

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 23, 2022

Ms. Tasha Lott Product Registration Manager Albaugh, LLC 1525 NE 36<sup>th</sup> Street Ankeny, IA 50021

Subject: Notification per PRN 98-10 – Add an alternate brand name Product Name: ALB 2048 EPA Registration Number: 42750-401 Application Date: November 30, 2021 Decision Number: 580512

Dear Ms. Lott:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The alternate brand name Surmise 5 has been added to the product record.

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 the Federal Insecticide Fungicide and Rodenticide Act 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) list 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.

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If you have any questions, you may contact BeWanda Alexander at (202)566-2465 or by email at <u>alexander.bewanda@epa.gov</u>.

Sincerely,

Heather & Mc Farley

Heather McFarley Product Manager 24 Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

# ALB 2048

# [ABN: Surmise 5]

A non-selective herbicide for post emergence broadcast use on canola, corn, cotton, and soybean designated as Glufosinate resistant. **ALB 2048** may be used for weed control in non-Glufosinate resistant cotton when applied with a hooded sprayer incrop. **ALB 2048** may be applied as a broadcast burndown application before planting or prior to emergence of any variety of canola, corn, cotton, soybean or sugar beet. **ALB 2048** may be used for post emergence weed control in listed tree vine and berry crops. **ALB 2048** may also be applied for potato vine desiccation.

## ACTIVE INGREDIENT

Glufosinate ammonium*	45.9%
Other Ingredients	<u>54.1%</u>
Total	100.0%

\*Liquid soluble concentrate containing 4.6 pounds of active ingredient per U. S. gallon

# **KEEP OUT OF REACH OF CHILDREN**

# **CAUTION/PRECAUCIÓN**

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) is acceptable.

	FIRST AID
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF IN THE EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
doctor or going for tr	R: Have the product container or label with you when calling a poison control center or eatment. FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL FREE AT 1-800-424-9300.
performed as soon as	<b>AN</b> : If this product is ingested endotracheal intubation and gastric lavage should be s possible followed by charcoal and sodium sulfate administration.

See inside label booklet for additional PRECAUTIONARY STATEMENTS and DIRECTIONS FOR USE

EPA Reg. No. 42750-\_\_\_

EPA Est. No. \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_(gallons)

# MANUFACTURED BY:

Albaugh, LLC 1525 NE 36<sup>th</sup> Street Ankeny, IA 50021

# NOTIFICATION

42750-401

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

03/23/2022

# **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION/PRECAUCIÓN.** Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

# **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Mixers/Loaders/Applicators and other handlers must wear:

- Long-sleeved shirt and long pants, socks, shoes, and waterproof gloves (including Natural Rubber).
- Wear protective eyewear (goggles, face shield, or safety glasses).

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

# **USER SAFETY RECOMMENDATIONS**

Users should:

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

# **ENGINEERING CONTROL STATEMENT**

When handlers use closed systems enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240(d) (4 6)] the handler PPE requirements may be reduced or modified as specified in the WPS.

# **ENVIRONMENTAL HAZARDS**

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

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

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

# PHYSICAL OR CHEMICAL HAZARDS

**DO NOT** mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

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

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

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

**[NOTE TO REVIEWER:** The statement "Not for use in \_\_\_\_\_" (e.g. Not for use in California) may be added or removed from Directions For Use as required.]

# AGRICULTURAL USE REQUIREMENTS

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

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

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

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

# IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT

This product may be applied as a **burndown treatment prior to planting or prior to emergence** of any variety of canola, corn, sweet corn<sup>[\*]</sup>, cotton, olive, soybean or sugar beet. This product may be applied to cotton not sensitive to the active ingredient in this product using a hooded sprayer.

[\*Not for use in California]

**Post emergence row crop applications** of this product may be made only to crops designated as Glufosinate resistant. To the extent consistent with applicable law, Albaugh LLC does not warrant the use of this product over the top on crops other than those designated as Glufosinate resistant and designed to safely withstand the application of this product.

The basis of selectivity of this product in crops is the presence of a gene which results in a plant that is resistant to the active ingredient in this product. Crops not containing this gene will be susceptible to this product, and severe crop injury and 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.

**Applications to trees, vines and berries** must avoid contact of this product solution, spray, drift or mist with green bark, stems, or foliage, as injury may occur to trees, berries and vines. Only trunks with callused, mature brown bark

may be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of this product with parts of trees, berries or vines other than mature brown bark can result in serious damage.

# Mandatory Spray Drift Mitigation:

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, **DO NOT** release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are advised with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

# Advisory Spray Drift Language

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

## Spray Drift Management:

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

# **Importance of Droplet Size:**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and

coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

# **Techniques for Controlling Droplet Size:**

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

# **Controlling Droplet Size -Aircraft**

- **Number of Nozzles** Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.

- AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- **Nozzle Type** Solid stream nozzles (including disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length Longer booms increase drift potential. Therefore, a shorter boom length is advised.
- Application Height Application more than 10ft. above the canopy increases the potential for spray drift.
- Boom Height Setting the boom at the lowest referenced height (if specified) which provides uniform coverage
  reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom must remain level with
  the crop and have minimal bounce.

# Drift Reduction Technology (DRT)

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

- **Wind** Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.
- **Temperature and Humidity** When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.
- **Temperature Inversions** Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.
- **Shielded Sprayers** Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

# **PRODUCT INFORMATION**

**ALB 2048** is a water-soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds in Glufosinate resistant canola, corn, cotton and soybean, and in trees, vines and berries. **ALB 2048** may also be applied for potato vine desiccation. **ALB 2048** may also be applied as a broadcast burndown application before planting or prior to emergence of any variety of canola, corn, sweet corn<sup>[\*]</sup>, cotton, olive, soybean or sugar beet.

[\*Not for use in California]

**ALB 2048** is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply **ALB 2048** to actively growing weeds as described in the **Weed Control for Row Crops** section to get maximum weed control. Uniform, thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

- **ALB 2048** is rainfast four (4) hours after application to most weed species; therefore, rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control.
- Applications must be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters palmer amaranth and velvetleaf control.
- Consult your local Cooperative Extension Service or Albaugh LLC Representative for guidelines on the optimum application timing for **ALB 2048** in your region.

- Weed control may be reduced if application is made when heavy dew, fog and mist/rain are present; or when weeds are under stress due to environmental conditions including drought, cool temperatures or extended periods of cloudiness.
- Warm temperatures, high humidity and bright sunlight improve the performance of **ALB 2048**.
- **ALB 2048** is a foliar-active material with little or no soil-residual activity.
- To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application.

# **ROTATIONAL CROP RESTRICTIONS\***

Rotational crop planting intervals following application of **ALB 2048** are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Corn, Sweet Corn, Cotton, Rice, Soybean and Sugar Beet	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70 Days
All Other Crops	180 Days

\*See Application Directions for Potato Vine Desiccation for Rotational Crop Restrictions specifically after **ALB 2048** applications to potatoes.

# WEED RESISTANCE MANAGEMENT

# GLUFOSINATE GROUP 10 HERBICIDE

For resistance management, **ALB 2048** is a Group 10 herbicide (glutamine synthetase inhibitor). Any weed population may contain or develop plants naturally resistant to **ALB 2048** and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies must be followed.

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

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

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

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

Report any incidence of non-performance of this product against a particular weed species to your Albaugh LLC representative or call 1-800-247-8013 or at www.albaughLLC.com. If resistance is suspected, treat weed escapes with an herbicide having a different mode of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

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

- Start with clean fields. Plant into weed-free fields and keep fields as weed free as possible. Effective tillage or the use of a burndown herbicide program can control emerged weeds prior to planting.
- **Scout fields.** Scout before and after herbicide application to monitor weed populations for early signs of resistance development.

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

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 more information on Weed Resistance Management, visit the Herbicide Resistance Action Committee (HRAC) on the web at http://www.hracglobal.com.

# WEED CONTROL FOR ROW CROPS

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

	Broadleaf Weeds Cont				
(including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)					
		11 fl oz/A	14.5 - 21.5 fl oz/A		
		(0.40 lbs ai/A)	(0.53 – 0.79 lbs ai/A)		
Common Name	Scientific Name	C = Control NA = Not Advised S = Suppression	C = Control NA = Not Advised S = Suppression		
Amaranth, Palmer	Amaranthus palmeri	NA	С		
Anoda, spurred	Anoda cristata	С	С		
Beggarweed, Florida	Desmodium tortuosum	С	С		
Black medic	Medicago lupulina L.	C	С		
Blueweed, Texas	Helianthus ciliaris DC.	С	С		
Buckwheat, wild	Polygonum convolvulus	C	С		
Buffalobur	Solanum cornutum	С	С		
Burcucumber	Sicyos angulatus	С	С		
Canola, volunteer <sup>1</sup>	Brassica spp.	C <sup>1</sup>	C <sup>1</sup>		
Catchweed bedstraw (cleavers)	Galium aparine L.	C	С		
Carpetweed	Mollugo verticillata	С	С		
Chickweed, common	Stellaria media	С	С		
Cocklebur, common	Xanthium strumarium	С	С		
Copperleaf, hophornbeam	Acalypha ostryaefolia	С	С		
Cotton, volunteer <sup>1</sup>	Gossypium sp.	C <sup>1</sup>	C1		
Croton, tropic	Croton glandulosus	C	С		
Croton, woolly	Croton capitatus	С	С		
Eclipta	Eclipta alba	С	С		
Devil's claw	Proboscidea Louisiana	С	С		
Fleabane, annual	Erigeron annuus	С	С		

Galinsoga, hairy	Galinsoga ciliate	С	С
Galinsoga, small flower	Galinsoga parviflora	C	C
Groundcherry, cutleaf	Physalis angulate	C	C
Geranium, cutleaf	Geranium dissectrum L.	C	C
Hempnettle	Galeopsis sp.	C	C
Horsenettle, Carolina <sup>2</sup>	Solanum carolinense	C <sup>2</sup>	C <sup>2</sup>
Jimsonweed	Datura stramonium	C	C
Knotweed	Polygonum spec.	C	C
Ladysthumb	Polygonum persicaria	C	C
Kochia	Kochia scoparia	C	C
Lambsquarters, common	Chenopodium album	C	C
Mallow, common	Malva spec.	C	C
Mallow, Venice	Hibiscus trionum	C	C C
Marestail <sup>3</sup>	Conyza Canadensis	S	C C
	Iva annua	C	<u>с</u>
Marsh-elder, annual	Iva annua Ipomoea hederacea var.	L	C
Morningglory, entireleaf	intergriuscula	С	С
Morningglory, ivyleaf	Ipomoea hederacea	С	С
Morningglory, pitted	Ipomoea lacunose	С	С
Morningglory, sharppod	Ipomoea cordatotriloba	С	С
Morningglory, smallflower	Jacquemontia tamnifolia	С	С
Morningglory, tall	Lpomoea purppurea	С	С
Mustard, wild	Sinapis arvensis	С	С
Nightshade, black	Solanum nigrum	С	С
Nightshade, eastern black	Solanum ptycanthum	С	С
Nightshade, hairy	Solanum sarrachoides	С	С
Pennycress	Thlaspi arvense	С	С
Pigweed, redroot	Amaranthus retroflexus	C	C
Pigweed, prostrate	Amaranthus blitoides	С	С
Pigweed, spiny	Amaranthus spinosus	C	C
Pigweed, smooth	Amaranthus hybridus	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.	С	С
Soybeans, volunteer <sup>1</sup>	Glycine max	C <sup>1</sup>	C <sup>1</sup>
Spurge, prostrate	Euphorbia humifusa	C	C
Spurge, spotted	Euphorbia maculate L.	C	C
Starbur, bristly	Acanthospermum hispidum	C	C
	reanciospermant hispidam	6	<u> </u>

Sunflower, common	Helianthus annuus	С	С
Sunflower, prairie	Corythucha pura	С	С
Sunflower, volunteer	Girassol	С	С
Thistle, Russian <sup>2</sup>	Salsola kali	S <sup>2</sup>	C <sup>2</sup>
Velvetleaf	Abutilon theophrasti	С	С
Waterhemp, common	Amaranthus rudis	NA	С
Waterhemp, tall	Amaranthus tuberculatos	NA	С

<sup>1</sup>Volunteer Glufosinate resistant crops from the previous season will not be controlled. <sup>2</sup>May require sequential applications for control. <sup>3</sup>For optimum control apply **ALB 2048** on 6" marestail.

Grass Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
(		11 fl oz/A (0.40 lbs ai/A)	14.5 - 21.5 fl oz/A (0.53 – 0.79 lbs ai/A)
Common Name	Scientific Name	C = Control NA = Not Advised S = Suppression	C = Control NA = Not Advised S = Suppression
Barley, volunteer <sup>3</sup>	Hordeum vulgare	C <sub>3</sub>	C3
Barnyardgrass	Echinochloa spec.	С	С
Bluegrass, annual	Poa annua L.	С	С
Corn, volunteer <sup>i</sup>	Zea mays L.	C <sup>1</sup>	C1
Crabgrass, large <sup>ii</sup>	Digitaria sanguinalis	C <sup>2</sup>	C <sup>2</sup>
Crabgrass, smooth <sup>2</sup>	Digitaria ischaemum	C <sup>2</sup>	C <sup>2</sup>
Cupgrass, woolly	Eriochloa villosa	С	С
Foxtail, bristly	Setaria verticillata	С	С
Foxtail, giant	Setaria faberi	С	С
Foxtail, green	Setaria viridis	С	С
Foxtail, robust purple	Setaria viridis	С	С
Foxtail, yellow <sup>2</sup>	Pennisetum glaucum	C <sup>2</sup>	C <sup>2</sup>
Goosegrass <sup>3</sup>	Eleusine indica	C <sup>3</sup>	C <sup>3</sup>
Johnsongrass, seedling	Sorghum halepense	С	С
Junglerice	Echinochloa colonum	С	С
Millet, wild-proso	Panicum miliaceum L.	С	С
Millet, proso volunteer	Milium vernale	С	С
Oat, wild <sup>2</sup>	Avena fatua	С	С
Panicum, fall	Panicum dichotomiflorum	С	С
Panicum, Texas	Panicum texanum	С	С
Rice, red	Oryza sativa L.	С	С
Rice, volunteer <sup>1</sup>	Oryza sativa	C1	C1
Sandbur, field <sup>2</sup>	Cenchrus pauciflorus	S <sup>2</sup>	C <sup>2</sup>
Shattercane	Sorghum vulgare PERS.	С	С
Signalgrass, broadleaf	Brachiaria platyphylla	С	С
Sprangletop	Leptochloa spec.	С	С
Sorghum, volunteer	Sorghum sp.	С	С
Stinkgrass	Eragrostis cilianensis	С	С
Wheat, volunteer <sup>2</sup>	Triticum spec.	C <sup>2</sup>	C <sup>2</sup>
Witchgrass	Panicum virgatum L.	C	C

<sup>1</sup>Volunteer Glufosinate resistant crops from the previous season will not be controlled. A timely cultivation 7 to 10 days after an application and/or retreatment 1021 days after the first application is advised for controlling dense clumps of volunteer corn or volunteer rice.

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

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

**Biennial and Perennial Weeds Controlled** (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin Resistant Biotypes) For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications ALB 2048 are advised by crop (see crop sections) 14.5 - 21.5 fl oz/A (0.53 – 0.79 lbs ai/A) C = Control NA = Not Advised **Scientific Name Common Name** S = Suppression Alfalfa Medicago sativa L. С Bermudagrass Cynodon dactylon С Bindweed, field Convolvulus arvensis L. С Bindweed, hedge Calystegia sepium С Bluegrass, Kentucky Poa pratensis L. С Helianthus ciliaris DC. Blueweed, Texas С Bromegrass, smooth Bromus inermis С Burdock Arctium sp. С Bursage, woolyleaf С Ambrosia grayi Chickweed, Mouse-ear Cerastium vulgatum L. С Clover, red Trifolium pretense L. С Dandelion Taraxacum officinale S Dock, smooth S Rumex spec. Dogbane, hemp Apocynum cannabinum С Goldenrod, gray Solidago nemoralis S Sorghum halepense Johnsongrass, rhizome S Milkweed, common Asclepias syriaca S Milkweed, honeyvine Ampelamus albidus С Muhly, wirestem S Muhlenbergia frondosa Nightshade, sliverleaf Solanum elaeagnifoium S Nutsedge, purple Cyperus rotundus С Nutsedge, yellow Cyperus ferax С Orchardgrass Dactylis glomerata L. С Poinsettia, wild Euphorbia heterophylla L. S Pokeweed Phytolaccaceae С Quackgrass Agropyron repens С Sowthistle, perennial Sonchus arvensis L. С S Thistle, bull Cirsium vulgare Thistle, Canada Cirsium arvense С Timothy Phleum pretense L. S Wormwood, biennial Artemisia biennis С

# **APPLICATION AND MIXING PROCEDURES**

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

**Ground Application**: Refer to the Rate Tables for proper application rates.

**Aerial Application**: Poor coverage will result in reduced weed control. See the Spray Drift Management section of this label for additional information on proper application of **ALB 2048**.

## **COMPATIBILITY TESTING**

If **ALB 2048** is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly.

Check compatibility as follows:

- 1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1-quart jar.
- 2. For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3. For each 8 fl oz of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 8 fl oz (0.29 lb ai) of **ALB 2048** 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.

# MIXING INSTRUCTIONS

**Tank Mix: ALB 2048** 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. **ALB 2048** cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rate directions and other restrictions.

**ALB 2048** must be applied with properly calibrated and clean equipment. **ALB 2048** is formulated to mix readily in water. Prior to adding **ALB 2048** to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see Cleaning Instructions).

Mix **ALB 2048** with water to make a finished spray solution as follows:

- 1. Fill the spray tank half full with water.
- 2. Start agitation.
- 3. If mixing with a flowable/wettable powder tank mix partner. Prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
- 4. Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
- 5. If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 6. Complete filling the spray tank with water.
- 7. Add the proper amount of **ALB 2048** and continue agitation.
- 8. If foaming occurs, use a silicone-based antifoam agent.

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

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

## **CLEANING INSTRUCTIONS**

Before using **ALB 2048**, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Equipment must be thoroughly rinsed using a commercial tank cleaner.

After using **ALB 2048**, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not designated as Glufosinate resistant. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

# APPLICATION DIRECTIONS FOR BURNDOWN USE

**ALB 2048** may be applied as a **burndown treatment prior to planting or prior to emergence** of any variety of canola, corn, sweet corn<sup>[\*\*\*]</sup>, cotton, soybean, or sugar beet.

## **APPLICATION TIMING**

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

## **APPLICATION RATES**

Apply 14.5 to 21.5 fl oz/A (0.53 to 0.79 lbs ai/A) depending on crop, weed species and intention of post application use. Please see application charts below.

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

**RESTRICTIONS** (see crop-specific use restrictions)

- Cotton, if environmental conditions prevent timely applications, a single application may be made of up to 21.5 fluid ounces per acre (0.79 lb ai/A) of ALB 2048. If more than 14.5 fluid ounces per acre (0.53 lb ai/A) are used in any single application, the annual total may not exceed 36 fluid ounces per acre (1.32 lbs ai/A), including all application timings.
- In canola, corn (sweet<sup>[\*\*\*]</sup> and field) and soybean, if environmental conditions prevent timely applications, a single application may be made of up to 21.5 fluid ounces per acre (0.79 lb ai/A) of ALB 2048. The year total may not exceed 21.5 fluid ounces per acre (0.79 lb ai/A) including all application timings.
- In sugar beets, if environmental conditions prevent timely applications, a single application may be made of up to
  18 fluid ounces per acre (0.66 lb ai/A) of ALB 2048. No additional applications of ALB 2048 may be made post
  emergence to the crop during the year.

## **ADJUVANTS**

Ammonium sulfate (AMS) can be used at 1.5 lb/A to 3 lb/A. Rates are dependent on tank mix partners, environmental conditions, temperatures and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like velvetleaf and lambsquarters, under difficult environmental conditions (low relative humidity) or hard water. An anti-foam agent is advised.

## SURFACTANTS/OILS

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

## APPLICATION DIRECTIONS FOR NON-GLUFOSINATE RESISTANT CROPS

Сгор	Burndown	In-Season Applications	Yearly Maximum
Canola, Soybean, Sweet Corn <sup>[***]</sup> , Field Corn	14.5 – 21.5 <sup>*</sup> fl oz/A <i>(0.53 – 0.79 lb ai/A)</i>	None	21.5* fl oz/A <i>(0.79 lb ai/A)</i>
Sugar beets	14.5 - 18 fl oz/A <i>(0.53 – 0.66 lb ai/A)</i>	None	18 fl oz/A <i>(0.66 lb ai/A)</i>
Cotton Use Pattern 1	14.5 fl oz/A <i>(0.53 lb ai/A)</i>	2 applications at 14.5 fl oz/A <sup>**</sup> (0.53 lb ai/A) Make second application 10-14 days after the first application.	43.5 fl oz/A ( <i>1.59 lbs ai/A)</i>
Cotton Use Pattern 2	16 - 21.5 fl oz/A <i>(0.58 – 0.79 lb ai/A)</i>	1 application at 14.5 fl oz/A** <i>(0.53 lb ai/A)</i>	36 fl oz/A ( <i>1.32 lbs ai/A)</i>

\*Maximum rate in California is 18 fl. oz/A (0.66 lbs ai/A)

\*\*Cotton designated as Glufosinate resistant OR with hooded sprayer for all varieties (see COTTON use directions). [\*\*\*Not for use in California]

# APPLICATION DIRECTIONS FOR GLUFOSINATE RESISTANT CROPS

		In-Season Applications	
Crop	Burndown	(Glufosinate Resistant Varieties Only)	Yearly Maximum
		1 to 2 applications at 14.5 – 21.5 fl oz/A (0.53 – 0.79 lb ai/A)	
Soybean,	14.5 – 21.5* fl oz/A	For soybeans, make second application	43.5 fl oz/A
Field Corn	(0.53 – 0.79 lb ai/A)	at least 5 days after the first application.	(1.59 lbs ai/A)
		For field corn, make second application	
		at least 7 days after first application.	
		1 to 2 applications at 11 fl oz/A	
Sweet	11 fl oz/A	(0.40 lb ai/A)	22 fl oz/A
Corn <sup>[***]</sup>	(0.40 lb ai/A)	Make second application at least	(0.80 lb ai/A)
		7 days after the first application.	
		1 to 2 applications at 14.5 fl oz/A	
Canola	14.5 – 21.5* fl oz/A	(0.53 ai/A)	43.5** fl oz/A
Calibla	(0.53 – 0.79 lb ai/A)	Make second application at least	(1.59 lbs ai/A)
		10 days after the first application	
		1 to 2 applications at 14.5 fl oz/A	
Cotton Use	14.5 fI oz/A	(0.53 lb ai/A)	43.5** fl oz/A
Pattern 1	(0.53 lb ai/A)	Make second application 10-14	(1.59 lb ai/A)
		days after the first application.	
Cotton Use	15 – 21.5* fl oz/A	1 application at 14.5 fl oz/A****	36 fl oz/A
Pattern 2	(0.55 – 0.79 lb ai/A)	(0.53 lb ai/A)	(1.32 lbs ai/A)
Sugar Booto	14.5 - 18 fl oz/A	1 application at 14.5 fl oz/A	30 fl oz/A
Sugar Beets	(0.53 – 0.66 lb ai/A)	(0.53 lb ai/A)	(1.10 lbs ai/A)

\* Maximum rate in California is 18 fl oz/A (0.66 lbs ai/A) with annual maximum of 36 fl oz/A (1.32 lbs ai/A) \*\* Maximum rate in California is 11 fl oz/A (0.40 lbs ai/A) with annual maximum of 22 fl oz/A (0.8 lbs ai/A)

[\*\*\*Not for use in California]

\*\*\*\*Cotton designated as Glufosinate resistant OR with hooded sprayer for all varieties (see **COTTON** use directions).

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT SUGAR BEETS [Not for use in California]

Apply **ALB 2048** only to sugar beets designated as Glufosinate resistant. resistant. **ALB 2048** is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

# **APPLICATION TIMING**

Applications of **ALB 2048** on sugar beets designated as Glufosinate resistant may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet.

Apply to small and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on

weed heights refer to the WEED CONTROL FOR ROW CROPS section.

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

# **APPLICATION RATES**

Apply 14.5 - 18 fluid ounces per acre (0.53 - 0.66 lb ai/A) depending on weed species, size and density per weed chart. If a second application is needed, make the second application in a minimum of 10 days after the first application. The maximum annual rate of **ALB 2048** on sugar beets is 30 fl oz/A (1.10 lbs ai/A).

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

# ADJUVANTS

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

# SURFACTANTS/OILS

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

# **RESTRICTIONS TO THE DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT SUGAR BEETS**

- **DO NOT** apply more than 30 fl oz/A (1.10 lbs ai/A) of **ALB 2048** per year.
- DO NOT apply ALB 2048 within 60 days of harvesting sugar beets.
- If a second application is needed, make the second application a minimum of 10 days after the first application.
- **DO NOT** exceed the single application rate maximum of 18 fl oz/A (0.66 lb ai/A).
- **DO NOT** make more than 2 applications per year when applied at reduced rates.
- **DO NOT** plant rotation crops in a field treated with **ALB 2048** within 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale, which may be planted 70 days after the last application of this product. Corn, soybeans, canola, and sugar beets containing a Glufosinate resistance trait may be planted at any time.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply **ALB 2048** if sugar beets show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT CANOLA

Apply **ALB 2048** only to canola designated as Glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **APPLICATION TIMING**

Applications of **ALB 2048** on canola may be made from the cotyledon stage up to the early bolting stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

# **APPLICATION RATES**

Apply **ALB 2048** at 11 to 14.5 fl oz/A (0.40 - 0.53 lb ai/A) per application. If a second application of **ALB 2048** is needed, make the second application in a minimum of 7 days after the first application. The maximum annual rate of **ALB 2048** on canola is 43.5 fl oz/A (1.59 lbs ai/A).

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

# **APPLICATION RATES WITH TANK MIX PARTNERS**

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

Apply **ALB 2048** at 11 to 14.5 fl oz (0.40 – 0.53 lb ai) per acre per application, depending on weed species, size and density per weed chart.

Tank mix partners advised to enhance grass control, including products containing quizalofop p-ethyl, sethoxydim and clethodim.

If a second application is needed, make the second application in a minimum of 7 days after the first application.

Tank mixes may aid in the performance of **ALB 2048**. 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. 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. **DO NOT** mix **ALB 2048** mix with any product containing a label prohibition against such mixing.

## ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

## SURFACTANTS/OILS

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See SPRAY DRIFT MANAGEMENT section for more detailed information.

## **RESTRICTIONS TO THE DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT CANOLA**

- 1. **DO NOT** use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- 2. **DO NOT** apply more than two applications of **ALB 2048** per year. Sequential applications must be at least 10 days apart.
- 3. DO NOT apply ALB 2048 within 65 days of harvesting canola.
- 4. DO NOT exceed the maximum single application rate of 21.5 fl oz/A (0.79 lb ai/A).
- 5. **DO NOT** apply more than 43.5 fl oz/A (1.59 lbs ai/A) of **ALB 2048** per year.

- 6. **DO NOT** graze the treated crop or cut for hay.
- 7. **DO NOT** apply **ALB 2048** if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- 8. **DO NOT** apply this product through any type of irrigation system.
- 9. Refer to the **"Rotational Crop Restrictions"** section under the **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.

# APPLICATION DIRECTIONS FOR GLUFSOSINATE RESISTANT CANOLA FOR SEED PROPOGATION

[Not for use in California]

Up to three applications of **ALB 2048** at up to 14.5 fl oz/A (0.53 lb ai/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 18-30, 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 three applications of **ALB 2048** per acre per year.
- **DO NOT** apply more than 14.5 fl oz/A (0.53 lb ai/A) per application.
- **Application interval** = not less than 10 days.
- **DO NOT** apply more than 43.5 fl oz/A (1.59 lbs ai/A) of **ALB 2048** per year.
- **DO NOT** apply **ALB 2048** beyond the early bolting stage or within 65 days of harvesting canola seed.
- **DO NOT** use treated canola seed for food, feed or oil purposes.
- DO NOT apply ALB 2048 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.

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT SWEET CORN

[Not for use in California]

Apply **ALB 2048** only to sweet corn designated as Glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **APPLICATION TIMING**

Applications of **ALB 2048** on Glufosinate resistant sweet corn may be made from emergence until the V-6 stage of growth; i.e., 6 developed collars, whichever comes first.

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf, make applications of Glufosinate between dawn and 2 hours before sunset.

# **APPLICATION RATES**

Apply at a rate of 11 fl oz/A (0.40 lb ai/A), depending on weed species, size and density per weed chart. If required, a second application of 11 fl oz/A (0.40 lb ai/A) can be applied. The second application must be made a minimum 7 days after the first application. The maximum annual rate of **ALB 2048** on sweet corn is 22 fl oz/A (0.80 lb ai/A).

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

# APPLICATION RATES WITH TANK MIX PARTNERS

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

Apply **ALB 2048** at 11 fl oz/A (0.40 lb ai/A) per application, depending on weed species, size and density per weed chart. Advised tank mix partners, including products containing atrazine, tembotrione, thiencarbazone-methyl, and dicamba DGA salt.

If a second application is needed, make the second application in a minimum of 7 days after the first application. Tank mixes may aid in the performance of **ALB 2048**. 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 label limitations, restrictions and precautions. **DO NOT** exceed any labeled dosage rates. **DO NOT** mix **ALB 2048** mix with any product containing a label prohibition against such mixing.

## **ADJUVANTS**

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

## SURFACTANTS/OILS

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

## **RESTRICTIONS TO THE DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT SWEET CORN**

- 1. DO NOT apply ALB 2048 within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- 2. DO NOT apply more than 22 fl oz/A (0.80 lb ai/A) of ALB 2048 on sweet corn per year.
- 3. **DO NOT** apply more than two applications of **ALB 2048** to sweet corn per year. Sequential applications must be at least 7 days apart.
- 4. DO NOT exceed the maximum single application rate of 11 fl oz/A (0.40 lb ai/A).
- 5. If **ALB 2048** was used in a burndown application, no postemergence applications may be made to the crop.
- 6. **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- 7. **DO NOT** apply **ALB 2048** if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall etc.).
- 8. **DO NOT** apply this product through any type of irrigation system.
- 9. Refer to the *Rotational Crop Restrictions* section under the *Product Information* heading of this label for the appropriate rotational crop plantback intervals.

See the **Application Methods for Broadcast Application**, **Mixing Instructions** and **Weed Control for Row Crops** tables on this label for further instruction.

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT FIELD AND SILAGE CORN

Apply **ALB 2048** only to corn designated as Glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

# **APPLICATION TIMING**

Applications of **ALB 2048** on Glufosinate resistant corn may be made from emergence until the V-6 stage of growth, i.e., 6 developed collars, whichever comes first.

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf make applications of **ALB 2048** between dawn and 2 hours before sunset

# **APPLICATION RATES**

Apply **ALB 2048** at 14.5 to 21.5<sup>\*</sup> fl oz/A (0.53 – 0.79 lb ai/A) per application depending on weed species, size and density per weed chart.

\*Maximum rate in California is 11 fl oz/A (0.40 lbs ai/A)

If a second application is needed, make the second application at up to 14.5 fl oz/A (0.53 lb ai/A) with a minimum of 7 days after the first application. The maximum rate of **ALB 2048** on Glufosinate resistant field and silage corn is  $43.5^{**}$  fl oz/A (*1.59 lb ai/A*).

\*\*Maximum annual rate in California is 22 fl oz/A (0.80 lbs ai/A).

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

## **APPLICATION RATES WITH TANK MIX PARTNERS**

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

Apply **ALB 2048** at 14.5 to 21.5<sup>\*</sup> fl oz/A (0.53 – 0.79 lb ai/A), depending on weed species, size and density per weed chart.

\*Maximum rate in California is 11 fl oz/A (0.40 lbs ai/A).

Advised tank mix partners, including products containing atrazine, tembotrione, thiencarbazone-methyl and dicamba, DGA salt. If a second application is needed, make the second application in a minimum of 7 days after the first application. Tank mixes may aid in the performance of **ALB 2048**.

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 label limitations, restrictions and precautions.

**DO NOT** exceed any labeled dosage rates. **DO NOT** mix **ALB 2048** mix with any product containing a label prohibition against such mixing.

## ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

## SURFACTANTS / OILS:

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

## APPLICATION DROP NOZZLE EQUIPMENT

Applications of **ALB 2048** Field corn and Corn Silage may be made with drop nozzles from emergence until 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 AND SILAGE CORN

- **DO NOT** apply **ALB 2048** within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
- **DO NOT** apply more than two applications per year. Sequential applications must be at least 10 days apart.
- **DO NOT** apply more than 43.5<sup>\*\*</sup> fl oz/A (1.59 lb ai/A) of **ALB 2048** on corn per year. \*\*Maximum annual rate in California is 22 fl oz/A (0.8 lbs ai/A).
- DO NOT exceed the maximum single application rate of 21.5\* fl oz/A (0.79 lb ai/A). \*Maximum rate in California is 11 fl oz/A (0.40 lbs ai/A).
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- DO NOT apply ALB 2048 if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the "Rotational Crop Restrictions" section under the "Information" heading of this label for the appropriate rotational crop plant back intervals.

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT COTTON

Uniform, thorough spray coverage is necessary to achieve consistent weed control. **ALB 2048** may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to Glufosinate resistant cotton. This product may be applied post-emergence to non-Glufosinate resistant cotton varieties or cultivars by using equipment designed to minimize contact of the spray with the cotton foliage. See the Application Methods on the non-Glufosinate resistant cotton section for selection of shielding equipment. Severe injury and damage may result if the **ALB 2048** contacts the foliage or stems of cotton **NOT** designated as Glufosinate resistant.

# APPLICATION TIMING

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

# **APPLICATION RATES**

Apply **ALB 2048** to cotton from emergence up to the early bloom stage at 14.5 fl oz/A (0.53 lb ai/A). If environmental conditions prevent a timely herbicide application, a single application of up to 21.5 fl oz/A (0.79 lbs ai/A) of **ALB 2048** may be made to cotton.

If more than 14.5 fl oz/A (0.53 lb ai/A) are used in any single application, the yearly total may not exceed 36 fl oz/A (1.32 lb ai/A), including all application timings. See **Restrictions to the Directions for Use on Glufosinate resistant Cotton** below for additional information.

# **Option 1: 3 post applications**

Apply 14.5 fl oz/A (0.53 lb ai/A) per application depending on weed species, size and density per weed chart. If required a second application of 14.5 fl oz/A (0.53 lb ai/A) may be made 10-14 days after the first application. If required, a third application of 14.5 fl oz/A (0.53 lb ai/A) may be made 10-14 days after the second application. The yearly maximum rate of **ALB 2048** on cotton is 43.5 fl oz/A (1.59 lb ai/A).

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

# **Option 2: 2 post applications**

Apply 16 to 21.5 fl oz/A (0.58 -0.79 lb ai/A) per application depending on weed species, size and density per weed chart. If required a second application of 14.5 fl oz/A (0.53 lb ai/A) can be applied. The sequential applications must be made minimum 10 days and may be made 14 days after each other. The maximum annual rate of **ALB 2048** on cotton is 36 fl oz/A (1.32 lb ai/A) per acre.

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

Use Pattern	1st Application	<b>2nd Application</b> <i>Minimum 10 days up to</i> <i>14 days after 1<sup>st</sup></i> <i>application</i>	<b>3rd Application</b> <i>Minimum 10 days up to</i> <i>14 days after 2nd</i> <i>application</i>	Yearly Maximum
Option 1	14.5 fl oz/A <i>(0.53 lb ai/A)</i>	14.5 fl oz/A (0.53 lb ai/A)	14.5 fl oz/A <i>(0.53 lb ai/A)</i>	43.5 fl oz/A <i>(1.59 lbs ai/A)</i>
Option 2	16 - 21.5 fl oz/ A <i>(0.58-0.79 lb ai/A)</i>	14.5 fl oz/A <i>(0.53 lb ai/A)</i>	None	36 fl oz/A <i>(1.32 lbs</i> <i>ai/A)</i>

# TANK MIX ON GLUFOSINATE RESISTANT COTTON

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

Certain herbicide tank mixes may aid in the performance of **ALB 2048**. **ALB 2048** 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. **ALB 2048** cannot be mixed with any product containing a label prohibition against such mixing.

# ADJUVANTS

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

# SURFACTANTS / OILS

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

# **RESTRICTIONS TO THE DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT COTTON**

- **DO NOT** apply **ALB 2048** to Glufosinate resistant cotton in Florida, South of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
- **DO NOT** apply **ALB 2048** within 70 days prior to cotton harvest.
- **DO NOT** make more than 3 applications of **ALB 2048** to cotton per acre per year.
- **DO NOT** apply more than 14.5 fl oz/A (0.53 lb ai/A) per application.
- **DO NOT** apply more than 43.5 fl oz (1.59 lb ai/A) (including all application timings) to cotton per year under this application scenario. Sequential applications must be at least 10 days apart.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of **ALB 2048** at up to 21.5 fl oz/A (0.79 lb ai/A) may be made to cotton.
- **DO NOT** apply more than 21.5 fl oz/A (0.79 lb ai/A) of **ALB 2048** in a single application under this use scenario. If a single application greater than 14.5 fl oz/A (0.53 lb ai) is made, a subsequent application not to exceed 14.5

fl oz/A (0.53 lb ai) may be made to cotton. The annual total use rate under this scenario may not exceed 36 fl oz/A (1.32 lb ai) of **ALB 2048**. Sequential applications must be at least 10 days apart.

- **DO NOT** apply this product through any type of irrigation system.
- Refer to the **"Rotational Crop Restrictions"** section under the **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.

# APPLICATION METHODS FOR NON-GLUFOSINATE RESISTANT COTTON

Application of **ALB 2048** to cotton varieties not designated as Glufosinate resistant requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

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

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

Band width in inches Row width in inches	Х	Broadcast RATE per acre	=	Amount of banded product needed per acre
Band width in inches Row width in inches	Х	Broadcast spray VOLUME per acre	=	Banded Spray Volume needed per acre

## TANK MIX ON NON-GLUFOSINATE RESISTANT COTTON

Certain tank mixes may aid in the performance of **ALB 2048**. No additional surfactant is needed with any tank mix partner. **ALB 2048** 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. **ALB 2048** cannot be mixed with any product containing a label prohibition against such mixing.

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

# POST-HARVEST / FALL BURNDOWN ON NON-GLUFOSINATE RESISTANT COTTON

**ALB 2048** may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 21.5 fl oz/A (0.79 lb ai/A) of **ALB 2048** may be applied in a single application to control larger weeds growing in the crop at the time of harvest. If more than 14.5 fl oz/A (0.53 lb ai/A) is used in a single application, the yearly total may not exceed 36 fl oz/A (1.32 lb ai/A), including all application timings. Refer to the **Rotational Crop Restrictions** section of this label for appropriate rotational crop information.

# TANK MIX ON NON-GLUFOSINATE RESISTANT COTTON

Certain tank mixes may aid in the performance of **ALB 2048**. No additional surfactant is needed with any tank mix partner. **ALB 2048** 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. **ALB 2048** 

cannot be mixed with any product containing a label prohibition against such mixing.

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

# RESTRICTIONS TO THE DIRECTIONS FOR NON-GLUFOSINATE RESISTANT COTTON POSTHARVEST BURNDOWN USE

- **DO NOT** apply more than 21.5 fl oz/A (0.79 lb ai/A) of **ALB 2048** in a single application to control larger weeds growing in the crop at the time of harvest.
- If more than 14.5 fl oz/A (0.53 lb ai/A) is used in a single application: DO NOT apply more than 36 fl oz/A (1.32 lb ai/A) per year, including all application timings.
- **DO NOT** make more than two applications per year. **DO NOT** make second application within 10 days of first.

# APPLICATION DIRECTIONS FOR USE ON GLUFOSINATE RESISTANT SOYBEANS

Apply **ALB 2048** only to soybeans designated as Glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

## **APPLICATION TIMING**

Applications of **ALB 2048** on soybeans may be made from emergence up to but not including the R1 bloom growth stage.

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

Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed control may be reduced when applications are made when heavy dew, fog and mist/rain are present or when weeds are under stress due to drought, cool temperatures or extended periods of cloudiness. **ALB 2048** is a foliar-active material with little or no soil-residual activity. **ALB 2048** is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best results on lambsquarters, Palmer amaranth and velvetleaf, make applications of Glufosinate between dawn and 2 hours before sunset.

## **APPLICATION RATES**

Apply **ALB 2048** at 14.5 to 21.5 fl oz/A (0.53 – 0.79 lb ai/A) depending on weed species, size and density per weed chart.

If a second application is needed, make the second application of 14.5 to 21.5 fl oz/A (0.53 - 0.79 lb ai/A), can be applied up to a yearly maximum of 43.5 fl oz/A (1.59 lbs ai/A).

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

	Use Pattern Rate Ranges	
1 <sup>st</sup> Application	2 <sup>nd</sup> Application Minimum of 5 days after 1 <sup>st</sup> Application	Yearly Maximum
14.5 - 21.5* fl oz/A	14.5-21.5* fl oz/A	43.5* fl oz/A
(0.53 – 0.79 lb ai/A)	(0.53 - 0.79 lb ai/A)	(1.59 lbs ai/A)

\*Maximum single application rate in California is 18 fl oz/A (0.66 lbs ai/A) with total annual maximum application of 36 fl oz/A (1.32 lbs ai/A)

## SOYBEAN TANK MIX INSTRUCTIONS

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow

the applicable restrictions and 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.

Certain herbicide tank mixes may complement **ALB 2048**. No additional surfactant is needed with any tank mix partner. **ALB 2048** 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. **ALB 2048** cannot be mixed with any product containing a label prohibition against such mixing.

# **ADJUVANTS**

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 lb/A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

# SURFACTANTS / OILS

The use of additional surfactants or crop oils in tank mixes with **ALB 2048** may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

See SPRAY DRIFT MANAGEMENT section for more detailed information.

## **RESTRICTIONS TO THE DIRECTIONS FOR USE ON SOYBEANS**

- **DO NOT** apply **ALB 2048** within 70 days of harvesting soybean seed.
- **DO NOT** apply more than 43.5 fl oz/A (*1.59 lb ai/A*) of **ALB 2048** on soybeans per growing year. The maximum annual application rate in California is 36 fl oz/A (1.32 lbs ai/A)
- **DO NOT** apply more than 21.5 fl oz/A (0.79 lb ai/A) of **ALB 2048** in a single application. Maximum single application rate in California is 18 fl oz/A (0.66 lbs ai/A).
- **DO NOT** make more than 3 applications per year, when applied at reduced rates.
- **DO NOT** make sequential applications within 10 days of previous application.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- DO NOT apply ALB 2048 if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.
- Refer to the *"Rotational Crop Restrictions"* section under the **"Product Information"** heading of this label for the appropriate rotational crop plant back intervals.
- Sequential applications must be at least 5 days apart

# APPLICATION DIRECTIONS FOR CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

**ALB 2048** may be applied to select out susceptible "segregates," i.e., canola, corn, cotton, and soybean plants that are sensitive to glufosinate-ammonium (i.e. **DO NOT** contain a Glufosinate resistance trait) during seed propagation.

• **Canola (Glufosinate resistant): ALB 2048** may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry a Glufosinate resistance trait and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing a Glufosinate resistance trait will be severely injured or killed if treated with this herbicide.

See **Application Use Directions for Use on Glufosinate resistant Canola** for use rates, application timing and use restrictions.

Corn (Glufosinate resistant): Inbred lines, plants not possessing a Glufosinate resistance trait, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of non-sensitive corn "segregates", ALB 2048 may be applied at 11 fl oz/A (0.40 lb ai/A) plus AMS at 3 lb/A (17 lb/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 11 fl oz/A *(0.40 lb ai/A)* plus AMS at 3 lb/A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall. Sequential applications need to be at least 10 days apart. When temperatures exceed 85°F, the rate of AMS can be reduced to 1.5 lbs/A *(*8.5 lb/100 gallons) to reduce potential leaf burn.

See **Application Use Directions for Use on Glufosinate resistant Corn** for use rates, application timing and use restrictions.

 Cotton (Glufosinate resistant): ALB 2048 may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry a Glufosinate resistant trait and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not possessing a Glufosinate resistance trait will be severely injured or killed if treated with this herbicide.

See **Application Use Directions for Use on Glufosinate resistant Cotton** for use rates, application timing and use restrictions.

Soybean (Glufosinate resistant): For the selection of non-sensitive soybean "segregates", ALB 2048 may be applied at up to 11 - 18 fl oz/A (0.40 - 0.66 lb ai/A) when soybean is in the third trifoliate stage. A second treatment of 11 - 14.5 fl oz/A (0.40 - 0.53 lb ai/A) may be applied up to but not including the bloom growth stage of soybean. Sequential applications must be at least 5 days apart.

See **Application Use Directions for Use on Glufosinate resistant Soybeans** for use rates, application timing and use restrictions.

# **APPLICATION DIRECTIONS FOR USE ON LISTED TREE, VINE, AND BERRY CROPS**

Apply **ALB 2048** to the tree, vine, and berry crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

#### **REGISTERED CROPS**

#### **BERRIES:**

#### Crop Subgroup 13-B: Bushberry subgroup

Blueberry, highbush; blueberry, lowbush; currant; elderberry; gooseberry; huckleberry; Juneberry; lingonberry; salal

#### CITRUS CROP GROUP 10-10:

Orange or tangerine/mandarin, Calamondin; citron, citrus hybrids; Mediterranean Mandarin; orange, sour; orange, sweet; satsuma darin; tachibana orange; tangerine (mandarin); tangelo; tangor, trifoliate orange; cultivars, varieties and/or hybrids of these

Lemon or lime – Australian desert lime; Australian finger lime; Australian round lime; brown river finger lime; kumquat; lemon; lime; mount white lime; New Guinea wild lime; Russel River lime; sweet lime; Tahiti lime; cultivars, varieties and/or hybrids of these

Grapefruit – Grapefruit; Japanese summer grapefruit; pummelo; tangelo; uniq fruit; cultivars, varieties and/or hybrids of these.

**OLIVES:** all olive varieties

## POME FRUIT (CROP GROUP 11-10):

#### Crop Group 11. Pome Fruits Group

Apple; crabapple; loquat; mayhaw; pear; pear, oriental; quince; azarole; hook; medlar; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these

## STONE FRUIT (CROP GROUP 12-12):

#### Crop Group 12. Stone Fruits Group

Apricot; cherry, sweet; cherry, tart; nectarine, peach; plum; plum, chicksaw; damson; plum, Japanese; plumcot; prune; capulin; jujube and sloe; cultivars, varieties and/or hybrids of these.

#### TREE NUTS (CROP GROUP 14-12):

#### **Crop Group 14. Tree Nuts Group**

Almond; beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut), hickory nut, macadamia nut (bush nut), pecan, pistachios, and walnut, black and English

**GRAPES**: all grape varieties (table, wine, and raisins)

## **APPLICATION TIMING**

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of **ALB 2048**. Weed Control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. **DO NOT** retreat these weeds with **ALB 2048** until sufficient regrowth has occurred.

Apply **ALB 2048** as a directed spray to control undesirable vegetation in tree, vine and berries listed on this label. Apply as a broadcast, banded, or spot treatment application depending on the situation to control weeds listed under the heading "Weeds Controlled in Tree, Vine and Berry crops". Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of **ALB 2048** may be necessary to control plants generating from underground parts or seed.

Avoid contact of **ALB 2048** solution, spray, drift or mist with green bark, stems, or foliage, as injury may occur to trees and vines. **Only trunks with callused, mature brown bark may be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of ALB 2048 with parts of trees or vines other than mature brown bark can result in serious damage**.

## APPLICATION METHODS FOR BROADCAST APPLICATIONS

Apply **ALB 2048** at the rates listed below for broadcast applications based on weed size and stage of growth.

Wood Cine and Change	ALB 204	ALB 2048 Rate	
Weed Size and Stage	fl oz/A	lb ai/A	
Weeds < 3" in height	24 fl oz/A	0.88 lb ai/A	
Weeds < 6" in height pre-tiller grasses	28 fl oz/A	1.02 lb ai/A	
Weeds > 6" in height and/or grasses that have tillered	28 - 41 fl oz/A	1.02 – 1.50 lbs ai/A	

#### APPLICATION METHODS FOR BANDED SPRAY APPLICATIONS

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

Band width in inches	X Rate per acre	<ul> <li>Amount of herbicide</li> </ul>
Row width in inches	broadcast	needed for treatment

## APPLICATION METHODS FOR SPOT OR DIRECTED-SPRAY APPLICATIONS

For spot or directed spray application, mix **ALB 2048** at 0.82 fl oz *(0.03 lb ai)* of product per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. **DO NOT** make spot or directed spray applications to tree or vine trunk as injury may occur.

## WEEDS CONTROLLED IN TREE, VINE AND BERRY CROPS

#### **Broadleaf Weeds**

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

## **Grass Weeds**

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

#### **Biennial and Perennial Weeds**

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

\* apply to annual ryegrass prior to 3 inches in height

\*\* indicates suppression

## **RESTRICTIONS TO THE DIRECTIONS FOR USE ON TREE, VINE, AND BERRY CROPS**

- **DO NOT** apply more than 82 fl oz of **ALB 2048** per acre (3.0 lbs ai/A) to berry bushes and stone fruit per year.
- DO NOT exceed the maximum single application rate of 41 fl oz/A (1.50 lb ai/A)
- **DO NOT** make more than 2 applications per year at a maximum rate or 41 fl oz/A (1.50 lb ai/A) per application to berry bushes and stone fruit.
- **DO NOT** apply more than 123 fl oz (4.50 lbs ai/A) of this product per acre to tree nuts, vines, pome fruits, citrus and olives in any calendar year.
- **DO NOT** make more than 3 applications at a maximum rate of 41 fl oz/A (1.50 lb ai/A) per application to tree nuts, vines, pome fruits, citrus and olives.
- **DO NOT** graze, harvest, and/or feed treated orchard cover crops to livestock.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product aerially to tree, berry, or vine crops.
- **DO NOT** apply this product within 14 days of nut, fruit, berry or grape harvest.

- Applications to citrus fruits, pome fruits and olives must be a minimum of 14 days apart.
- Applications to stone fruit must be a minimum of 28 days apart.
- Applications to berry bushes must be a minimum of 14 days apart.
- **DO NOT** make spot spray applications to suckers, as tree injury may occur.

# SUCKER CONTROL WITH ALB 2048 HERBICIDE

**ALB 2048** will reduce or eliminate sucker growth when applied to suckers that are young, green and uncallused. For sucker control, apply a split application approximately 4 weeks apart at 28 fl oz/A (1.02 lb ai/A). Coverage of all sucker foliage is necessary for optimum control. Suckers must not exceed 12 inches in length.

#### TANK MIX PARTNER

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

**ALB 2048** does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of **ALB 2048** or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. **ALB 2048** may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. **ALB 2048** cannot be mixed with any product containing a label prohibition against such mixing.

diuron	napropamide	oryzalin	terbacil
flumioxazin	norfluazon	simazine	

# APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

## **APPLICATION RATES AND TIMING**

Apply **ALB 2048** at the beginning of natural senescence of potato vines. Apply 10.4 fl oz/A (0.38 lb ai/A). **DO NOT** split this application or apply more than one application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20 to 100 gpa) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply **ALB 2048** with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

## **RESTRICTIONS TO THE DIRECTIONS FOR USE IN POTATO VINE DESICCATION**

- **DO NOT** apply more than 10.4 fl oz/A (0.38 lb ai/A) to potato vines per year or per single application.
- **DO NOT** harvest potatoes until 9 days or more after application of **ALB 2048**.
- **DO NOT** apply to potatoes grown for seed.
- Potatoes, canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of ALB 2048 as a potato vine desiccant.
- **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale until 30 or more days after an application of **ALB 2048** as a potato vine desiccant.
- **DO NOT** plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of **ALB 2048** as a potato vine desiccant.
- **DO NOT** split this application or apply more than one application per harvest.

# FALLOW FIELDS OR POST HARVEST

**ALB 2048** may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **Weed Control for Row Crops** section of this label. Applications may be made in fallow fields, post-harvest, prior to planting or emergence of any crop listed on this label. Apply **ALB 2048** at 11 or 14.5 fl oz/A (0.40 - 0.53 lb ai/A) to fallow fields to control specific weeds. **ALB 2048** must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are advised with **ALB 2048** to enhance total weed control. When using **ALB 2048** in tank mix combinations, follow the precautions and directions of use of the most restrictive label. See the **Application and Mixing Procedures** section of this label for additional information on how to apply this product. See the **"Product Information"** section of this label for rotational crop restrictions.

# **RESTRICTIONS TO THE DIRCTIONS FOR USE ON FALLOW FIELDS OR POST HARVEST**

- **DO NOT** apply more than 14.5 fl oz/A (0.53 lbs ai/A) in a single application.
- **DO NOT** make more than 3 applications per year
- **DO NOT** make sequential applications sooner than 14 days apart.
- **DO NOT** apply more than 43.5 fl oz/A (1.59 lbs ai/A) per year.

# **NON-CROP USES**

**ALB 2048** controls annual and perennial weeds in non-crop areas defined below in the "Where to Apply Section". Applications may be made on a broadcast, banded or spot treatment basis depending on the situation. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from underground parts or seed.

## WHEN TO APPLY

**ALB 2048** is a foliar-active material. Best results are obtained when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest rate directed.

**ALB 2048** must be applied at the labeled rate in the **HOW TO APPLY** section. Repeat applications of **ALB 2048** or tank mixes of **ALB 2048** plus one or more appropriate residual herbicide(s) listed on this label will be needed to control weeds emerging from underground parts or seeds.

## HOW TO MIX

ALB 2048 must be mixed with water to make finished spray solution as follows:

- 1. Fill the spray tank with the required amount of water.
- 2. Add the proper amount of product, then mix thoroughly.

#### **HOW TO APPLY**

#### **Spot or Directed Applications**

This product may be used as a spot or directed spray application using 0.20 to 0.40 fl oz/gal of water (0.007 -0.014 lbs ai/gal of water) of water depending upon the weed and stage of growth as shown in the following sections. Spray undesirable vegetation foliage on a spray-to-wet basis. **DO NOT** apply beyond runoff. Ensure uniform and complete coverage. Use a coarse spray. **DO NOT** spray during windy conditions. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

When making spot treatments **DO NOT** exceed broadcast per acre use rates.

#### **Broadcast or Boom Applications**

Apply 6 - 19 fl oz/A (0.22 - 0.69 lb ai/A) depending upon the weed and stage of growth as shown in the following sections. Use a minimum of 40 gallons of water per acre with a minimum of 30-psi spray pressure.

#### **Aerial Applications**

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage.

**DO NOT** apply when winds are gusty or under conditions which favor drift on to desirable vegetation. Applications under conditions which cause drift of this product will result in damage to any vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

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

**ALB 2048** is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate.

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

Tank mix applications of **ALB 2048** plus the following herbicides are advised for broad-spectrum postemergence and preemergence weed control:

Isopropylamine salt of imazapyr	butroxydim	norflurazon
prodiamine	isoxaben	Diglycolamine salt of 3,6-dichloro-o-anisic Acid
oryzalin	pendimethalin	oxadiazon

A compatibility test must be conducted with any potential tank mix partner with **ALB 2048**, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below:

- 1. Fill the jar three-quarters full with water.
- 2. Add the appropriate amount of herbicide in the following order: (a) dry flowable, (b) wettable powder, (c) aqueous suspensions, (d) flowables, (e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.
- 3. After adding ail ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oily film on the jar or other signs of incompatibility.
- 4. If the compatibility test shows signs of incompatibility, **DO NOT** tank mix the product tested with **ALB 2048**.

# For the Following Weeds Controlled by ALB 2048 Apply:

#### Spot application:

Apply 0.37 fl oz/gal of water (0.014 lb ai/gal of water) when the weed height or diameter is less than 6 inches. Apply 0.62 fl oz/ gal of water (0.023 lb ai/gal of water) when the weed height or diameter is 6 inches or greater.

#### **Broadcast application:**

Apply 20 fl oz/A (0.73 lb ai/A) when the weed height or diameter is less than 6 inches. Apply 28 fl oz/A (1.02 lb ai/A) when the weed height or diameter is 6 inches or greater.

Broadleaf Weeds		
Chickweed	Jimsonweed	Marestail
Clover	Kochia	Purslane
Common	London rocket	Shepherdspurse
Cocklebur	Malva (little	Smartweed
Filaree	mallow)	
Grasses and Sedges		
Barnyardgrass	Green Foxtail	(Signalgrass)
Cupgrass	Johnsongrass	Stinkgrass
Fall Panicum	(rhizome) Lovegrass	Windgrass,
Giant	Shattercane	yellow
Foxtail	Smallflower Alexandergrass	Foxtail
Goosegrass		

## For the Following Weeds Controlled by ALB 2048 Apply:

## Spot application:

Apply 0.62 fl oz/gal of water (0.023 lb ai/gal of water) when the weed height or diameter is less than 6 inches. Apply 0.88 fl oz/gal of water (0.032 lb ai/gal of water) when the weed height or diameter is 6 inches or greater.

#### **Broadcast application:**

Apply 28 fl oz/A (1.02 lbs ai/A) when the weed height or diameter is less than inches tall. Apply 40 fl oz/A (1.46 lbs ai/A) when the weed height or diameter is 8 inches or greater.

#### **Broadleaf weeds**

Annual sowthistle	Lambsquarter
Bindweed	Leafy spurge
Buffalorbur	Mugwort
Burdock	Musk thistle
Canada thistle	Nettle
Curly dock	Nightshade
Dandelion	Pennycress
Dogbane (hemp)	Pigweed, redroot
Field growwell	Plantain
Fleabane	Prickly lettuce
Goldenrod	Ragweed
Horsetail	Russian thistle
Grasses and Sedges	
Annual	Downy bromegrass
bluegrass	Fescue
Bahiagrass	Guineagrass
Barley	Kentucky bluegrass
Bermudagrass	Nutsedge
Carpetgrass	Paragrass
Crabgrass	Quackgrass
Dallisgrass	

Tansy mustard Velvetleaf Vervain Virginia copperleaf White heath aster Wild buckwheat Wild buckwheat Wild mustard Wild onion Wild rose Wild turnip Wood sorrel Yellow rocket

Ryegrass Sandbur Smooth bromegrass Torpedograss Vaseygrass Wheat Wild oat

## **Additional Use Directions**

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

#### Use on Woody Species[\*]

When applied as labeled, **ALB 2048** will provide control, partial control, or suppression of certain perennial woody weed species. Apply 32.5 - 96 fl oz/A (*1.19 - 3.51 lb ai/A*). Use the higher specified rates per acre of this product when conditions are not optimum for spray penetration, including when vegetation growth is heavy or dense. Lower specified rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

[\*Not for use in California]

## WHERE TO APPLY

## **Trimming and Edging**

**ALB 2048** may be used for trimming and edging landscape areas including: around individual trees and shrubs, landscape beds, foundations, fences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. For control of weeds emerging from seed, the use of **ALB 2048** in a tank mix with preemergence herbicides is advised. If spraying in areas adjacent to desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

**Conservation Reserve Program (CRP)**<sup>[\*]</sup>: This product can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres. For selective applications with broadcast spray equipment, apply 24 to to 27.3 fl. oz./A (0.88 to 1.0 lb. ai/A) of this product in early spring before desirable CRP grasses, including crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant.

[\*Not for use in California]

**Wildlife Food Plots**<sup>[\*]</sup>: This product may be used as a site preparation treatment prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling.

[\*Not for use in California]

#### Farmsteads, Recreational and Public Areas

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

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

**ALB 2048** may be used to control winter annual weeds in well-established ornamental dormant hybrid or common Bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply **ALB 2048** at a rate of 20 – 40 fl oz/A (0.73 – 1.46 lb ai/A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by **ALB 2048** section of this label for selecting specified rates. Applications of **ALB 2048** may also be used to suppress or control undesirable biennial or perennial weeds. **DO NOT** apply more than 40 fl oz (1.46 lbs ai) of **ALB 2048** per acre per year for this use. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed greenup may occur.

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

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

**DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result.

DO NOT apply ALB 2048 as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.

#### **Directed spray application:**

**ALB 2048** may be applied as a directed spray to control in-row weeds in field-grown woody plants. Refer to the How to Apply section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting.

#### Site preparation application:

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

# Greenhouse and shade house applications:

**ALB 2048** may be used to control weeds in greenhouses and shade- houses. Air circulation fans must be turned off during application. Apply **ALB 2048** as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation. **DO NOT** use in greenhouses or shade houses containing edible crops.

# USE RESTRICTIONS FOR NON-CROP USE

- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation.
- **DO NOT** allow grazing of vegetation treated with this product.
- **DO NOT** apply more than 123 fl oz of this product per acre per year (4.5 lbs ai/A/year).
- **DO NOT** apply more than 41 fl oz of this product per acre per single application (1.5 lbs ai/A/application).
- **DO NOT** apply more than a total of 3 broadcast applications (excluding spot treatment) per year.
- **DO NOT** apply more than 2 applications per year on Dormant bermudagrass.
- Applications must be made at least 14 days apart in non-crop areas.

# **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE: DO NOT** use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature must not exceed 125° F. If storage temperature for bulk **ALB 2048** is below 32° F, the material must not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

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

# **CONTAINER HANDLING:**

# [Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)]

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

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

Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. This is a sealed returnable container to be used only for **ALB 2048**. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

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

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

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

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# LABEL HISTORY (not part of final printed label)

FILE NAME	VERSION MARK	COMMENTS
042750.000XX.20210326	032621	Initial Registration DRAFT
04250-00UNR.20211123.DRAFT	112321	Revisions requested by US EPA
042750-00401.20211124.MASTER	AD112421	EPA Acceptance
042750-401.20211130.DRAFT	<u>113021</u>	Alternate Brand Name Notification