soybean plants that are not resistant to glufosinate during seed propagation.

Glufosinate-resistant Canola - L-GLUFOSINATE LIQUID FORMULATION may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry a gene that imparts resistance to glufosinate and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the glufosinate resistance gene will be severely injured or killed if treated with this herbicide. See application use directions for use on canola for use rates and application timing. Up to three applications of **L-GLUFOSINATE LIQUID FORMULATION** at up to 33 fl ozs/A per application may be made to glufosinate-resistant canola for seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18 to 30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

Restrictions to the Directions for Glufosinate-resistant Canola for Seed Propagation

- **DO NOT** apply more than 3 applications of **L-GLUFOSINATE LIQUID FORMULATION** per year.
- Retreatment interval for seed propagation is a minimum of 7 days between applications.
- **DO NOT** apply more than 33 fl ozs/A (0.24 lb ai/A) in a single application.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) of **L-GLUFOSINATE LIQUID FORMULATION** per year.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** within 65 days of harvesting canola seed.
- **DO NOT** use treated canola seed for food, feed or oil purposes.
- **DO NOT** apply **L-GLUFOSINATE LIQUID FORMULATION** 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 **Table 5** for State Restrictions.

Glufosinate-resistant Corn (Field and Sweet) – Inbred lines, plants not possessing glufosinate resistance, will be severely injured or killed if treated with this herbicide. For the selection of resistant corn "segregates", **L-GLUFOSINATE LIQUID FORMULATION** may be applied at 25 fl ozs/A (0.18 lbs ai/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 25 fl ozs/A (0.18 lbs ai/A) plus AMS at 3 lbs/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24 inches tall. Sequential applications must be at least 10 days apart. When temperatures exceed 85° F, the rate of AMS can be reduced to 1.5 lbs/A (8.5 lbs/100 gallons) to reduce potential leaf burn.

Restrictions to the Directions for Use for Glufosinate-Resistant Corn (Field and Sweet) for Seed Propagation

- **DO NOT** apply more than 2 applications per year to glufosinate-resistant corn for seed propagation.
- Sequential applications must be at least 10 days apart.
- **DO NOT** apply more than 25 fl ozs/A (0.18 lbs ai/A) in a single application.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) per year.
- Refer to **Table 5** for State Restrictions.

Glufosinate-resistant Cotton - L-GLUFOSINATE LIQUID FORMULATION may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a gene that imparts resistance to glufosinate and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing the glufosinate resistance gene will be severely injured or killed if treated with this herbicide. See application use directions for use on cotton for use rates and application timing. For the selection of resistant cotton "segregates", **L-GLUFOSINATE LIQUID FORMULATION** may be applied at up to three times at 33 fl ozs/A (0.24 lbs ai/A).

Restrictions to the Directions for Use for Glufosinate-Resistant Cotton for Seed Propagation

- **DO NOT** apply more than 3 applications per year to glufosinate-resistant cotton for seed propagation.
- **DO NOT** apply more than 33 fl ozs/A (0.24 lbs ai/A) in a single application.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) per year.
- Sequential applications must be at least 10 days apart.

Glufosinate-resistant Soybeans - For the selection of resistant soybean "segregates", **L-GLUFOSINATE LIQUID FORMULATION** may be applied at 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) when soybean is in the third trifoliate stage. A second treatment of 33 to 50 fl ozs/A (0.24 lbs ai/A to 0.36 lbs ai/A) may be applied up to but not including the bloom growth stage of soybean.

Restrictions to the Directions for Use for Glufosinate-Resistant Soybean for Seed Propagation

- **DO NOT** apply more than 3 applications per year to glufosinate-resistant soybean for seed propagation when using reduced rates.
- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application.
- **DO NOT** apply more than 100 fl ozs/A (0.73 lbs ai/A) per year.
- Sequential applications must be at least 5 days apart.

Application Directions for Fallow Fields and Postharvest Burndown for Canola, Corn (Field and Sweet), Cotton, and Soybean

L-GLUFOSINATE LIQUID FORMULATION may be applied as a substitute for tillage in fallow fields to control or suppress weeds listed in Tables 1-3. Applications may be made in fallow fields and postharvest.

Restrictions to the Directions for Use in Fallow Fields and Postharvest

- **DO NOT** apply more than 50 fl ozs/A (0.36 lbs ai/A) in a single application.
- **DO NOT** apply more than 1 application in fallow fields or postharvest per year.

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. Store the container in a cool, dry, well-ventilated place. 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. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling

Nonrefillable Container (Plastic): DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse plastic containers small enough to shake (capacity ≤ 50 pounds) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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

Conditions of Sale and Warranty

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. or the Seller. All such risks shall be assumed by the Buyer.

To the extent consistent with applicable law, MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. To the extent consistent with applicable law, MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC., shall not be liable for consequential, special or indirect damages resulting from the use or handling of this product. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer. To the extent consistent with applicable law exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling or application of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid for this product or at MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC.'s election, the replacement of this product. MITSUI CHEMICALS CROP & LIFE SOLUTIONS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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