



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

34704-1130

Date of Issuance:

8/12/19

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Carabiner

Name and Address of Registrant (include ZIP Code):

LOVELAND PRODUCTS INC.  
P.O. BOX 1286  
GREELEY, CO 80632

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

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

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

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

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

Signature of Approving Official:

Erik Kraft, Product Manager 24  
Fungicide and Herbicide Branch, Registration Division (7505P)

Date:

8/12/19

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, “EPA Reg. No. 34704-1130.”
3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 06/26/2019

If you have any questions, please contact Francisco Llarena-Arias by phone at 703-347-0459, or via email at [llarena-arias.francisco@epa.gov](mailto:llarena-arias.francisco@epa.gov).

Enclosure

[Editor's Note for Reviewers: [Brackets] indicate optional passages or passages that depend on packaging. {Braces} indicate location of text.]

{BEGIN Booklet Front Panel}

MESOTRIONE GROUP **27** HERBICIDE



# Carabiner

**ACTIVE INGREDIENT:**

	<b>By Wt.</b>
Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione.....	40.0%
OTHER INGREDIENTS:.....	60.0%
<b>TOTAL</b>	<b>100.0%</b>

Contains 4.0 pounds mesotrione per gallon.

### KEEP OUT OF REACH OF CHILDREN

### CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label find someone to explain it to you in detail.)

[For Additional Precautionary Statements, Directions for Use, Storage and Disposal and Other Use Information, See Inside the Label Booklet.]

FIRST AID	
<b>If on skin:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. For emergency medical assistance, call 1-866-944-8565. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.</p>	

EPA Reg. No.: 34704-xxxx

EPA Est. No.: [nnnn-xx-nnn]

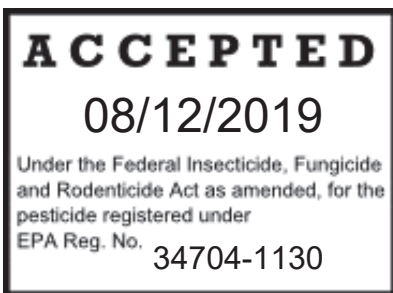
Net Contents: [yyyy]

[Print code]

[EPA MASTER LABEL—Label ID 06/19]

Formulated for  
Loveland Products Inc.,  
P.O. Box 1286, Greeley, CO 80632-1286

{END Booklet Front Panel}



{BEGIN Language inside booklet}

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

**Personal Protective Equipment (PPE):**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (barrier laminate, butyl rubber  $\geq$  14 mils, neoprene rubber, nitrile rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils)

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:**

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

**ENGINEERING CONTROL STATEMENTS**

When handlers use closed systems or enclosed cabs 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, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

**SURFACE WATER ADVISORY**

This product may contaminate water through drift or spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

**PHYSICAL/CHEMICAL HAZARDS**

Combustible liquid. Do not use or store near heat or open flame. Do not mix or allow 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 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 State or Tribal agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

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

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

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

- coveralls
- shoes plus socks
- chemical-resistant gloves (barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber, polyvinyl chloride (PVC)  $\geq$  14 mils, and viton  $\geq$  14 mils)

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.

**Do not enter treated areas without protection clothing until sprays have dried.**

### **PRODUCT INFORMATION**

This product is a systemic pre-emergence and post-emergence herbicide for selective contact and residual control of broadleaf weeds in labeled crops. In pre-emergence applications, weeds take up the product through the soil during weed emergence. Dry weather conditions reduce pre-emergent effectiveness of this product. At least ¼-inch of rainfall must occur within 7 to 10 days of application; rotary hoeing activates this product. In post-emergence applications, vulnerable weeds take up the product through treated foliage and stop growing soon after application. It can take up to two weeks for weeds to die. This product is absorbed by soil and/or through foliage of emerged weeds.

This product does not control most species of grass weeds. This product can be tank-mixed with other herbicides registered to control grass weeds (see tank-mix information in this label for additional information). This product can be used in combination with a burndown herbicide prior to planting to provide weed control in field corn, seed corn, yellow popcorn, and sweet corn. 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 a precautionary statement for each product in the tank mixture.

### **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

For resistance management, this product is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 27 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

The efficacy of this product is not affected by the presence of biotype weed species that are resistant to Protoporphyrinogen Oxidase (PPO), 4-Hydroxyphenylpyruvate Dioxygenase (HPPD) or Acetolactate Synthase (ALS) inhibiting herbicides or to Triazine or Glyphosate herbicides.

To reduce the risk of weeds developing resistance to mesotrione in corn, always use full specified label rates. When applying this product post-emergence after a mesotrione-containing pre-emergence herbicide, add atrazine as a tank mix partner. Use specified label rates of this product to prevent selection for, or population shifts toward, marginally resistant weed species and/or species biotypes.

Fields should be scouted before and after applying to identify the weed species present and their growth stage to determine if the intended application will be effective.

To delay herbicide resistance, take the following steps:

- Rotate the use of this product or other Group 27 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:
  - 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;
  - surviving plants mixed with controlled individuals of the same species.
- If resistance is suspected, prevent weed seed production and weed escapes in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Loveland Products, Inc. at 888-574-2878 or at [www.lovelandproducts.com](http://www.lovelandproducts.com).

### INTEGRATED WEED PEST MANAGEMENT

Integrate this product into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

### USE PRECAUTIONS

Severe corn injury and/or yield loss can occur:

- From post-emergent application of this product to corn treated with Terbufos or Chlorpyrifos.
- If foliar post-emergent applications of this product are made to corn in a tank mix with any organophosphate or carbamate insecticide.
- If an organophosphate or carbamate insecticide is applied foliar post-emergence within 7 days before or 7 days after applying this product.
- When weeds are stressed due to drought, heat, lack of fertility, flooding, or prolonged cool temperatures control can be reduced or delayed since the weeds are not actively growing. Weed escapes or regrowth may occur when application is made under prolonged stress conditions. Optimum weed control will be obtained if an application of this product is made following label directions when weeds are actively growing.
- This product may be applied with pyrethroid type insecticides (e.g., Lambda cyhalothrin).

### USE RESTRICTIONS

- **DO NOT** apply this product to white popcorn or ornamental (Indian) corn.
- **DO NOT** cultivate corn within 7 days before or after application of this product as weed control may be reduced.
- **DO NOT** apply this product through any type of irrigation system unless specified under the specific crop section of the label.
- **DO NOT** apply this product with suspension fertilizers as the carrier.
- **DO NOT** apply this product post-emergence in a tank mix with emulsifiable concentrate grass herbicides, unless specifically directed under one of the tank mix sections of this label, or crop injury can occur.
- **DO NOT** make aerial applications of this product unless specified in the specific crop directions of this label.

## **MANDATORY SPRAY DRIFT MANAGEMENT**

### **Aerial Applications**

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

### **Boom-less Ground Applications**

- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

### **Ground Boom Applications**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a coarse or larger droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

## **IMPORTANCE OF DROPLET SIZE**

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

### **Controlling Droplet Size – Ground Boom**

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

### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

## **SHIELDED SPRAYERS**

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

## **TEMPERATURE AND HUMIDITY**

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

## **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

## **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **WINDBLOWN SOIL PARTICLES**

This product has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying this product if prevailing local conditions may be expected to result in off-site movement.

## **AERIAL APPLICATION INSTRUCTIONS FOR CORN AND SUGARCANE**

**RESTRICTION:** This product can be applied aurally only to corn and sugarcane.

This product may be applied aurally for preemergence or postemergence weed control in corn only in the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Nebraska, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

This product may be applied aurally for preemergence or postemergence weed control in sugarcane only in the following states: Florida, Louisiana and Texas.

Applications must be made in a minimum of 2.0 gallons of water per acre.

## **PRE-EMERGENCE GROUND APPLICATION INSTRUCTIONS**

Apply this product preemergence with a carrier volume of 10.0 to 60.0 gal/A.

Spray nozzles must be uniformly spaced, the same size and type, and must provide accurate and uniform application. Apply in a spray volume of 10 to 60 gal/A using water or liquid fertilizer (excluding suspension fertilizers) as the carrier. Use a pump that can maintain a pressure of at least 35 to 40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles.

**Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, resuspend** the spray solution by running on full agitation prior to spraying.

## **POST-EMERGENCE GROUND APPLICATION INSTRUCTIONS**

Spray nozzles must be uniformly spaced, the same size and type, and must provide accurate and uniform application. Good weed coverage is essential for optimum weed control. Boom height for broadcast over-the-top applications must be based on the height of the crop – at least 15 inches above the crop canopy.

Apply in a spray volume of 10.0 to 30.0 gal/A using water as a carrier. Use a pump that can maintain a pressure of at least 35 to 40 psi at the nozzles and provide proper agitation within the tank to keep the product dispersed. Lower pressures may be used with extended range or drift reduction nozzles. When weed foliage is dense, use a minimum of 20.0 gallons.

Flat fan nozzles of 80° or 110° are advised for optimum postemergence coverage. **DO NOT** use floodjet nozzles or controlled droplet application equipment for postemergence applications.

Nozzles may be angled forward 45° to enhance penetration of the crop and provide better coverage. Ensure that all in-line strainer and nozzle screens in the sprayer are 50-mesh or coarser.

**Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time. If the agitation is stopped for more than 5 minutes, resuspend** the spray solution by running on full agitation prior to spraying.

## **USE DIRECTIONS WITH SPRAY ADDITIVES**



## POSTEMERGENCE ADJUVANTS

When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Council of Producers & Distributors of Agrotechnology (CPDA) adjuvant certification program is advised.

The following adjuvant directions are intended primarily for using this product in corn. Refer to the use directions section of each crop section for specific adjuvant directions.

## POSTEMERGENCE APPLICATIONS TO FIELD CORN AND SEED CORN

For postemergence applications made after the crop has emerged, add crop oil concentrate (COC) to the spray solution at the rate of 1.0 gal/100 gal of water (1.0% v/v). The use of a nonionic surfactant (NIS) at 1.0 qt/100 gallons of water (0.25% v/v) instead of COC is allowed, but the weed control achieved with COC is consistently better than NIS. **The use of methylated seed oil (MSO) adjuvants or MSO blend adjuvants for postemergence applications of this product may cause severe crop injury to occur. DO NOT use MSO adjuvants for postemergence use unless directed for a specific tank mix under the TANK MIXTURES FOR CORN section of this label, or unless permitted by a supplemental label.** In addition to COC, always add spray grade UAN (e.g., 28-0-0) to the spray solution at a rate of 2.5% (v/v) or AMS at 8.5 lb/100 gal of spray solution, except if precluded elsewhere on this label or by a supplemental label.

## POSTEMERGENCE APPLICATIONS TO SWEET CORN AND YELLOW POPCORN

**DO NOT add UAN or AMS when making postemergence applications of this product to yellow popcorn or sweet corn, or severe crop injury may occur.**

For postemergence applications to yellow popcorn and sweet corn, the use of a nonionic surfactant (NIS) instead of a crop oil concentrate (COC) is advised, to minimize the risk of crop injury. A COC may be used, and will increase the level of weed control achieved, especially under dry growing conditions, but the risk of crop injury is increased significantly under lush growing conditions. For optimum control, the addition of atrazine is advised wherever rotational or local atrazine restrictions allow.

## PREEMERGENCE ADJUVANTS

**For applying this product preplant or preemergence, and where weeds are present, the use of any adjuvant for agricultural use is permitted. In these situations, MSO type adjuvants are typically better than COC type adjuvants, which are typically better than NIS type adjuvants for enhancing weed control. UAN or AMS can be added and typically provides better weed control than not adding one of these. 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.**

## SPRAY EQUIPMENT CLEANING

It is important to follow the procedures below for cleaning equipment before spraying a crop other than corn. Mix only as much spray solution as is needed.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare cleaning solution of 1.0 gallon of household ammonia per 25.0 gallons of water. Commercial spray tank cleaners can be used in lieu of ammonia/water solution.
3. Using a pressure washer, clean the inside of the spray tank with the cleaning solution. Wash ALL parts of the tank, including the inside top surface. If a pressure washer is not available, fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the spray and recirculate the cleaning solution for a minimum of 15 minutes. All visible deposits of spray solution must be removed from the spray tank before making any other applications.
4. Flush hoses, spray lines, and nozzles with cleaning solution for a minimum of 1 minute.
5. Dispose of rinsate from steps 1 through 3 in an appropriate manner.
6. Repeat steps 2 through 5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia solution after completing the previous steps.
8. Rinse the complete spray system with clean water.

## MIXING INSTRUCTIONS

See the Crop Use Directions sections of the label for specific tank mix instructions.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Use in accordance with the most restrictive label limitations and precautions.

## MIXING RESTRICTIONS

- **DO NOT** exceed any dosage rates specified on labels.
- **DO NOT** mix this product with any product containing a label prohibition against such mixing.
- **DO NOT** tank mix this product with any other insecticide, fungicide, fertilizer, or adjuvant not specified on this label without first testing compatibility, as poor mixing can occur. Test compatibility on a small scale (including a jar test) before actual tank mixing.

### MIXING PROCEDURE

1. Use sprayers in good operating condition with good agitation. Ensure that the sprayer is cleaned according to the label instructions of the product label used prior to this product. For post-emergence applications, use clean water only for the spray solution. Ensure that all in-line strainers and nozzle screens in the sprayer are 50-mesh or coarser. **DO NOT** use screens finer than 50-mesh.
2. Use liquid fertilizer (NOT suspension fertilizer) as the carrier for pre-emergence applications.
3. Start filling spray tank or pre-mix tank with clean water and begin agitation. Maintain constant agitation.
4. When sprayer or pre-mix is half full of water, add AMS, maintaining agitation until dispersed.
5. Add this product slowly and agitate until completely dissolved. Wait at least 1 minute after the last of this product has been added to allow for complete dispersion. If using cold water, a longer agitation period may be required to ensure adequate dispersing.
6. If tank mixing, add the tank mix product.
7. Add the adjuvant and UAN, if needed, and continue to fill tank to desired level with water.

### WEED CONTROL TABLES

This product applied as directed in this label will control or partially control the weeds listed in **Tables 1 and 2**.

Partial control means either erratic control (good to poor control) or control that is below what is generally regarded as acceptable control for commercial weed control.

For best post-emergence results, apply this product to actively growing weeds.

Dry weather following pre-emergence applications may reduce efficacy of residual weed control. If irrigation is available, apply ½-1-inch water after pre-emergence application. If irrigation is not available, make a uniform shallow cultivation as soon as weeds emerge.

This product applied alone or in a tank-mix with atrazine will not provide consistent or adequate control of weeds that are resistant to post-emergence HPPD inhibiting herbicides.

Refer to the crop sections of this label for specific use directions and application rates.

**Table 1. Weeds Controlled with Post-Emergence Agricultural Use Applications of this product**

Common Name	Scientific Name	This product 3.0 Fl Oz/A (0.094 lb. AI/A) Applied Alone	This product <sup>1</sup> 2.5 to 3.0 Fl Oz/A (0.078 to 0.094 lb. AI/A) + Atrazine
		Apply to Weeds <5" Tall <sup>2</sup>	
Amaranth, palmer	<i>Amaranthus palmeri</i>	PC <sup>+</sup>	C <sup>+</sup>
Amaranth, powell	<i>Amaranthus powellii</i>	C	C
Amaranth, spiny	<i>Amaranthus spinosus</i>	C	C
Atriplex	<i>Chenopodium orach</i>	C	C
Broadleaf signalgrass	<i>Urochloa platyphylla</i>	C <sup>+</sup>	C <sup>+</sup>
Buckwheat, wild	<i>Polygonum convolvulus</i>	PC	PC
Buffalobur	<i>Solanum rostratum</i>	C	C
Burcucumber	<i>Sicyos angulatus</i>	PC	C <sup>+</sup>
Carpetweed	<i>Mollugo verticillata</i>	C	C
Carrot, wild	<i>Daucus carota</i>	PC	C
Chickweed, common	<i>Stellaria media</i>	C	C
Cocklebur, common	<i>Xanthum strumarium</i>	C	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	C <sup>+</sup>	C <sup>+</sup>
Dandelion	<i>Taraxacum officinale</i>	NC	PC
Dock, curly	<i>Rumex crispus</i>	PC	PC

Galinsoga	<i>Galinsoga parviflora</i>	C	C
Hemp	<i>Cannabis sativa</i>	C	C
Horsenettle	<i>Solanum carolinense</i>	PC	C
Horseweed (marestail)	<i>Conyza canadensis</i>	PC	C
Jimsonweed	<i>Datura stramonium</i>	C	C
Knotweed, prostrate	<i>Polygonum aviculare</i>	PC	PC
Kochia	<i>Kochia scoparia</i>	PC <sup>+</sup>	C <sup>+</sup>
Lambsquarters, common	<i>Chenopodium album</i>	C	C
Mallow, Venice	<i>Hibiscus trionum</i>	NC	C
Morningglory, entireleaf	<i>Ipomoea hederacea</i>	PC	C
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	PC	C
Morningglory, pitted	<i>Ipomoea lacunosa</i>	PC	C
Mustard, wild	<i>Brassica kaber</i>	C	C
Nightshade, black	<i>Solanum nigrum</i>	C	C
Nightshade, Eastern black	<i>Solanum ptychanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C
Nutsedge, yellow	<i>Cyperus esculentus</i>	PC	PC
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C
Pigweed, tumble	<i>Amaranthus albus</i>	C	C
Pokeweed, common	<i>Phytolacca americana</i>	PC	PC
Potatoes, volunteer	<i>Solanum</i> spp.	C	C
Pusley, Florida	<i>Richardia scabra</i>	C <sup>+</sup>	C <sup>+</sup>
Ragweed, common	<i>Ambrosia artemisiifolia</i>	PC	C
Ragweed, giant	<i>Ambrosia trifida</i>	C <sup>+</sup>	C
Sesbania, hemp	<i>Sesbania exaltata</i>	C	C
Sida, prickly (teaweed)	<i>Sida spinosa</i>	NC	C <sup>+</sup>
Smartweed, ladysthumb	<i>Polygonum persicaria</i>	C <sup>+</sup>	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C <sup>+</sup>	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C <sup>+</sup>	C
Sunflower, common	<i>Helianthus annuus</i>	C	C
Thistle, Canada	<i>Cirsium arvense</i>	NC	PC
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>	C <sup>+</sup>	C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C <sup>+</sup>	C

<sup>1</sup>This product tank-mixed with atrazine is approved only for use on corn and sugarcane.

<sup>2</sup>Weeds can be controlled at larger than listed sizes; however, to protect crop yield, manage weed resistance, and provide effective control, treat weeds before they reach 5" tall.

<sup>+</sup>Apply before weeds exceed 3" tall.

C = Control

NC = Not Controlled

PC = Partial Control

**Table 2. Weeds Controlled with Pre-Emergence Agricultural Use Applications of this product**

Common Name	Scientific Name	This product applied alone	This product applied + Atrazine*
Amaranth, palmer	<i>Amaranthus palmeri</i>	C	C
Amaranth, powell	<i>Amaranthus powellii</i>	C	C
Amaranth, spiny	<i>Amaranthus spinosus</i>	C	C
Broadleaf signalgrass	<i>Urochloa platyphylla</i>	PC	PC
Buffalobur	<i>Solanum rostratum</i>	C	C
Carpetweed	<i>Mollugo verticillata</i>	C	C
Chickweed, common	<i>Stellaria media</i>	C	C
Cocklebur, common	<i>Xanthum strumarium</i>	PC	C
Crabgrass, large	<i>Digitaria sanguinalis</i>	PC	PC
Galinsoga	<i>Galinsoga parviflora</i>	C	C
Jimsonweed	<i>Datura stramonium</i>	C	C
Kochia	<i>Kochia scoparia</i>	PC	C
Lambsquarters, common	<i>Chenopodium album</i>	C	C
Morningglory, entireleaf	<i>Ipomoea hederacea</i>	PC	C
Morningglory, ivyleaf	<i>Ipomoea hederacea</i>	PC	C

Morningglory, pitted	<i>Ipomoea lacunosa</i>	PC	C
Nightshade, Eastern black	<i>Solanum ptychanthum</i>	C	C
Nightshade, hairy	<i>Solanum sarrachoides</i>	C	C
Pigweed, redroot	<i>Amaranthus retroflexus</i>	C	C
Pigweed, smooth	<i>Amaranthus hybridus</i>	C	C
Pigweed, tumble	<i>Amaranthus albus</i>	C	C
Ragweed, common	<i>Ambrosia artemisiifolia</i>	C	C
Ragweed, giant	<i>Ambrosia trifida</i>	PC	C
Smartweed, ladythumb	<i>Polygonum persicaria</i>	C	C
Smartweed, pale	<i>Polygonum lapathifolium</i>	C	C
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	C	C
Sunflower, common	<i>Helianthus annuus</i>	PC	C
Velvetleaf	<i>Abutilon theophrasti</i>	C	C
Waterhemp, common	<i>Amaranthus rudis</i>	C	C
Waterhemp, tall	<i>Amaranthus tuberculatus</i>	C	C

\* This product tank-mixed with atrazine is approved only for use on corn, grain sorghum and sugarcane. Refer to the crop sections on this label for specific use directions.

C = Control

PC = Partial Control

### ROTATIONAL CROP INTERVALS

If this product is applied alone, follow the crop rotation intervals listed below in **Table 3**. If this product is tank-mixed with other products, then follow the most restrictive product's crop rotation interval.

**Table 3. Time Interval between Applying this product and Replanting/Planting of Rotational Crop**

Replant/ Rotational Interval	Crop
Anytime	Asparagus, Corn (all types), Cranberry, Flax, Kentucky bluegrass grown for seed, Pearl Millet, Oats, Rhubarb, Ryegrass (perennial and annual) grown for seed, Sorghum (grain and sweet), Soybeans, Sugarcane, Tall fescue grown for seed
4 Months	Small grain cereals (wheat, barley, rye)
10 Months	Alfalfa, Blueberry, Canola, Cotton, Currant, Lingonberry, Okra, Peanuts, Peas*, Potato, Rice, Snap Beans*, Sunflowers, Tobacco
18 Months	Cucurbits, Dry beans, Red Clover, Sugar Beets, All other crops

\*Plant these rotation crops ONLY if the criteria listed below have been met. If all criteria have NOT been met, plant peas and snap beans a minimum of 18 months after applying this product.

- A minimum of 20 inches of rainfall plus irrigation has occurred between application and planting of the rotational crop.
- Soil pH is greater than 6.0.
- 3.0 fl oz/A (0.094 lb AI/A) or less of this product has been applied no later than June 30<sup>th</sup> of the year preceding rotational crop planting.
- No other HPPD herbicides (e.g., Mesotrione, Glyphosate + Mesotrione + S-Metolachlor, + S-Metolachlor 19% Atrazine 18.61% + Mesotrione 2.44%, S-Metolachlor 27.1% + Atrazine 9.94%+ Mesotrione 2.71%, Mesotrione + S-Metolachlor, Topramezone, Isoxaflutole, Thien carbazon-methyl + Tembotrione, Thien carbazon-methyl + Isoxaflutole, or Tembotrione) were applied the year prior to planting peas and snap beans.

**RESTRICTION: DO NOT** plant peas or snap beans on sand, sandy loam, or loamy sand soils in Minnesota or Wisconsin.

### SPECIFIC USE DIRECTIONS AGRICULTURAL USES

#### ASPARAGUS

This product can be applied broadcast or banded at a rate of 3.0 to 7.7 fl oz/A (0.094 to 0.24 lb AI/A) to asparagus as a spring application prior to spear emergence, as a post-harvest application (after final harvest), or both.

Use the 3.0 fl oz/A (0.094 lb AI/A) rate for post-emergence control or partial control of the emerged weeds listed in **Table 1**. Use the 6.0 to 7.7 fl oz/A (0.19 to 0.24 lb AI/A) rate for pre-emergence control or partial control of the weeds listed in **Table 2**. For banded applications, the application must be made to account for band width, i.e., to deliver 3.0 to 7.7 fl oz (0.094 to 0.24 lb AI) per treated acre. For the best pre-emergence weed control with spring applications, this product must be applied after fern mowing, disking or other tillage operation but prior to asparagus spear emergence.

When making post-harvest applications, the rate applied pre-emergence in the spring must be considered so as not to exceed the 7.7 fl oz/A (0.24 lb AI/A) per year rate limit. Post-harvest applications must be made in a way that minimizes contact with any standing asparagus spears or ferns and maximizes contact with the weeds and/or soil, e.g., by using a directed or semi-directed type application, or crop injury may occur. With post-harvest applications, the use of an adjuvant will increase the risk of crop injury.

If weeds are emerged at the time of applying this product, the addition of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v or a non-ionic surfactant (NIS) at the rate of 0.25% v/v is advised. In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v or ammonium sulfate (AMS) at the rate of 8.5 lb/100 gallons of spray solution may be added for improved burndown of emerged weeds. If weeds have not yet emerged, no adjuvant is advised.

#### **Asparagus Restrictions:**

- **DO NOT** apply more than 7.7 fl oz/A (0.24 lb AI/A) of this product per year.
- **DO NOT** apply more than 7.7 fl oz/A (0.24 lb AI/A) in a single application.
- **DO NOT** make more than two applications on this product per year when using reduced application rates.
- Minimum retreatment interval is 14 days.

#### **BLUEGRASS, RYEGRASS (ANNUAL AND PERENNIAL), AND TALL FESCUE GROWN FOR SEED**

This product can be applied to bluegrass, annual ryegrass, perennial ryegrass, or tall fescue which is grown for seed. This product can be applied as a pre-emergence application to bare soil (new seeding) or as a post-emergence application to an emerged grass crop.

#### **Pre-Emergence Applications**

Apply this product as a broadcast, surface spray at a rate of 6.0 fl oz/A (0.19 lb AI/A) to a newly seeded crop. Product application must be made prior to crop and weed emergence. Rainfall or irrigation as the newly seeded grass crop emerges from the soil may increase the risk of injury from this product. Grass crop injury symptoms include temporary bleaching of newly emerged leaves, or in extreme conditions, stunting. For a list of pre-emergence weeds controlled or partially controlled see **Table 2**. In addition to the weeds listed in **Table 2**, this product applied pre-emergence will control manna grass.

#### **Post-Emergence Application**

Apply this product as a broadcast post-emergence spray at a rate of 3.0 to 6.0 fl oz/A (0.094 to 0.19 lb AI/A) to emerged bluegrass, perennial ryegrass or tall fescue grown for seed. Use the 3.0 fl oz/A (0.094 lb AI/A) rate for post-emergence control or partial control of the weeds listed in **Table 1**. In addition to the weeds listed in **Table 2**, this product applied post-emergence will control manna grass (up to 3 tillers).

Use the 6.0 fl oz/A (0.19 lb AI/A) rate for post-emergence weed control plus extended residual weed control (see **Table 2**). The addition of a crop oil concentrate type adjuvant at 1% v/v or a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is advised. Post-emergence applications of this product may result in temporary bleaching of the grass crop.

In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v or ammonium sulfate (AMS) at the rate of 8.5 lb/100 gallons of spray solution may also be added for improved control of emerged weeds. The addition of UAN or AMS will improve consistency of post-emergence weed control but will also increase the risk of grass crop injury, especially at product rates greater than 3.0 fl oz/A (0.094 lb AI/A). If grass crop injury is a concern, do not add UAN or AMS to the spray solution.

Tank mixing other pesticides with this product post-emergence may increase the risk of crop injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to this product for applications made post-emergence to the crop.

#### **Bluegrass, Ryegrass, and Tall Fescue Grown for Seed Restrictions:**

- **DO NOT** harvest the grass crop for seed or straw within 60 days following the application of this product.
- **DO NOT** graze or feed forage from treated areas within 14 days following harvest of seed or straw and at least 74 days after application of this product.
- **DO NOT** make more than two applications of this product per year.
- Minimum retreatment interval is 14 days.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application and not more than 9.0 fl oz/A (0.28 lb AI/A) of this product per year.
- Applications of this product to grasses grown for seed species not listed on this label may result in severe injury.

## BUSH AND CANEBERRIES (CROP GROUP 13-07A AND 13-07B)

Note: Not all cultivars and types of berries that are included within the Environmental Protection Agencies definition of bush and caneberries (Crop Subgroups 13-07A and 13-07B) have been tested and shown to have adequate crop safety to mesotrione. Those that have been tested, and are believed to be reasonably fit, are listed below along with use directions for that crop. If this product is used on bush or caneberries not listed below, severe crop injury may occur.

This product may be applied as a pre-bloom post-directed spray in high bush blueberry, lingonberry, red currant, black currant, black raspberry, red raspberry, and blackberry. For a list of weeds controlled see **Tables 1 and 2**. This product may be applied in bush or caneberries at a rate up to 6.0 fl oz/A (0.19 lb AI/A). If a split application weed control program is desired, 3.0 fl oz/A (0.094 lb AI/A) followed by 3.0 fl oz/A (0.094 lb AI/A) may be used, but no more than two applications per year are allowed and not more than 6.0 fl oz/A (0.19 lb AI/A) in total per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised, but avoid using COC adjuvants that are injurious to bush or caneberry leaves. **DO NOT** apply this product to bush or caneberries after the onset of the bloom stage or illegal residues may occur.

In low bush blueberries, this product may only be applied in the non-bearing year. This application may be a broadcast application. Up to 6.0 fl oz/A (0.19 lb AI/A) of this product may be applied in a single application, or 3.0 fl oz/A (0.094 lb AI/A) followed by 3.0 fl oz/A (0.094 lb AI/A) if used in a split application program. No more than two applications per year are allowed and not more than 6.0 fl oz/A (0.19 lb AI/A) in total per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v is advised. Applications of this product during dry weather conditions and/or temperatures above 85° can cause injury to low bush blueberries. Applications of this product can cause yellowing or necrosis of leaves and under severe conditions, leaf drop may occur especially on "Sourtop" variety blueberries.

### Bush & Caneberry Restrictions:

- **DO NOT** make more than two applications of this product per year when using reduced application rates.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) per year.
- If two applications are made, they must be made no closer than 14 days apart.

## CORN

Apply this product by ground for pre-emergence or post-emergence weed control in field corn, seed corn, yellow popcorn, and sweet corn. Apply this product to corn up to 30" tall or up to the 8-leaf stage of corn growth to control broadleaf and grass weeds listed in **Tables 1 and 2**.

Aerial applications of this product can be made pre-emergence or post-emergence in the following states: **Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.**

See seed company instructions for use on field corn inbred lines. Special adjuvant restrictions must be followed for post-emergence applications of this product in yellow popcorn or sweet corn (see the **Spray Additives** section of this label).

Post-emergence application of this product to yellow popcorn and sweet corn hybrids may cause crop bleaching. Bleach is transitory and will not affect final yield or quality. Herbicide sensitivity, however, can vary widely in yellow popcorn and sweet corn, and all hybrids of these have not been tested. Contact your local popcorn/sweet corn company, Fieldman, or University Specialist to learn about hybrid directions before making a post-emergence application of this product to yellow popcorn or sweet corn. **DO NOT** include nitrogen-based adjuvants (UAN or AMS) when making post-emergence applications of this product to yellow popcorn or sweet corn.

Temporary transient bleaching may occur in field corn treated with this product post-emergence under extreme weather conditions or when the crop is under stress. Field corn will quickly outgrow this condition and develop normally.

### Corn Restrictions:

- **DO NOT** apply more than 7.7 fl oz/A (0.24 lb AI/A) of this product per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** exceed 7.7 fl oz (0.24 lb AI/A) in a single pre-emergence application.
- **DO NOT** exceed 3.0 fl oz (0.094 lb AI/A) in a single post-emergence application.
- Minimum retreatment interval is 14 days.
- **DO NOT** feed or harvest forage, grain, or stover within 45 days after application.
- **DO NOT** apply this product to white popcorn or ornamental (Indian) corn.

### This Product Used Alone – Post-Emergence

Apply 3.0 fl oz/A (0.094 lb AI/A) per application. Always add an appropriate adjuvant to the spray tank (see the **Spray Additives** section of this label).

Apply to actively growing weeds. See **Table 1** for a complete list of weeds controlled. Susceptible weeds that emerge post-application may be controlled after the herbicide is absorbed into the soil. This product will not control most grass weeds.

Two post-emergence applications of this product may be made under the following restrictions:

- Only one post-emergence application may be made if this product has been applied pre-emergence. Do not exceed a total of 7.7 fl oz/A (0.24 lb AI/A) per year.
- Minimum retreatment interval is 14 days.
- Applications made at rates lower than 3.0 fl oz/A. (0.094 lb AI/A) post-emergence may not provide adequate weed control and may result in reduced residual control.
- **DO NOT** exceed a total of 6.0 fl oz/A (0.19 lb AI/A) for the two post-emergence applications.
- If a post-emergence application of this product was made to ground that received pre-emergence treatment of another mesotrione-containing herbicide, atrazine must be tank mixed with this product.
- If mixing this product with atrazine, do not apply to corn taller than 12".
- Treat corn up to 30" tall or up to the 8-leaf stage of growth.
- **DO NOT** harvest, forage, or stover within 45 days post-application.

### This Product Used Alone – Pre-Emergence

Apply 6.0 to 7.7 fl oz/A (0.19 to 0.24 lb AI/A) by ground sprayer in 10.0 to 30.0 gallons of water per acre to control broadleaf weeds (up to 80.0 gallons if applied with liquid fertilizer). See **Table 2** for a complete list of weeds controlled. This product can be tank mixed with other approved pre-emergence grass herbicides to control grasses. Refer to the tank mix section for a list of tank-mix partners.

### Tank Mixtures for Corn

Apply this product in tank mix with other registered herbicides to improve spectrum of weed control in burndown, pre-emergence, or post-emergence applications. These tank mixtures can also be used to include a different mode of action herbicide to control and manage the development of resistant weed biotypes.

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.

### Burndown Tank Mixtures in Corn

Apply this product in tank mixture with other registered herbicides for burndown and residual weed control.

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 3.0 fl oz/A (0.094 lb AI/A) product with paraquat dichloride, glyphosate-isopropylammonium, dicamba, diglycolamine salt, and/or for improved broadleaf weed control with limited residual control before planting corn and before corn emergence. For better residual control, apply 6.0 to 7.7 fl oz/A (0.19 to 0.24 lb AI/A) of this product (see **Table 2**) with the products listed. Use the adjuvant system specified by the burndown herbicide. Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled.

### Pre-Emergence Tank Mixture in Corn

Apply 5.3 to 7.7 fl oz/A (0.17 to 0.24 lb AI/A) of this product in tank mixture with other registered herbicides (**Tank Mixtures for Pre-Emergence Application in Corn**) for pre-emergence residual weed control. Refer to **Table 2** for a list of weeds controlled by this product applied pre-emergence.

### Tank Mixtures for Pre-Emergence Application in Corn

Refer to the individual product labels of the products listed for precautionary statements, restrictions, use rates, approved uses, and a list of weeds controlled.

Acetochlor  
Acetochlor + Atrazine  
Atrazine  
Atrazine + dimethenamide-P  
Atrazine + glyphosate-isopropylammonium + S-Metolachlor  
Atrazine + S-Metolachlor  
Dimethenamide-P  
S-Metolachlor  
Pendimethalin

### Post-Emergence Tank Mixtures in Corn

See **Table 4** below for a list of tank mixtures that can be applied after corn has emerged. **DO NOT** apply less than 3.0 fl oz/A (0.094 lb AI/A) of this product unless specified on this label, as a loss of residual control can occur.

Always add an appropriate adjuvant to the spray tank (See the **Spray Additives** section of this label). Refer to the individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled. Not all the tank mix pesticides listed are registered for use on field corn, yellow popcorn, or sweet corn.

### Table 4. Tank Mixtures for Post-Emergence Application to Corn

Refer to the individual product labels for products listed for precautionary statements, restrictions, use rates, approved uses, and a list of weeds controlled.

Tank Mix Partner	Use Directions
Atrazine	See <b>Table 1</b> for application rates and list of weeds controlled.
Atrazine + Glyphosate-isopropylammonium + S-Metolachlor	Use only on Agrisure® GT corn or Roundup Ready® corn. Crop death will occur if this mixture is applied to a corn hybrid that is not designated as Agrisure® GT or Roundup Ready®. <b>DO NOT</b> add urea ammonium nitrate (UAN) or methylated seed oil (MSO) adjuvants to this mixture or crop injury can occur.
Atrazine + S-Metolachlor	<b>DO NOT</b> use nitrogen-based adjuvants (UAN or AMS); apply as post-directed spray. <b>DO NOT</b> use crop oil concentrate (COC); use a non-ionic surfactant (NIS) to avoid crop injury. Control of emerged weeds can be reduced due to the adjuvant effect on weed coverage.
Citric acid	
Atrazine + Nicosulfuron + Rimsulfuron	This mixture will provide additional weed control. Refer to the product label for a list of weeds controlled.
Rimsulfuron + Thifensulfuron methyl	
Bromoxynil octanoate	This mixture will provide additional broadleaf weed control. Refer to the product label for use rates.
Dicamba, Sodium salt + Primisulfuron-methyl	This mixture will control additional weeds. See product label for list of weeds controlled.
Glufosinate	Use only on corn designated as LibertyLink®. Use of this mixture on corn hybrids not designated as LibertyLink® will result in severe crop injury or death. <b>DO NOT</b> use crop oil concentrate (COC) as an adjuvant or crop injury can occur.
Glyphosate	Use only on corn Agrisure® GT corn or Roundup Ready® corn. Use of this mixture on corn hybrids that are not designated as Agrisure® GT or Roundup Ready® will result in crop death. Add spray-grade ammonium sulfate (AMS) at a rate that delivers 8.5 to 17.0 lb of AMS/100 gal of water. If the glyphosate product calls for an adjuvant in addition to AMS, add 0.25 to 0.5% v/v (1.0 to 2.0 qt/100 gal) of a non-ionic surfactant (NIS).



	<b>DO NOT</b> add urea ammonium nitrate (UAN), crop oil concentrate (COC) or methylated seed oil (MSO) adjuvants to this tank mixture or crop injury can occur.
Imazapyr + Imazethapyr	Use only on corn designated at Clearfield® corn. Use of this mixture on corn hybrids not designated as Clearfield® will result in severe crop injury or death. <b>DO NOT</b> use Methylated Seed Oil (MSO) or any MSO blend with this mixture or severe crop injury can occur.
Nicosulfuron	This mixture will provide additional grass control. Refer to the product label for a list of weeds controlled.
Nicosulfuron + Rimsulfuron	This mixture will control additional weeds. See product label for list of weeds controlled.
Nicosulfuron + Rimsulfuron + Atrazine	
Nicosulfuron + Thifensulfuron-methyl	This mixture will control additional weeds. See product label for list of weeds controlled.
Primisulfuron-methyl + Prosulfuron	This mixture will control additional weeds. See product label for list of weeds controlled.
Prosulfuron	This mixture will control additional weeds. See product label for list of weeds controlled.
Sodium salt of bentazon	This mixture will provide additional broadleaf weed control. Refer to the product label for a list of weeds controlled.

## CITRUS FRUIT, POME FRUIT, STONE FRUIT AND TREE NUTS

This product may be used for postemergence and residual control of weeds listed in **Tables 1 and 2** in the following crops.

**Citrus fruit – group 10-10 (Australian desert lime, Australian finger lime, Australian round lime, Brown River finger lime, calamondin, citron, citrus hybrids, grapefruit, Japanese summer grapefruit, kumquat, lemon, lime, Mediterranean mandarin, sour orange, sweet orange, pummelo, Russell River lime, Satsuma mandarin, sweet lime, Tachibana orange, Tahiti lime, tangelo, tangerine (Mandarin), tangor, trifoliate orange, uniq fruit, cultivars, varieties and/or hybrids of these)**

**Pome fruit – group 11-10 (apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese ;quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these)**

**Stone fruit – group 12-12 (apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Chinese jujube; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars; varieties and/or hybrids of these)**

**Tree nuts – group 14-12 (African nut-tree; almond; beech nut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; Coquito nut; Dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; Mongongo nut; monkey puzzle nut; monkeypot; Okari nut; Pachira nut; peach palm nut; pecan; pequi; pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties and/or hybrids of these)**

### Precautions:

- Avoid crop injury by applying the spray to the grove or orchard floor and to the weeds, while avoiding contact with crop foliage, stems or fruit.
- Contact of this product with crop can result in bleaching injury that is typically temporary.
- Use trunk guards to protect plants until adequate bark has developed.
- Specified rates are based on broadcast treatment. For band applications around trees in fruit or nut plantings, reduce the broadcast rate of this product and carrier per acre in proportion to the area actually sprayed. (See **Banded Applications** Section)

### Restrictions:

- Apply this product only to pome fruit, stone fruit and nut trees that have been established for a minimum of 12 months. This product can be applied in citrus trees or plantings that are less than 12 months old and are exhibiting normal growth and vigor.
- **DO NOT** apply in stressed orchards - stressed due to poor weather or other abiotic factors.
- **DO NOT** exceed a total of 12.0 fl oz/A (0.38 lb AI/A) of this product per year or in a 12-month period.

- **DO NOT** exceed 6.0 fl oz/A (0.19 lb AI/A) of this product for the first application.
- **DO NOT** exceed 3 applications per year or in a 12-month period when using reduced application rates.
- Allow at least 5 months between applications of this product at 6.0 fl oz/A (0.19 lb AI/A) and at least 6 weeks between applications of 6.0 fl oz/A (0.19 lb AI/A) and subsequent applications of 3.0 fl oz/A (0.094 lb AI/A). (Applications must follow one of the four programs listed in **Table 5** below.)
- Pome fruit, stone fruit or tree nuts Pre-Harvest Interval (PHI) is 30 days.
- Citrus Pre-Harvest Interval (PHI) is 1 day.
- **DO NOT** use on soils with greater than 20% gravel.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product by air.

### Spray Adjuvants

For application to emerged weeds, the use of COC (crop oil concentrate) type adjuvant at 1% v/v or NIS (non-ionic surfactant) at 0.25% v/v is advised. Addition of AMS (ammonium sulfate) or other nitrogen-based adjuvants will increase efficacy when used in combination with COC or NIS. For more information see Spray Adjuvants section on this label.

### Banded Applications

When applying a row or banded treatment of this product, the following formula may be used to calculate the amount per acre:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

### Tank Mix Instructions

This product may be mixed and applied in combination with most commonly used herbicides registered for use in the approved crops to expand the postemergence weed control – spectrum and residual activity. Acceptable tankmix partners include:

- Alion® (EPA Reg. No. 264-1106, indaziflam)
- Diuron 4L Herbicide (EPA Reg. No. 34704-854, diuron)
- Forfeit 280 (EPA Reg. No. 34704-1080, glufosinate)
- GoalTender® (EPA Reg. No. 62719-447, oxyfluorfen)
- Hyvar® (EPA Reg. No. 432-1546, bromacil)
- Krovar® (EPA Reg. No. 5481-635, bromacil + diuron)
- Mad Dog K6 (EPA Reg. No. 34704-1111, Glycine, N-(phosphonomethyl)- potassium salt)
- Mad Dog Plus (EPA Reg. No. 34704-890, Glyphosate-isopropylammonium)
- ParaQ (EPA Reg. No. 34704-1117, paraquat-dichloride)
- Simazine 4L (EPA Reg. No. 34704-687, simazine)
- Solicam® (EPA Reg. No. 61842-41, norflurazon)
- Stealth (EPA Reg. No. 34704-868, pendimethalin)
- Surflan® (EPA Reg. No. 70506-43, oryzalin)
- Tetris™ SG (EPA Reg. No. 91234-85, rimsulfuron)

Tank mixtures can be effective tools to help control or manage the development of resistant weeds. The application of mixtures or sequences of effective herbicides, with different sites of action, can provide the diversity needed for management of herbicide resistance.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses and a list of weeds controlled.

### Weed Control (Table 1 and 2)

This product provides both preemergence and postemergence control of susceptible weeds. Best control is obtained from preemergence applications before germination of seed or as postemergence applications are made before weeds reach 5" in height. Susceptible weeds are listed in **Tables 1 and 2** of this label. Rainfall or irrigation soon after application will enhance preemergence activity.

### USE DIRECTIONS

Apply as a directed or shielded spray. Avoid contact with trunk surfaces, fruit or crop foliage. **DO NOT** apply when nuts or fruits are on the ground at harvest. Ensure that soil is firm, settled and relatively free of trash at time of application. Also ensure that the soil is free of depressions around trees where rain or irrigation water can concentrate. Apply the first application of this product in late fall/early winter or spring and subsequent applications utilizing one of the programs noted in the **Table 5**.

**Table 5. Application Programs, Rates and Intervals**

Program	Application Rate in fl oz/A (lb AI/A)			Application interval (in wks)
	1 <sup>st</sup> Application	2 <sup>nd</sup> Application	3 <sup>rd</sup> Application	
1	6.0 (0.19)	6.0 (0.19)	-	20
2	6.0 (0.19)	3.0 (0.094)	-	6
3	6.0 (0.19)	3.0 (0.094)	3.0 (0.094)	6
4	3.0 (0.094)	3.0 (0.094)	3.0 (0.094)	6

Apply this product in a spray volume of 10.0 to 40.0 gallons per acre.

For effective residual weed control, this product must be moved into the weed seed germination zone. For preemergence weed control, apply this product before rainfall or irrigation. For optimum residual control, this product can be tank-mixed with residual herbicides including:

- Alion® (EPA Reg. No. 264-1106, indaziflam)
- Diuron 4L Herbicide (EPA Reg. No. 34704-854, diuron)
- Goal Tender® (EPA Reg. No. 62719-447, oxyfluorfen)
- Hyvar® (EPA Reg. No. 432-1546, bromacil)
- Krovar® (EPA Reg. No. 5481-635, bromacil + diuron)
- Simazine 4L (EPA Reg. No. 34704-687, simazine)
- Solicam®(EPA Reg. No. 61842-41, norflurazon)
- Stealth (EPA Reg. No. 34704-868, pendimethalin)
- Tetris™ SG (EPA Reg. No. 91234-85, rimsulfuron)

For optimum postemergence weed control, apply this product before weeds exceed 5" in height to actively growing weeds in tank mixture with burndown herbicides including:

- ParaQ (EPA Reg. No. 34704-1117, paraquat-dichloride)
- Glyphosate products, including:
  - Mad Dog K6 (EPA Reg. No. 34704-1111, Glycine, N-(phosphonomethyl)- potassium salt)
  - Mad Dog Plus (EPA Reg. No. 34704-890, Glyphosate-isopropylammonium)
- Forfeit 280 (EPA Reg. No. 34704-1080, glufosinate)
- GoalTender (EPA Reg. No. 62719-447, oxyfluorfen)

Subsequent application(s) of this product can be made alone or in tank mixture, with the herbicides noted above, if weed emergence occurs.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses and a list of weeds controlled.

## CRANBERRY

Apply this product to bearing or non-bearing cranberry beds to control or suppress the weeds listed in **Tables 1 and 2**, and:

- bog St. John's wort (*Hypericum boreale*)
- rushes (*Juncus canadensis*, *J. effuses*, *J. bufonulus*, *J. tenuis*)
- sedges spp. (*Carex* spp.)
- silverleaf (*Potentilla pacifica*)
- yellow loosestrife (*Lysimachia terrestris*)

## RESTRICTIONS for Bearing/Non-Bearing Application Rates:

- Apply up to 8.0 fl oz/A (0.25 lb AI/A) in a single application, but do not apply more than 16.0 fl oz/A (0.50 lb AI/A) in total per year.
- **DO NOT** make more than two applications per year.
- If two applications are made, do not make them closer than 14 days apart. Use 1% v/v of a crop oil concentrate (COC) or 0.25% v/v non-ionic surfactant (NIS).
- **DO NOT** use COC adjuvants that are known to injure cranberry leaves.
- **Non-bearing Cranberries:** Apply after the bud break stage no less than 45 days before flooding in fall or winter.
- **Bearing Cranberries:** Apply after the bud break stage no less than 45 days before flooding or harvest.

This product can be applied through irrigation systems (chemigation) including center pivot or solid set.

**Cranberry Restrictions:**

- **DO NOT** make more than two applications of this product per year.
- **DO NOT** apply more than 8.0 fl oz/A (0.25 lb AI/A) in a single application.
- **DO NOT** apply more than 16.0 fl oz/A (0.50 lb AI/A) per year.
- If two applications are made, they must be made no closer than 14 days apart.

**Sprinkler Irrigation Application – Cranberries Only**

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for optimal control. Maintain good agitation in the pesticide supply tank prior to and during the entire application process. Inject the specified rate of this product into the irrigation system with a metering device designed to introduce a constant flow and that will distribute the product to target areas in 0.1 to 0.2 acre-inch of water. Use the least amount of water with this rate range required for proper distribution and coverage.

After application is complete, flush the entire irrigation and injection systems with clean water before stopping the system. If application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of this product for the area covered needs to be injected into the system only during the end of the irrigation set for sufficient time to provide optimal coverage and distribution.

**CHEMIGATION USE PRECAUTIONS – SPRINKLER IRRIGATION APPLICATION**

Apply this product through center pivot or solid set sprinkler irrigation systems only. **DO NOT** apply this product through any other type of irrigation system.

Non-uniform distribution of treated water can cause crop injury, product ineffectiveness, and/or illegal pesticide residues in the crop. Contact State Extension Service Specialists, equipment manufacturers or other experts if you have questions about calibrating equipment.

**DO NOT** connect an irrigation system or greenhouse system used for pesticide application to any public water system. A public water system is any system used for provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible personal shall shut the system down and make necessary adjustments if the need arises.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back-flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when pressure decreases to the point where pesticide distribution is adversely affected. Systems must also use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and are capable of being fitted with a system interlock.

Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.

**CHEMIGATION USE RESTRICTIONS – SPRINKLER IRRIGATION APPLICATION:**

- **DO NOT** apply this product through any other type of irrigation system.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- **DO NOT** apply directly to water or areas where surface water is present outside the bog system.
- **DO NOT** contaminate water when disposing of equipment washwater or rinsate.
- **DO NOT** apply within 10 feet of surface water outside the bog system.
- **DO NOT** spray to runoff.

## FLAX

This product may be applied pre-emergence in flax, i.e., after planting but before crop emergence, at a rate up to 6.0 fl oz/A (0.19 lb AI/A). For a list of weeds controlled see **Tables 1 and 2**. **DO NOT** apply more than one application, and not more than 6.0 fl oz/A (0.19 lb AI/A), per year in flax. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised. In addition, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% (v/v) or AMS at the rate of 8.5 lbs/100 gallons of spray solution may be added to improve the burndown of existing weeds. Applications of this product to emerged flax can result in severe crop injury.

### Flax Restrictions:

- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application.
- **DO NOT** apply this product more than 6.0 fl oz/A (0.19 lb AI/A) per year.

## OATS

This product can be applied pre-emergence or post-emergence (but not both) for weed control in oats.

For pre-emergence control or partial control of the weeds listed in **Table 2**, apply this product broadcast at a rate of 6.0 fl oz/A (0.19 lb AI/A) prior to oat emergence. For best pre-emergence weed control, the product application must be made prior to weed emergence.

For post-emergence (after oat emergence) control or partial control of the weeds listed in **Table 1**, apply this product at a rate of 3.0 fl oz/A (0.094 lb AI/A). For best results, this product must be applied to emerged weeds that are less than 5" tall. Post-emergence applications of this product may result in temporary injury of the oat crop. Injury symptoms may include leaf bleaching, leaf burn and in extreme conditions, stunting.

If emerged weeds are present at the time of applying this product, the addition of a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v or a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is advised. In addition to COC or NIS, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% v/v or ammonium sulfate (AMS) at the rate of 8.5 lb/100 gallons of spray solution may be added for improved weed control. If emerged weeds are not present at the time of applying this product, no additives are advised. If oat injury is a concern, eliminating the use of UAN or AMS will reduce the risk for post-emergence crop injury. Additionally, the use of NIS instead of COC will also reduce the oat injury risk. However, weed control is also reduced if UAN or AMS is eliminated and when switching from COC to NIS.

Tank mixing other pesticides with this product post-emergence may increase the risk of injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to this product for applications made post-emergence to the crop.

### Oat Restrictions:

- **DO NOT** graze or feed forage from treated areas within 30 days following an application of this product.
- **DO NOT** harvest oats within 50 days following the application of this product.
- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply this product pre-emergence (prior to oat emergence) at more than 6.0 fl oz/A (0.19 lb AI/A) per year.
- **DO NOT** apply this product post-emergence at more than 3.0 fl oz/A (0.094 lb AI/A) per year.
- If the oat crop treated with this product is lost or destroyed, oats may be replanted immediately. If this product was applied to the lost oat crop, no additional product can be applied to the replanted oat crop.

## OKRA

This product can be applied as a row-middle or a hooded post-direct treatment (but not both) for weed control in okra.

### Pre-Emergence Row-Middle Applications

Apply this product at a rate of 6.0 fl oz/A (0.19 lb AI/A) as a banded application to the row middles prior to weed emergence. For this banded application, leave one foot of untreated area over the okra row or 6 inches to each side of the planted row. For banded applications, the application must be made to account for band width, i.e., to deliver 6.0 fl oz (0.19 lb AI) per treated acre. **DO NOT** apply this product directly over the planted okra row or severe crop injury may occur. Injury risk is greatest on coarse textured soils (sand, sandy loam or loamy sand).

### Post-Emergence Hooded Applications

Apply this product at a rate of 3.0 fl oz/A (0.094 lb AI/A) as a post-emergence directed application using a hooded sprayer for control or partial control of the weeds listed in **Table 1**. Okra must be at least 3 inches tall at the time of this application. It is advised that a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. For post-emergence hooded applications, the spray equipment must be set up to minimize the amount of this product that contacts the okra foliage or crop injury will occur. For best post-emergence results, this product must be applied to actively growing weeds.

#### Okra Restrictions:

- **DO NOT** harvest okra within 28 days following the application of this product.
- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply this product as a row-middle application at more than 6.0 fl oz (0.19 lb AI) per acre per year.
- **DO NOT** apply this product as a post-directed application at more than 3.0 fl oz (0.094 lb AI) per acre per year.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application.
- **DO NOT** apply this product as a broadcast pre-emergence or broadcast post-emergence application to okra or severe injury will occur.
- If the okra crop treated with this product is lost or destroyed, okra can be replanted only in the soil band that was not treated with this product.

### PEARL MILLET

This product may be applied pre-emergence in pearl millet, i.e., after planting but before crop emergence, at a rate up to 6.0 fl oz/A (0.19 lb AI/A). For a list of weeds controlled see **Table 2**. **DO NOT** apply more than one application, and not more than 6.0 fl oz/A (0.19 lb AI/A) per year in pearl millet. If weeds are emerged at the time of application, the use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is advised. In addition, a spray grade UAN (e.g., 28-0-0) at the rate of 2.5% (v/v) or AMS at the rate of 8.5 lb/100 gal of spray solution may be added to improve the burndown of existing weeds. Applications of this product to emerged pearl millet can result in severe crop injury.

#### Pearl Millet Restrictions:

- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) per year.

### RHUBARB

This product can be applied prior to crop emergence for weed control in established rhubarb.

Apply this product at a rate of 6.0 fl oz/A (0.19 lb AI/A) to dormant (prior to any spring green-up) rhubarb for control or partial control of the weeds listed in **Table 2**. If weeds are emerged at the time of application, it is advised that a crop oil concentrate (COC) type adjuvant at 1% v/v or a non-ionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v be added to the spray solution. Applications of this product to rhubarb that is not dormant may result in a temporary bleaching symptomology. Rainfall or irrigation after the product application may increase the risk of injury to emerging rhubarb.

#### Rhubarb Restrictions:

- **DO NOT** harvest rhubarb within 21 days following the application of this product.
- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) per year.

### SORGHUM (GRAIN and SWEET)

#### Pre-Emergence Application Directions

Make pre-emergence application of this product or pre-plant non-incorporated applications up to 21 days before planting sorghum for control or partial control of the weeds listed in **Table 2**.

Apply 6.0 to 6.4 fl oz/A (0.19 to 0.20 lb AI/A) broadcast non-incorporated application prior to sorghum emergence. Making the application less than 7 days before planting will increase the risk of plant injury, especially if rainfall or irrigation occurs after the application. Injury symptoms include temporary bleaching of newly emerged leaves. Making application of this product 8 to 21 days prior to planting will decrease risk of crop injury.

If this product is applied prior to planting, minimize disturbance of soil treated with herbicide during the planting process to reduce the potential for weed emergence.

If emerged weeds are present at the time of pre-emergence application, use 0.25% v/v of a non-ionic surfactant (NIS) adjuvant or 1% v/v of crop oil concentrate (COC) and add it to the spray solution. A spray-grade UAN applied at a rate of 2.5% v/v or 8.5 lb/100 gallons of spray solution of ammonium sulfate (AMS) can be added to the spray solution in addition to the COC or NIS.

#### **Pre-Emergence Sorghum Application Restrictions:**

- **DO NOT** make more than one application of this product per year.
- **DO NOT** apply more than 6.4 fl oz/A (0.2 lb AI/A) in a single application.
- **DO NOT** apply more than 6.4 fl oz/A (0.2 lb AI/A) per year.
- **DO NOT** apply to emerged sorghum or severe crop injury can occur.
- **DO NOT** use this product in the production of forage sorghum, sudangrass, sorghum-sudangrass hybrids, or dual-purpose sorghum.
- **DO NOT** apply to sorghum that is grown on coarse textured soils (e.g., sandy loam, loamy sand, sand).
- **Texas Restriction: DO NOT** apply to sorghum grown south of Interstate 20 (I-20) or east of Highway 277.

#### **Post-Emergence Application Directions**

Apply this product post-directed to grain sorghum to control and/or partially control weeds listed in **Table 1**. Apply to actively growing weeds for optimal control.

Apply 3.0 fl. oz/A (0.094 lb. AI/A) post-directed application when sorghum is at least 8" tall. Make the application by directing the spray between crop rows, and toward the base of the plant. Direct application of this product onto foliage can result in crop injury including temporary bleaching. If leaves do bleach, newly emerged leaves following application will not be affected.

Use 0.25% v/v of a non-ionic surfactant (NIS) adjuvant or 1% v/v of crop oil concentrate (COC) and add it to the spray solution. A spray-grade UAN applied at a rate of 2.5% v/v or 8.5 lb/100 gallons of spray solution of ammonium sulfate (AMS) can be added to the spray solution in addition to the COC or NIS.

This product can be tank-mixed with herbicides registered for use on sorghum to improve weed control. These tank-mixtures can also include a herbicide with a different mode of action to help control or manage the development of resistant weed biotypes.

#### **Post-Directed Restrictions:**

- **DO NOT** make more than one post-directed application per year.
- **DO NOT** apply more than 3.0 fl oz/A (0.094 lb AI/A) in a single post-directed application.
- **DO NOT** apply more than 6.4 fl oz/A (0.20 lb AI/A) per year.
- **DO NOT** apply broadcast over-the-top to emerged sorghum or severe crop injury can occur.
- **DO NOT** harvest sorghum for forage for 30 days following application.
- **DO NOT** harvest for grain or stover for 60 days following application.
- **DO NOT** apply after the sorghum seedhead emerges.
- **DO NOT** use in the production of forage sorghum, sudangrass, or sorghum-sudangrass hybrids.

## **SOYBEAN**

This product can be applied pre-emergence to mesotrione-resistant soybeans. Applications to soybeans that are not designated as mesotrione-resistant will result in significant crop injury.

#### **Pre-Emergence Applications**

For pre-emergence control of the weeds listed in **Table 2**, apply this product prior to soybean emergence at a rate of 6.0 fl oz/A (0.19 lb AI/A). Apply the higher rate for longer residual control. This product may be tank mixed with other registered soybean herbicides including S-Metolachlor and S-Metolachlor + Sodium salt of fomesafen. Refer to the tank mix partner label and follow all precautions and restrictions.

If weeds are emerged at the time of application, add either a non-ionic surfactant (NIS) at 1.0 qt/100 gallons (0.25% v/v) or a crop oil concentrate (COC) at 1.0 gal/100 gal (1% v/v). In addition to NIS or COC, it is also advised to add either ammonium sulfate (AMS) at 8.5 to 17.0 lb/100 gallons (or equivalent).

### **Soybean Restrictions:**

- Apply no more than 6.0 fl oz/A (0.19 lb AI/A) per year.
- Make no more than one pre-emergence application per year.
- **DO NOT** apply more than 6.0 fl oz/A (0.19 lb AI/A) in a single application
- **DO NOT** apply to emerged soybeans.
- **DO NOT** graze or feed soybean forage or hay to livestock.

### **SUGARCANE**

Apply this product by ground for pre-emergence, post-emergence over-the-top or post-emergence direct weed control in sugarcane.

Apply this product aerially for pre-emergence and post-emergence weed control in the states of: Florida, Louisiana, and Texas.

#### **Pre-Emergence Applications**

Apply 6.0 to 7.7 fl oz/A (0.19 to 0.24 lb AI/A) of this product to control weeds listed in **Table 2**. Make application after the planting of plant-cane or after harvest of ratoon-cane. If weeds are emerged at the time of application, add a crop oil concentrate (COC) type adjuvant at 1% v/v OR a non-ionic surfactant (NIS) type adjuvant at 0.25% v/v to the spray solution. In addition to the COC or NIS, a spray grade UAN at a rate of 2.5% v/v OR ammonium sulfate (AMS) at a rate of 8.5 lb/100 gals. of spray solution can be added to the spray solution. Tank mix Atrazine or Ametryn with this product to improve weed control. Refer to the tank mix partner label for specific rates and use directions.

#### **Post-Emergence Applications**

Apply 3.0 fl oz/A (0.094 lb AI/A) of this product to control weeds listed in **Table 1**. Apply as a post-over-the-top or as a post-directed spray to the base of the sugarcane. If a pre-emergence application was made earlier in the season, only one single post-emergence application can be made. If no pre-emergence application was made earlier in the season, then both a post-over-the-top and a post-directed spray application can be made. For optimum weed control, apply to actively growing weeds.

Add either a crop oil concentrate (COC) adjuvant at 1% v/v OR a non-ionic surfactant (NIS) adjuvant to the spray solution. In addition to the COC or NIS, use a spray grade UAN (e.g., 28-0-0) at 2.5% v/v OR ammonium sulfate (AMS) at 8.5 lbs/100 gallons of spray solution to improve weed control.

For additional post-emergence weed control, tank mix this product with atrazine, Sodium salt of asulam and/or Trifloxysulfuron-Sodium. Refer to the tank mix product label for specific rate and use directions.

#### **Sugarcane Restrictions:**

- **DO NOT** apply more than 7.7 fl oz/A (0.24 lb AI/A) in a pre-emergence application.
- **DO NOT** apply more than 3.0 fl oz/A (0.094 lb AI/A) in a post-emergence application.
- **DO NOT** make more than 2 applications per year. If a pre-emergence application is made, only one post-emergence application can be made.
- Minimum retreatment interval is 14 days.
- **DO NOT** apply more than 10.7 fl oz/A (0.33 lb AI/A) per year.
- **DO NOT** harvest sugarcane within 114 days following a post-over-the-top treatment (114-day PHI).
- **DO NOT** harvest sugarcane with 100 days following a post-directed application (100-day PHI).

### **NON-AGRICULTURAL USES**

#### **TURFGRASS**

This product is applied pre- and post-emergence to provide selective contact and residual control of turfgrass weeds. If applied pre-emergence, it is absorbed when emerging from the soil. Pre-emergence activity and control is reduced under dry conditions. Activate this product with 0.15 inches of irrigation if rain has not fallen within 10 days of application. Post-emergent control is obtained by absorption into the soil and contact with foliage. Growth ceases post-application, weeds turn white from chlorophyll loss, and will die within three weeks. Make a repeat application after 2 to 3 weeks to improve post-emergence weed control. Add a non-ionic surfactant when making post-emergence applications.

Turfgrass color can temporarily become white during treatment. Whitening typically occurs 5 to 7 days post-application and lasts for several weeks. A second application to the same site will cause less whitening of plant tissue.

This product controls weeds prior to and during seeding of certain turfgrasses during turf renovation (see New Seedings). If making pre-emergence application to established turf, tank mix this product with other pre-emergence herbicides including Evade WDG



Herbicide for longer residual and broad-spectrum control.

This product can be applied to commercial and residential turfgrasses. Non-crop area use sites include golf courses, sod farms, athletic fields, parks, residential and commercial properties, cemeteries, airports, and lawns.

**Turfgrass Use Precautions:**

Apply this product at reduced rates of 4.0 fl oz/A (0.13 lb AI/A) or less if tank mixing with atrazine, bentazon, or simazine. Before tank mixing this product with other herbicides, conduct a compatibility, safety, and efficacy test before treating larger areas. See tank mix partner labels for directions and precautions. The most restrictive directions apply.

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.

Thoroughly clean application equipment after use to avoid injury to sensitive plants.

To avoid injury to sensitive species, keep traffic out of treated areas until sprays have dried; irrigate soil lightly to move this product from turf foliage before resuming normal irrigation.

**Turfgrass Use Restrictions:**

- **DO NOT** overspray or allow spray to drift to ornamentals or flower beds and gardens. Roses and daylilies are particularly sensitive to this product.
- **DO NOT** apply more than 8.0 fl oz/A (0.125 lb AI/A) in a single application.
- **DO NOT** apply more than 16.0 oz/A (0.50 lb AI/A) per year.
- **DO NOT** make more than 4 applications of this product per year when using reduced application rates.
- If multiple applications are made, they must be made no closer than 14 days apart.
- **DO NOT** plant any crop other than turfgrass for 18 months post-application of this product to avoid turfgrass injury.
- **DO NOT** apply organophosphate or carbamate insecticides within 7 days of applying this product.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** make aerial applications.
- **DO NOT** use treated clippings to mulch trees or vegetable/flower gardens.
- **DO NOT** apply this product on Bentgrass, bermudagrass, kikuyugrass, *Poa annua*, seashore paspalum, and zoysiagrass where plant injury is unacceptable. Maintain a 5-foot buffer between treated areas and bentgrass or *Poa annua* greens.
- **DO NOT** apply over the top of exposed roots of trees and ornamentals.
- **DO NOT** use on golf course putting greens; maintain a minimum of a 5-foot buffer between putting greens and treated areas.
- Residential Lawns: **DO NOT** make broadcast applications for pre- and post-emergent weed control unless the home lawn is being reseeded and/or renovated as whitening of some turfgrasses may occur.

**Turfgrass Species Controlled**

Species	Application Rate in Fl Oz/A (lb AI/A)
Buffalograss ( <i>Buchloe dactyloides</i> ) Centipedegrass ( <i>Eremochloa ophiuroides</i> ) Kentucky bluegrass ( <i>Poa pertensis</i> ) Tall fescue ( <i>Festuca arundinacea</i> )	5.0 to 8.0 (0.16 to 0.25)
Fine fescue* (creeping red, chewings and hard) <i>Festuca</i> spp. Perennial ryegrass* ( <i>Lolium perenne</i> )	5.0 (0.16)
St. Augustinegrass* (grown for sod) ( <i>Stenotaphrum secundatum</i> )	4.0 (0.134)

\* See additional rate instructions below.

**APPLICATION INSTRUCTIONS**

**Pre-Emergence Applications:**

Apply 4 to 8 fl oz (0.155 to 0.25 lb AI) of this product per acre in at least 30.0 gallons of water per acre before seeds germinate and as close to seed germination as possible. Combine this product with another pre-emergence herbicide including Barricade 65WG for extended control of crabgrass and foxtail.

**Pre-Emergence Application Precautions:**

This product is most effective on established turf when applied post-emergence unless it is combined with another soil active herbicide.

**Pre-Emergence Application Restrictions:**

- **DO NOT** exceed 5.0 fl oz (0.16 lb AI) per acre per application to perennial ryegrass, fine fescues, or mixed stands that consist of >50% perennial ryegrass and/or fine fescue.
- St. Augustinegrass sod: **DO NOT** exceed 4.0 fl oz (0.13 lb AI) per acre.

**Application to New Seedlings/New Lawns**

Apply 5.0 to 8.0 fl oz (0.16 to 0.25 lb AI) product per acre in at least 30.0 gallons of water per acre before seeding or after seeding of turfgrass species listed below, except fine fescue, as application to fine fescue can reduce grass density. This product can be effectively used on grass seed blends that contain <20% by weight hard/fine fescue. For optimal control, apply at grass seeding or as close to seeding as possible.

**New Seedlings/New Lawns Restrictions:**

- **DO NOT** spray on newly germinated turfgrass. Delay treatment until grass has been mowed 2 to 4 times and/or 4 weeks after emergence (whichever is longer).

**Post-Emergence Application Instructions:**

Apply 4.0 to 8.0 fl oz of this product (0.13 to 0.25 lb AI) per acre in at least 30.0 gal of water per acre with a NIS surfactant. Make a repeat application 2 to 3 weeks later for optimal weed control. Apply to young, actively growing weeds.

**Post-Emergence Application Precautions:**

Moisture stress and application to mature weeds can reduce herbicide efficacy.

**Bentgrass (*Agrostis* spp.)/Nimbleweed (*Muhlenbergia schreberi*) Treatment:**

Apply 5.0 fl oz (0.16 lb AI) product per acre in at least 30.0 gallons of water per acre combined with a NIS surfactant at 2- to 3-week intervals for a maximum of 3 applications. For optimal weed control, apply in late summer/early fall just prior to new growth.

**St. Augustinegrass (Sod uses only) and Centipedegrass Treatment:**

Apply to established turf ONLY.

**St. Augustinegrass (Sod uses only) and Centipedegrass Restrictions:**

- **DO NOT** exceed 4.0 fl oz (0.13 lb AI) product per application if tank mixing with Atrazine or Simazine.
- **DO NOT** exceed 0.5 lb atrazine or simazine active ingredient. See atrazine/simazine labels for precautions and restrictions.

**Dormant Bermudagrass Application only:**

Apply 5.0 fl oz (0.16 lb AI) per acre of this product to control winter weeds listed in the **Weeds Controlled** table below. Make a repeat application 2 to 3 weeks later. Application of this product to semi-dormant turf will cause bermudagrass whitening.

**Spot Applications of this product**

Spray Mix	Application Rate	Rate of this product	Rate of NIS adjuvant
2.0 gal	1.0 gal/1,000 sq ft	1.0 tsp	3.0 tsp

**Spot Application Restrictions:**

- **DO NOT** apply more than 16.0 oz (0.50 lb AI) of this product per acre per year.

**WEEDS CONTROLLED USING PRE-EMERGENCE APPLICATION**

Apply this product with a grass pre-emergence herbicide including Barricade 65WG Herbicide, except when used to control weeds in new seedlings. This product will control the following weeds using pre-emergence application:

Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>
Bluegrass (Annual)*	<i>Poa annua*</i>
Buckhorn Plantain	<i>Plantago lanceolata</i>

Carpetweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>
Crabgrass (Large)	<i>Digitaria sanguinalis</i>
Crabgrass (Smooth)	<i>Digitaria ischaemum</i>
Crabgrass (Southern)	<i>Digitaria ciliaris</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Lambsquarters	<i>Chenopodium album</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>
Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pennsylvanicum</i>
Speedwell (Persian)	<i>Veronica persica</i>
Speedwell (Purslane)	<i>Veronica peregrine</i>
Wild Carrot	<i>Daucus carota</i>

\*Suppression only.

#### WEEDS CONTROLLED USING POST-EMERGENCE APPLICATION

Make a second application of this product 2 to 3 weeks after initial treatment. For optimal control add a NIS-type surfactant and apply to young, actively growing weeds. This product will control the following weeds using post-emergence application:

Common Name	Scientific Name
Barnyardgrass	<i>Echinochloa crusgalli</i>
Bentgrass (Creeping)	<i>Agrostis stolonifera</i>
Buckhorn Plantain	<i>Plantago lanceolata</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed (Common)	<i>Stellaria media</i>
Chickweed (Mouseear)	<i>Cerastium vulgatum</i>
Clover (Large Hop)	<i>Trifolium aureum</i>
Clover (White)	<i>Trifolium repens</i>
Crabgrass (Large)*	<i>Digitaria sanguinalis*</i>
Crabgrass (Smooth)*	<i>Digitaria ischaemum*</i>
Crabgrass (Southern)*	<i>Digitaria ciliaris*</i>
Curly dock	<i>Rumex crispus</i>
Dandelion (Catsear)	<i>Hypochoeris radicata</i>
Dandelion (Common)	<i>Taraxacum officinale</i>
Florida Betony	<i>Stachys floridana</i>
Florida Pusley	<i>Richardia scabra</i>
Foxtail (Yellow)	<i>Setaria glauca</i>
Galinsoga	<i>Galinsoga ciliate</i>
Goosegrass*	<i>Eleusine indica*</i>
Ground Ivy	<i>Glechoma hederacea</i>
Healall	<i>Prunella vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Lambsquarters (Common)	<i>Chenopodium album</i>
Lawn Burweed	<i>Soliva sessilis</i>
Lovegrass (Tufted)	<i>Eragrostis pectinacea</i>
Marestail	<i>Conyza Canadensis</i>
Nimblewill	<i>Muhlenbergia schreberi</i>
Nutsedge (Yellow)	<i>Cyperus esculentus</i>
Oxalis	<i>Oxalis stricta</i>
Pigweed (Redroot)	<i>Amaranthus retroflexus</i>

Pigweed (Smooth)	<i>Amaranthus hybridus</i>
Purslane (Common)	<i>Portulaca oleracea</i>
Shepherd's Purse	<i>Capsella bursa-pastoris</i>
Smartweed (Pale)	<i>Polygonum lapathifolium</i>
Smartweed (Pennsylvania)	<i>Polygonum pennsylvanicum</i>
Sowthistle	<i>Sonchus oleraceus</i>
Swinecress	<i>Coronopus didymus</i>
Thistle (Canada)	<i>Cirsium arvense</i>
Verbena	<i>Verbena hastate</i>
Wild Carrot	<i>Daucus carota</i>
Wild Violet	<i>Viola pratensis</i>
Windmillgrass	<i>Chloris verticillata</i>

\*For optimal control, apply to less than 4 tiller crabgrass and goosegrass.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Do not store below 10 °F, (- 12 °C). Do not use or store near heat, open flame or hot surfaces. Keep out of reach of children and animals. Store in original containers only. Store in a cool dry place and avoid excess heat.

Carefully open containers. After partial use replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING: Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org). If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**[For packages up to 5 gallons: 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For packages greater than 56 gallons:** To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.]

**[For refillable containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two

more times. Offer for recycling or reconditioning, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

**[Container Disposal – Returnable/Refillable Sealed Container:** Do not rinse container. Do not break seals. Replace the dust cover/cap and return container, intact to point of purchase.]

**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.**

## **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Agrisure GT is a registered trademark of Syngenta.

Alion and Roundup Ready are registered trademarks of Bayer.

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GoalTender is a registered trademark of Corteva Agriscience.

Hyvar and Krovar are registered trademarks of American Vanguard Corporation.

Solicam is a registered trademark of Tessenderlo Kerley, Inc.

Surflan is a registered trademark of United Phosphorus, Inc.

Tetris is a registered trademark of Atticus, LLC.

{END Language inside booklet}

{BEGIN language affixed to container}

MESOTRIONE GROUP 27 HERBICIDE

# Carabiner

ACTIVE INGREDIENT:	By Wt.
Mesotrione: 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione .....	40.0%
OTHER INGREDIENTS**:	60.0%
TOTAL.....	100.0%

Contains 4.0 pounds mesotrione per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

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

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

FIRST AID	
<b>IF ON SKIN:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
<p><b>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call 1-866-944-8565. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.</b></p>	

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

##### CAUTION

Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing.

##### ENVIRONMENTAL HAZARDS:

Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

##### Surface Water Advisory

This product may contaminate water through drift or spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

### STORAGE AND DISPOSAL

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EPA Reg. No.: 34704-xxxx

EPA Est. No.: [nnnn-xx-nnn]

Net Contents: [yyyyyy]

[Print code]

[EPA MASTER LABEL—Label ID 06/19]

Formulated for

Loveland Products Inc.,

P.O. Box 1286, Greeley, CO 80632-1286

{END language affixed to container}