

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

84229-52

Date of Issuance:

EPA Reg. Number:

12/27/19

X Registration Reregistration (under FIFRA, as amended) Term of Issuance: Unconditional

Name of Pesticide Product:

Tide Diuron 4SC

Name and Address of Registrant (include ZIP Code):

Tide International, USA, Inc. c/o Pyxis Regulatory Consulting Inc. 4110 136<sup>th</sup> St. Ct. NW Gig Harbor, WA 98332

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/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 84229-52."
- 3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Signature of Approving Official:	Date:	
Erik Kraft, Product Manager 24 Fungicide Herbicide Branch, Registration Division (7505P)	12	2/27/19

Page 2 of 2 EPA Reg. No. 84229-52 Decision No. 549611

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 03/08/2019

If you have any questions, please contact BeWanda Alexander by phone at (703)347-0313, or via email at alexander.bewanda@epa.gov.

# **{LANGUAGE INSIDE BOOKLET}**

DIURON GROUP 7 HERBICIDE

# **TIDE DIURON 4SC**

#### Herbicide

For controlling many herbaceous weeds and annual and perennial grasses.

#### **ACTIVE INGREDIENT:**

Diuron (3-(3,4-Dichlorophenyl)-1 1-dimethylurea)*	40.0%
OTHER INGREDIENTS:	
TOTAL:	
*Contains 4 lbs. diuron per gallon.	

# KEEP OUT OF REACH OF CHILDREN CAUTION

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

EPA Reg. No. 84229-[xx]

EPA Est. No.

#### Manufactured for:

Tide International, USA, Inc. 21 Hubble Irvine, CA 92618

#### **Net Contents:**

ACCEPTED

12/27/2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 24000 50

84229-52

FIRST AID		
IF	Call a poison control center or doctor immediately for treatment advice.	
SWALLOWED:	Have person sip a glass of water if able to swallow.	
	Do not induce vomiting unless told to do so by a poison control center or	
	doctor.	
	Do not give anything by mouth to an unconscious person.	
IF ON SKIN OR	F ON SKIN OR • Take off contaminated clothing.	
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	• Remove contact lenses, if present, after the first 5 minutes, then continue	
	rinsing eye.	
	Call a poison control center or doctor for treatment advice	
IF INHALED:	<b>IF INHALED:</b> • Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, then give artificial	
	respiration, preferably by mouth-to-mouth, if possible.	
	Call a poison control center or doctor for treatment advice.	

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For additional information on this pesticide product, including health concerns, medical emergencies, or pesticide incidents, you may call **CHEMTREC**® at **1-800-424-9300**, 24 hours per day, 7 days per week.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

**All pilots and flaggers must wear:** Long-sleeved shirt and long pants and shoes plus socks. In addition to the PPE above, groundboom applicators must also wear chemical-resistant gloves made of any waterproof material, including polyethylene or polyvinyl chloride.

All mixers, loaders, other applicators, and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks, chemical-resistant gloves made of any waterproof material, including polyethylene or polyvinyl chloride and chemical-resistant apron when mixing, loading, or cleaning equipment or spills, and a NIOSH-approved particulate filtering respirator equipped with any N, R, or P class filter media. The respirator should have a NIOSH approval number prefix TC-84A. It is recommended that you require the respirator wearer to be tested and trained in the use, maintenance, and limitations of the respirator. See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS**

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

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(6)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition in the WPS for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, flaggers must wear long-sleeved shirt, long pants, shoes, and socks.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

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

#### **ENVIRONMENTAL HAZARDS**

**DO NOT** apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate. Cover or incorporate spills. Apply this product only as specified on this label.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# 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
- Chemical-resistant gloves of any waterproof material, and
- Shoes plus socks

#### 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 (WPS) for agricultural pesticides 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

DO NOT enter or allow others to enter treated areas until sprays have dried.

#### **USE INFORMATION**

Use of diuron in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition et al vs. EPA, C01-132C (W.D. WA.). For information, please refer to www.epa.gov/espp/wtc/.

This product is to be mixed with water and applied as a spray for selective control of weeds in certain crops and for non-selective weed control on non-cropland areas. It is non-corrosive to equipment, non-flammable and nonvolatile. This product may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time; the degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soils low in clay or organic matter to obtain equivalent herbicide performance. Moisture is required to activate the chemical; best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks of application.

This product, applied pre-emergence, before emergence of crop and weeds, is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling state before they compete with the crop. With favorable moisture conditions, this product continues to control weeds for some time as the crop becomes better able to compete. If weed seedlings begin to break through the pre-emergence treatment in significant numbers, implement secondary weed control procedures be implemented. These include cultivation and postemergence herbicide application.

This product may also be used to control emerged weeds.

Results vary with rate applied and environmental conditions; best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher. Addition of a non-ionic surfactant to the spray (where specified) increases contact effects of this product.

This product may be used as a directed post-emergence application. Avoid contact of crop foliage and/or fruit with spray or mist to avoid injury on the following crops: Artichokes, Corn (field), Cotton, Sorghum (grain), Sugarcane and established plantings of Apples, Bananas, Blueberries, Caneberries, Citrus, Gooseberries, Filberts, Grapes, Macadamia nuts, Olives, Papayas, Peaches, Pears, Pecans, Plantains, Walnuts and certain Tree plantings.

Under specified conditions (see "DIRECTIONS FOR USE"), this product without surfactant may be applied over the top of Alfalfa (established, dormant or semi-dormant), Asparagus (established), Birdsfoot trefoil (established, dormant), Grass seed crops (established), Oats, Pineapples, Plumosus fern (established, mowed), Red clover (established, dormant), Sugarcane and Wheat.

Weed species vary in susceptibility to this product and they may be more difficult to control when under stress. Combinations of this product with other herbicides (as registered) increase the number of species controlled; consult labels of the companion products for this and other information.

Since the effect of this product varies with soils, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas. Observe all use precautions and limitations on labeling of all products used in mixtures. Follow the most restrictive label.

**IMPORTANT:** Injury to or loss of desirable trees or other plants may result from failure to observe the following: **DO NOT** apply (except as directed for crop use) or drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. **DO NOT** use on home plantings of trees, shrubs or herbaceous plants, nor on lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants. **DO NOT** contaminate any body of water. **DO NOT** mix/load or use near wells including abandoned wells, drainage wells and sinkholes. Avoid storage of pesticides near well sites. Keep from contact with fertilizers, insecticides, fungicides and seeds. Thoroughly clean all traces of this product from application equipment immediately after use.

Calibrate sprayers only with clean water away from well sites. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

#### WEED RESISTANCE MANAGEMENT

For resistance management, Tide Diuron 4SC is a Group 7 herbicide. Any weed population may contain or develop plants naturally resistant to Tide Diuron 4SC and other Group 7 herbicides. Weed species with acquired resistance to Group 7 herbicides may eventually dominate the weed population if Group 7 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Tide Diuron 4SC or other Group 7 herbicides. Users should scout before and after application.

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

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

To delay herbicide resistance:

• Avoid the consecutive use of Tide Diuron 4SC or other target site of action Group 7 herbicides that might have a similar target site of action, on the same weed species.

- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides)
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Tide International, USA, Inc. retailer, representative or call 949-679-3535. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical, with the goal of preventing further seed production.

#### SPRAY DRIFT MANAGEMENT

Requirements for reducing spray drift for diuron ground and aerial applications: Use best practices to avoid drift to all other crops and non-target areas. DO NOT apply when conditions favor drift from target areas. The interaction of many equipment and weather-related factors determine the potential for spray drift. Avoiding spray drift at the application site is the responsibility of the applicator. The applicator must follow the most restrictive precautions to avoid drift, including those found in this labeling as well as applicable state and local regulations and ordinances. A drift control agent may reduce drift, however, it may also decrease weed control.

#### MANDATORY SPRAY DRIFT DIRECTIONS

#### **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 medium or coarser spray 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  $\frac{1}{2}$  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.
- apply when wind speeds exceed 10 miles per hour at the application site.
- DO NOT apply during temperature inversions.
- DO NOT apply by air if sensitive non-target crops are within 100 feet of the application site.

#### **Ground 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 medium or coarser spray 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.

# **Boom-less Ground Applications:**

- Applicators are required to use a medium 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.

#### **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.

# **Controlling Droplet Size - Aircraft**

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

#### **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.

# **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

#### 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.

Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

Take precautions to minimize spray drift.

**SELECTIVE USE IN CROPS:** This product when used before weed emergence (Pre-emergence use) will provide the following control of annual weeds:

CONTROL			
0.6 – 0.8 qt/A Barnyardgrass (Watergrass) Pigweed			
(0.6-0.8 lb	Crabgrass	Purslane	
ai/A)	Lambsquarters	Ragweed	
	Amsinkia (Fiddleneck)	Knawel	
	Annual Bluegrass	Pennycress	
	Annual groundcherry	Rattail fescue	
1.2 – 1.6	Annual morningglory	Red sprangletop	
qts/A	Annual sweet vernalgrass	Shepherdspurse	
(1.2-1.6 lbs	Chickweed	Tansymustard	
ai/A)	Corn spurry	Velvetgrass	
	Dogfennel	Wild buckwheat	
	Foxtail	Wild lettuce	
	Gromwell	Wild mustard	
	Ageratum	Marigold	
	Annual lovegrass	Mexican clover	
	Annual ryegrass	Orchardgrass	
	Annual smartweed	Peppergrass	
1.6 – 4.8	Annual sowthistle	Pineappleweed	
qts/A	Corn speedwell	Pokeweed	
(1.6-4.8 lbs	Dayflower	Rabbit tobacco	
ai/A)	Flora's paintbrush	Ricegrass	
	Hawksbeard	Sandbur	
	Horseweed	Spanishneedles	
	Johnsongrass (Seedling)	Velvetleaf (Buttonweed)	
	Kyllinger (Kyllinga)	Wild radish	
PARTIAL CONTROL			
0.8 qt/A	Annual, morningglory	Prickly sida (Teaweed)	
(0.8 lb ai/A)	Cocklebur	Sesbaria	
(U.O ID all A)	Cockiebui	Sicklepod	
3.2 qts/A (3.2 lbs ai/A)	Horsenettle	Quackgrass	
6.4 – 8 qts/A			
(6.4-8 lbs ai/A)	Guineagrass Maidencane	Pangolagrass	

# APPLICATION DIRECTIONS

#### **AERIAL APPLICATION**

Aerial application is prohibited EXCEPT for Alfalfa, Barley (Winter), Cotton (pre-plant or pre-emergence only), Grass seed crops (grown in Pacific Northwest only), rights-of-way, Sugarcane and Wheat (Winter). Application may be made by aircraft at a minimum of 3 gallons of water per acre. Avoid overlapping of spray swath and avoid application under conditions where excessive drift may occur. Where land is bedded, make application parallel to rows.

# **GROUND APPLICATION**

Use a boom power sprayer properly calibrated to a constant speed and rate of delivery. Openings in screen must be 50-mesh or larger. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate by mechanical or hydraulic means. If bypass or return line is used, ensure it terminates at the bottom of tank to minimize foaming. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping or injury to crop may result.

**PRE-EMERGENCE**: Use sufficient spray volume and pressure to uniformly distribute the spray solution over treated soil. Pre-emergence weed control will be reduced on high organic matter soils including, peat or muck.

**POST-EMERGENCE:** Use sufficient volume and pressure for thorough coverage of weed foliage. For selective applications and applications near sensitive crops, use low spray pressure to keep spray drift to a minimum. This product, at labeled rates, control seedling annual weeds including, Annual morningglory, Barnyardgrass (Watergrass), Crabgrass, Crowfoot, Goosegrass, Pigweed and Purslane. Addition of a surfactant to the spray (where specified) increases contact effects of this product. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher.

**SPRAY PREPARATION:** Mix proper amount of this product into necessary volume of water. Where use of a surfactant is specified, dilute with 10 parts of water and add as last ingredient to a nearly full tank.

**TANK MIXTURES:** This product may be tank mixed with other herbicides and/or adjuvants registered for crop or non-crop use in this label. Refer to the label of the tank mixture partner(s) for any additional use instructions or restrictions. Always follow the most restrictive label. 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.

**REPLANTING:** Unless otherwise directed, **DO NOT** replant treated areas to any crop within 2 years after last application as injury to subsequent crops may result.

**NOTE:** For crops grown in the arid west, reductions in normal irrigation practices for the crop in production or a Summer fallow period without supplemental irrigation may require the crop rotation intervals to be extended. When these conditions occur complete a field bioassay prior to planting of any desired crop. A successful bioassay means growing up to maturity a test strip of the crop(s) intended for production. Ensure the test crop(s) strips cross the entire field including knolls, low areas and areas where any berms were located. The results of this bioassay may require the rotation intervals to be extended.

**RATES:** All rates of this product are expressed as broadcast rates; for band treatment, use proportionately less. For example, use one-third of the broadcast rate when treating a 14-inch band where row spacing is 42 inches. Where a range of dosages is given, use the lower rate on Coarse textured soils low in clay or organic matter and the higher rate on Fine textured soils high in clay or organic matter. For post-emergence application, use the lower rate on smaller weeds and the higher rate on larger weeds.

**SOIL LIMITATIONS:** Crop injury may result from failure to observe the following: Unless otherwise directed, **DO NOT** use on Sand, Loamy sand or Gravelly soils or exposed subsoils, nor on Pecans where organic matter is less than 0.5%, nor on Alfalfa, Apples, Artichokes, Barley (Winter), Citrus, Cotton, Grapes, Oats, Olives, Papayas, Peaches, Pears, Sorghum, Sugarcane, Walnuts and Winter wheat where organic matter is less than 1%, nor on Blueberries, Birdsfoot trefoil, Caneberries, Gooseberries, Macadamia nuts and Peppermint where organic matter is less than 2%.

#### **CHEMIGATION**

- Apply this product only through sprinklers, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move or microsprinklers irrigation system(s). DO NOT apply this product through any other
- · type of irrigation system.
- Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, you need to contact your State Extension Service Specialists, equipment manufacturers or other experts.
- **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision
  of the responsible person, shall shut the system down and make necessary adjustments need to the need
  arise.
- Public water system means a system for the 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.

- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone
  backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of
  pesticide introduction. As an option to the RPZ, the water from the public water system needs to be
  discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air
  gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice
  the inside diameter of the fill pipe.
- 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 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 or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- System must use a metering pump, for example a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.
- Continuous agitation of the pesticide supply tank for the duration of the application period is advised.
- The pesticide is to be applied continuously for the duration of the water application.

#### **USES**

#### FIELD CROPS (See Soil Limitations)

A good seedbed must be prepared before pre-emergence use of this product as crop injury may result if application is made to ground which is cloddy or compacted, resulting in improperly planted seed. Plant seed to depth specified. Unless otherwise directed, surface of the soil may not be cultivated or disturbed after application of this product and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, make a shallow cultivation (rotary hoe preferred) after the emergence of crops while weeds are small enough to be controlled by mechanical means.

#### **ALFALFA**

#### **RESTRICTIONS:**

#### Dormant or Semi-dormant/Broadcast or Band/Ground or Aerial Applications:

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.
- DO NOT spray on snow-covered or frozen ground.
- DO NOT apply to seedling alfalfa nor to alfalfa/grass mixtures.
- **DO NOT** apply to alfalfa under stress from disease, insect damage, shallow root penetration (including on shallow hard pans), alkali spots; nor to flooded fields as crop injury may result.

# Use Specific Restrictions for CA, ID, OR, and WA:

Treat only stands established for 1 year or more.

**ID**, **OR**, **WA**: Use 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A). Apply in fall after alfalfa becomes dormant but no later than mid-December.

**CA (Dormant and Semi-Dormant Varieties):** Use 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A) in Fall or Winter after Alfalfa becomes dormant or semi-dormant, but before growth begins in the Spring. Crop injury may result if application is made to actively growing Alfalfa. For best results, apply before weeds have emerged or become established (2 inches in height or diameter). Control of established weeds is improved by applying this product with a suitable contact herbicide registered for such use. Sufficient rainfall for soil activation of this product is unlikely in CA after February 1. Treated areas may be replanted to any crop after one year from last application if rate does not exceed 1.6 qts/A (1.6 lbs ai/A).

AZ, NV: Use 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A) in Fall after Alfalfa becomes dormant but no later than January.

**Eastern CO, KS:** For control of Tansymustard, apply 0.8 qt/A (0.8 lb ai/A) shortly after emergence of Mustard in the Fall or Winter; use 1.6 qts/A (1.6 lbs ai/A) if weeds are 2 inches to 4 inches tall. Alternatively, if other annual weeds are present, apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) in February or March.

Other Areas Where Alfalfa Becomes Winter Dormant: Use 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A) (1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) East of Appalachian Mountains) in March or early April, but before Spring growth begins.

# **ARTICHOKES**

#### **RESTRICTIONS:**

# After last Cultivation/Directed Spray/Ground:

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.

**CA:** Apply 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A) in late Fall or early Winter after the last cultivation before weeds germinate or to emerging seedlings. Direct spray to cover the area between the rows and at the base of Artichoke plants, keeping contact with plants at a minimum. AERIAL APPLICATION IS PROHIBITED.

#### **ASPARAGUS**

#### **RESTRICTIONS:**

# Postemergence/Broadcast or Band/Ground:

- Maximum single application rate:
  - Light Sandy Soils: DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
  - Soils High in Clay or Organic matter: **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- Maximum annual application rate:
  - Light Sandy Soils: DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
  - Soils High in Clay or Organic matter: DO NOT apply more than 4.8 qts/A (4.8 lbs ai/A) of this
    product per year.
- DO NOT apply more than 2 applications per year.
- For soils high in clay or organic matter, when two applications are made, first application needs to be made no earlier than 4 weeks prior to spear emergence and no later than the early cutting period, and second application following completion of harvest; each application must be made at 2.4 qts/A (2.4 lbs ai/A).
- Minimum retreatment interval 30 days.
- AERIAL APPLICIATION IS PROHIBITED.
- DO NOT apply to young plants during the first year (except as noted below), nor to newly seeded Asparagus, nor on plants with exposed roots as severe injury may result.

#### Newly planted crowns/Broadcast or Band/ Ground:

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICIATION IS PROHIBITED.

# Use Specific Restrictions for San Joaquin Delta, CA

- DO NOT apply to soils containing < 2% organic matter.</li>
- DO NOT treat new crowns planted to a depth of less than 2 inches.

**Established Plantings:** On Light soils and other soils low in clay or organic matter, apply 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A). On soils high in clay or organic matter, apply 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A). Two applications may be used. Make the first application before weeds become established but no earlier than 4 weeks before spear emergence and no later than the early cutting period (if weeds are controlled into the cutting period by cultural practices, application may be delayed until immediately after the last cultivation); a second application may be made immediately following completion of harvest provided rainfall is expected. In WA (irrigated crop), apply a single treatment of 3.2 qts/A (3.2 lbs ai/A). If treatment is delayed until late Winter or early Spring, incorporation of the chemical in the top 1 inch to 2 inches of soil may substitute for lack of rain to activate the herbicide.

**Newly Planted Crowns—CA (San Joaquin Delta):** Make a single application of 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A) on soils high in clay or organic matter; use the lower rate on Clay loams and the higher rate on Peat soils. Soils must be settled by rainfall or irrigation prior to treatment.

#### BARLEY, WINTER (DRILL-PLANTED)

#### **RESTRICTIONS:**

#### Preemergence/Broadcast or Band/Ground or Aerial:

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 1.6 gts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- **DO NOT** replant treated areas to any crop within 1 year after the last application as injury to subsequent crops may result.

# Western OR and Western WA:

For drill-planted Barley, make a single application of 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) as soon as possible after planting but before emergence of Barley.

# **BERMUDAGRASS PASTURES (NEWLY-SPRIGGED)**

#### **RESTRICTIONS:**

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.
- DO NOT treat areas where sprigs are planted less than 2 inches deep as crop injury may result.
- DO NOT graze or feed foliage from treated areas to livestock within 70 days after application.

Apply 0.8 to 2.4 quarts after planting and before emergence of Bermudagrass or weeds. Alternatively, for control of emerged annual weeds up to 4 inches in height, apply 0.4 to 0.8 qt/A 0.4 to 0.8 lb ai/A); add a surfactant per 25 gallons of spray. If Bermudagrass has emerged at time of treatment, temporary burn of exposed plant parts may occur. Plant sprigs (stolons) 2 inches deep in a well-prepared seedbed.

#### **BIRDSFOOT TREFOIL (LOTUS)**

#### **RESTRICTIONS:**

#### **Dormant/Broadcast or Band/Ground:**

- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.
- **DO NOT** replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.
- Treat only stands established for at least 1 year.

• DO NOT apply to seedling Trefoil as injury may result.

#### Western OR:

Make a single application of 1.6 qts/A (1.6 lbs ai/A) when Trefoil is dormant (October 15 to December 15).

#### **CORN (FIELD)**

#### **RESTRICTIONS:**

# Postemergence/Directed Spray/Ground:

- **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
- **DO NOT** apply more than 0.6 qt/A (0.6 lb ai/A) with non-pressurized nitrogen.
- **DO NOT** apply more than 0.8 gt/A (0.8 lb ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.
- DO NOT APPLY OVER TOP OF CORN.
- **DO NOT** replant to any crop within 1 year except Corn, Cotton and Grain sorghum may be planted the Spring following treatment.

#### Preemergence/Broadcast or Band/Ground:

- **DO NOT** apply more than 0.8 gt/A (0.8 lb ai/A) of this product per application.
- DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.
- **DO NOT** replant treated areas to crops other than Corn or Cotton within 4 months following band treatment and 6 months following broadcast treatment as crop injury may result.

**Post-emergence:** Make a single application of 0.6 qt/A (06 lb ai/A) in combination with non-pressure nitrogen solution. If nitrogen solution is not used, apply 0.8 qt/A (0.8 lb ai/A). Add a surfactant for each 25 gallons of spray. Apply as a directed spray when Corn is at least 20 inches high and weeds are no taller than 3 inches.

**Pre-emergence—AR, LA, MS and TN:** Make a single application of 0.5 to 0.8 qt/A (0.5 to 0.8 lb ai/A) as a broadcast or band treatment after planting, but before Corn emerges. Plant Corn at least 1.5 inches deep.

#### COTTON

#### PRECAUTIONS:

• Seedling disease may weaken plants and increase the possibility of injury from the use of trifluralin products followed by this product.

#### **RESTRICTIONS:**

#### Ground or Aerial:

- Maximum annual application rate inclusive of all diuron applications made with 1 year:
  - Coarse soils: **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) per year.
  - Medium soils: **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) per year.
  - Fine soils: **DO NOT** apply more than 2.2 gts/A (2.2 lbs. ai/A) per year.
- Maximum number of applications per year including pre-plant, preemergence and postemergence is 3.
- Minimum retreatment interval 21 days.
- DO NOT SPRAY OVER THE TOP OF COTTON PLANTS.
- DO NOT apply to sand or loamy sand soils.
- DO NOT use on soils with less than 1% organic matter as crop injury may result.
- **DO NOT** use this product in pre-plant or pre-emergence applications where soil-applied organophosphate insecticides are used due to potential for severe cotton injury and possible stand loss.
- DO NOT allow livestock to graze treated Cotton.
- DO NOT treat Cotton in deep furrows as crop injury may result.

DO NOT retreat field with a second pre-plant or preemergence application during the same year as
injury to the crop may result.

#### Pre-plant

- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- Maximum annual application rate per acre per year:
  - Coarse soils: DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) per year.
  - Medium soils: DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) per year.
  - Fine soils: DO NOT apply more than 2.2 qts/A (2.2 lbs. ai/A) per year.
- DO NOT apply more than 1 application per year.
- Only Cotton and Corn may be planted within 6 months of pre-plant applications of this product.

# **Use Specific Restrictions for AZ and CA:**

- Maximum single application rate (alone):
  - Coarse soils: **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
  - Medium and Fine soils: DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- Maximum single application rate (following Trifluralin):
  - Coarse soils: DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
  - Medium and Fine soils: DO NOT apply more than 1.0 qt/A (1.0 lb ai/A) of this product per application.
- DO NOT apply more than 1 application per year.

#### **Preemergence**

- Maximum single application rate per acre per acre:
  - Coarse soils: **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
  - Medium soils: **DO NOT** apply more than 1.0 qt/A (1.0 lb ai/A) of this product per application.
  - Fine soils: **DO NOT** apply more than 1.6 qts/A (1.6 lbs. ai/A) of this product per application.
- Maximum annual application rate per acre per year:
  - Coarse soils: **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) of this product per year.
  - Medium soils: DO NOT apply more than 1.0 qt/A (1.0 lb ai/A) of this product per year.
  - Fine soils: DO NOT apply more than 1.6 qts/A (1.6 lbs. ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- DO NOT apply this product preemergence following application of the maximum rate for given soil applied preplant.
- Total amount of this product preemergence or preplant must not exceed the maximum use rate for either preplant or preemergence applications.
- Use only where Cotton is planted on flat or raised seedbeds.

# **Postemergence**

# (Directed Spray)

- Early postemergence (post directed to > 6-inch Cotton).
- Maximum single application rate per acre:
  - Cotton 6 to 8 inches: DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
  - Cotton 8 to 12 inches: DO NOT apply more than 1.2 qt/A (1.2 lbs ai/A) of this product per application.
- Maximum annual application rate per year:
  - Cotton 6 to 8 inches: DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) of this product per year.
  - Cotton 8 to 12 inches: DO NOT apply more than 1.2 qt/A (1.2 lbs ai/A) of this product per year.

- **DO NOT** apply more than 2 applications when applied at lower rates.
- Minimum retreatment interval 21 days.

# Late Season Postemergence (Lay-by Cotton 12 inches/20 inches tall for Pima S-2)

- **DO NOT** apply more than 1.2 gts/A (1.2 lbs ai/A) per application.
- **DO NOT** apply more than 1.2 qts/A (1.2 lbs ai/A) per year.
- DO NOT apply more than 2 applications per year when applied at lower rates.
- Minimum retreatment interval is 21 days.

# **Use Specific Restrictions for AZ and CA:**

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) per application.
- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) per year.
- DO NOT apply more than 1 application per year.

**Preplant—AZ and CA:** Use this product alone or apply as a separate operation following pre-plant broadcast treatment with trifluralin products (incorporated according to directions on product label). Apply this product as a broadcast spray after beds are formed, pre-irrigated and final seedbeds prepared. Prior to planting, drag-off the tops of the beds and plant in moist soil not treated with this product. Treated soil is returned to the bed after planting when irrigation furrows are reformed after Cotton has emerged. If more than two furrowing-out operations are made prior to lay-by or deep furrows are made early, weed control may be reduced in furrow bottoms. Use at the following rates:

This Product Alone (Pre-plant): 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A).

### This Product Following Trifluralin products:

Soil Texture	Rate Per Acre for This Product (qts/A)
Sandy loam, Loam, Silt loam, Silt	0.5 to 0.8 (0.5 to 0.8 lb ai/A)
Sandy clay loam, Clay loam, Silty clay loam Sandy clay, Clay	0.8 to 1.0 (0.8 to 1.0 lb ai/A)

**Pre-Plant— Except AZ, CA:** This product may be used for burndown of existing annual weeds and residual control of weeds prior to planting Cotton. Complete any planned tillage prior to application. Apply herbicide treatments before weeds germinate or before weed seedlings are more than 2 inches tall. If weeds are emerged prior to application, the addition of a non-ionic surfactant is advised. Avoid tillage following application to prevent incorporation of the herbicide into the Cotton seed germination zone which may result in crop injury. Dragging treated soil from beds will concentrate the herbicide in middles and reduce residual weed control on the beds.

Apply this product at 0.8 to 1.6 qts/A (lbs ai/A) from 15 to 45 days prior to anticipated planting. Refer to the table below for use rates in pre-plant applications. **DO NOT** exceed suggested use rates for individual soil textures shown in the table below. If less than the maximum rate of application for a given soil is applied pre-plant, subsequent pre-emergence applications of this product may be made. However, the total combined application rate for this product applied pre-plant and pre-emergence may not exceed the maximum suggested use rate for either application method.

#### This Product Alone:

Soil Texture	Rate Per Acre for This Product (qts/A)
Sandy loam, Loam, Silt loam, Silt	0.8 (0.8 lb ai/A)
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay	1.0 (1.0 lb ai/A)
Silty clay, Clay	1.6(1.6 lbs ai/A)

Pre-emergence application of herbicides with a similar mode of action to that of diuron following pre-plant application of this product may result in Cotton injury. When pre-plant applications of this product are followed by pre-emergence applications of herbicides with a similar mode of action, e.g., products containing fluometuron, use the product containing fluometuron at the minimum rate of application for the soil under consideration in order to reduce potential for crop injury. This is most critical where applications of this product are made less than 30 days pre-plant, on coarse textured soils and on soils low in organic matter. The risk of injury from pre-plant applications of this product is reduced where substantial rainfall (more than 0.5 inches) occurs between application and planting. Read and follow any additional use precautions on this product label when using this product for pre-plant weed control in Cotton.

**Pre-plant Tank Mixes:** When emerged weeds taller than 2 inches or weeds not listed on this label are present, this product may be tank-mixed with other products labeled for pre-plant applications in Cotton. The addition of dry spray grade ammonium sulfate at the rate of 2.0% w/w (17 pounds per 100 gallons finished spray solution) is suggested to enhance performance of this product plus glyphosate tank mixes. Replanting: Only Cotton and Corn may be planted within 6 months of pre-plant applications of this product. To avoid crop injury following replanting, avoid disturbing the original bed.

**Pre-emergence—Except AZ, CA:** Use this product alone or apply as a separate operation following pre-plant treatment with Trifluralin products. Apply this product after planting but before Cotton emerges. **DO NOT** treat Cotton in deep furrows as crop injury may result. Use only where Cotton is planted on flat or raised seedbeds. Shallow incorporation (no deeper than 0.25 inch) with a rotary hoe or similar equipment following planting usually improves results especially during dry weather. Use a wide press wheel on the planter to provide a level seedbed for subsequent early season post-emergence treatments. If moisture is insufficient to activate this product or if soil becomes crusted before crop emerges, make a shallow rotary hoeing (no deeper than 0.25 inch) before weeds become established.

**DO NOT** apply this product as pre-emergence following application of the maximum rate for a given soil applied pre-plant. If less than the maximum rate is used pre-plant, additional application of this product may be made at preemergence. However, the total amount of this product applied pre-plant and preemergence must not exceed the maximum suggested use rate for either pre-plant or pre-emergence applications.

**This Product Alone:** Make a single application as a broadcast or band spray using the following broadcast rates; for band treatment, use proportionately less.

Soil Texture	Rate Per Acre for This Product (qts/A)
Sandy loam, Loam, Silt loam, Silt	0.8 (0.8 lb ai/A)
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay	1.0 (1.0 lb ai/A)
Silty clay, Clay	1.6 (1.6 lbs ai/A)

**This Product Following Trifluralin products Pre-plant:** Apply Trifluralin product prior to planting as a broadcast or band treatment; incorporate according to directions on Trifluralin product label. As a separate operation, apply this product as a band treatment 14 to 20 inches wide after planting but before Cotton emerges. Use the following broadcast rates. For band treatment, use proportionately less.

Soil Texture	Rate Per Acre for This Product (qts/A)
Sandy loam, Loam, Silt loam, Silt	0.8 (0.8 lb ai/A)
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay, Clay	1.0 to 1.6 (1.0 to 1.6 lbs ai/A)

**Post-emergence:** Apply only as a directed spray to cover weed foliage; adjust nozzles to minimize contact of Cotton leaves with spray or drift or crop injury may result. Applications may also be made in hooded/shielded sprayers.

**Early Season:** Apply when Cotton is at least 6 inches tall and when weeds are actively growing and **DO NOT** exceed 2 inches in height. Apply as a band treatment at the following rates: for each 25 gallons of spray, add a surfactant. Two applications may be made if needed.

Annual Weed Problem (Up to 2 inches tall)		
Cotton Height	Rate Per Acre (qt)	
Cotton 6.0 to 8.0 inches	0.4 (0.4 lb ai/A)	
Cotton 8.0 to 12.0 inches	0.6 (0.6 lb ai/A)	

For control of seedling perennial grasses including, Johnsongrass and partial control of Nutsedge or when weed growth is under drought stress or over 2 inches high, add 1.65 to 2 pounds active MSMA to above spray mixture. If MSMA is used, **DO NOT** apply after first bloom. For enhanced weed control in hooded/shielded sprayer applications add MSMA as suggested above; or add registered paraquat or glyphosate formulations according to label specifications. Consult product labels for specific directions and precautions for hooded sprayer applications.

**Late Season (Lay-By):** Apply 0.8 to 1.2 qts/A (0.8 to 1.2 lbs ai/A) (0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) in AZ and CA) when Cotton is at least 12 inches tall (at least 20 inches tall for Pima S-2). For control of germinating weed

seedlings, apply to soil beneath Cotton plants and between rows immediately after last cultivation. In irrigated Cotton, best weed control is obtained if the field is irrigated within 3 to 4 days after application; thoroughly wet the surface of the ground over the row to carry the herbicide into the root zone of germinating weeds. Alternatively, for control of emerged annual weeds (up to 4 inches in height) at lay-by time, make a single application in combination with a surfactant or use 0.4 to 0.6 quart of this product (plus surfactant) per acre and repeat later if needed.

**Replanting:** If initial seeding fails to produce a stand, Cotton may be replanted in soil treated pre-emergence with this product alone or following pre-plant application of Trifluralin product. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation including, discing; **DO NOT** relist nor move soil into the original drill area. Plant seed at least 1 inch deep. **DO NOT** retreat field with a second pre-plant or pre-emergence application during the same crop year as injury to the crop may result.

#### Subsequent crops:

This Product—Type of Application	Crops That May Follow Treated Cotton
Band pre-emergence -OR- post-emergence	Any crop 4 months after last application.
Band pre-emergence plus post-emergence -OR- Broadcast pre-emergence (and pre-plant) -OR- Broadcast pre-emergence plus band post-emergence	Corn, Cotton, Grain sorghums (not Sorgos or Forage sorghums nor Grass sorghums) or Soybeans the next Spring. <b>DO NOT</b> replant treated areas to any other crop within 1 year after last application, as injury to subsequent crops may result.
Broadcast post-emergence (lay-by)	Corn, Cotton, Grain sorghums (not Sorgos or Forage sorghums nor Grass sorghums) the next Spring. <b>DO NOT</b> replant treated areas to any other crop within 1 year after last application, as injury to subsequent crops may result.

For subsequent crops in fields where Trifluralin product is used, follow instructions on Trifluralin product label(s).

# GRASS SEED CROPS (PERENNIAL EXCEPT WHERE SPECIFICALLY INDICATED) RESTRICTIONS:

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.
- Aerial application is limited only to the **Pacific Northwest**.
- Apply only to established plantings at least 1 year old, except as noted.
- DO NOT replant treated areas to any crop within 2 years of last application as injury to next crop may occur.
- DO NOT apply to snow covered or frozen ground as injury to the crop or poor weed control may result.
- DO NOT treat stands lacking in vigor due to poor fertility, environmental stress, insects, disease or damage from other herbicides.
- **DO NOT** apply to seedling alfalfa or alfalfa/grass mixtures.

#### Use Specific Restrictions for CO, KS, NM, OK

DO NOT apply after crop begins growth in the Spring as crop injury may result.

#### Use Specific Restrictions for Eastern OR, Eastern WA

DO NOT use on coarse (sand) textured soils.

#### Use Specific Restrictions for WA—perennial Ryegrass

DO NOT apply to perennial Ryegrass stands less than 1 year old.

**CO, KS, NM and OK:** On Sand bluestem, Side-oats grama and Switchgrass, apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) during the dormant period shortly before weed seedlings emerge. **DO NOT** apply after crop begins growth in the Spring as crop injury may result. In fields where ash residues have accumulated from burning straw, use 2.4 qts/A (2.4 lbs ai/A); spread unburned chaff or straw with a harrow or chopper before application.

**Eastern OR, Eastern WA:** On perennial Bluegrass and Fescue, apply 0.8 to 2.4 qts/A (0.8 to 2.4 lbs ai/A) as broadcast in enough diluent to get even distribution. Apply in Spring before rapid growth of the crop begins and when the Windgrass is still small (1 to 4 leaf). **DO NOT** use on coarse (sand) textured soils.

Western OR, Western WA: On Alta fescue, Astoria bentgrass, Highland bentgrass, Kentucky bluegrass (Merion bluegrass) and Orchardgrass, apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) between October 1 and November 15. In fields where ash residues have accumulated from burning straw, use 2.4 qts/A (2.4 lbs ai/A); spread unburned chaff or straw with a harrow or chopper before application. For best results, apply as soon as possible after Fall rains start. Remove established weeds (beyond 2- to 4-leaf stage) prior to treatment. Well-established vigorous stands of Spring-planted Alta fescue, Kentucky bluegrass and Orchardgrass may be treated the following Fall provided the crop is planted before April 1 and treatment is not applied before October 15; use 1.6 qts/A (1.6 lbs ai/A).

**WA:** Apply in the Fall to perennial Ryegrass to control weeds and seedling grasses including, annual bluegrass and volunteer ryegrass at the rate of 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) and to Tall fescue at the rate of 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A). Use a sufficient volume of water in minimum of 25 gallons per acre by ground and minimum of 5 gallons of water per acre by air, for thorough coverage of weed foliage. For best results, make applications at the onset of the Fall rains and before weeds have become established (typically October 1st through November 15th). Remove established weeds beyond the 2- to 4-leaf stage prior to treatment. Apply only to well established, vigorous stands. **DO NOT** apply to perennial Ryegrass stands less than 1 year old. Use mechanical agitation and avoid overlap of spray patterns. Weed control efficacy may be reduced in fields where ash residues have accumulated from burning straw.

Annual Ryegrass for the Creation of Rows: Apply 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) as a directed or shielded spray so the intended crop row area is not treated. Make these applications where excessive populations of annual Ryegrass are anticipated to volunteer from previous crops. Applications can be made as a directed/shielded spray during seeding or after emergence of annual Ryegrass. These applications generally will occur between October 1 and January 15. This product is most effective when applied before annual Ryegrass volunteer plants have more than 2 leaves. If larger plants are to be treated, addition of a labeled post-emergence herbicide will provide more effective control. Adjust nozzle heights and spacing to allow the establishment of the desired row width (generally about 3 inches) and spacing (generally 9 to 12 inches). Use of low pressure nozzles, shielded nozzles or drop nozzles to reduce spray movement into the intended crop row area is advised.

Fine Fescue Grass Seed Crops (including Chewings, Creeping red and Hard fescue types) for the suppression of Rattail fescue: Apply at 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) on soils having at least 1% organic matter. **DO NOT** use on Sand, Loamy sand, Gravelly soils or exposed subsoils.

Crop Stage and Application Timing: This product is for use on healthy, vigorous stands of Fine fescue. This product can be applied to stands established at least 1 year or to new plantings that have been established for at least 6 months and have a minimum of eight tillers at time of application. Apply in Fall before Grass weeds are beyond the 1- to 2-leaf stage and before broadleaf weeds are larger than 1 to 2 inches tall or across. Use the high end of the rate range for large weeds or where weed populations are high. Approximately 0.5 to 1 inch of rainfall or sprinkler irrigation is needed to move this product in the weed zone before weeds develop an established root system. Weeds larger than the size indicated or those having a well-established root system before this product is properly activated by rainfall/irrigation may not be adequately controlled. Weed control may be reduced by heavy straw residues or ash from field burning.

**Tank Mixes and Sequential Treatments:** This product can be applied either alone or in a program involving tank mixes and/or sequential treatments with other herbicides and adjuvants. When using as tank mix with other herbicides, use 0.8 to 1.2 qts/A (0.8 to 1.2 lbs ai/A) unless prior experience indicates it is safe to use higher rates. Tank mixes with other herbicides can increase the risk of crop injury. When using certain tank mixes for the first time, limit use to a small area to determine safety before treating large areas.

**ID, OR, WA:** Use in newly planted Bentgrass, Chewing fescue, Kentucky bluegrass, perennial Ryegrass, Orchardgrass and Tall fescue. During planting operation, spray a suitable brand of activated charcoal as a 1-inch band on soil surface at a rate of 300 pounds per acre (broadcast basis; equivalent to 15 pounds per acre of crop when row spacing is 20 inches). Mount nozzles to apply directly over seed rows to prevent crop injury. Follow with this product as a single broadcast spray at a rate of 2 to 2.4 qts/A (2 to 2.4 lbs ai/A). Apply as soon as possible after planting, but before crops or weeds emerge and before rains or sprinkler irrigation. Fall or Spring plantings may be treated. Best results usually occur with early Fall plantings. Treatment will not control Downy brome or Wild oats.

# PERENNIAL RYEGRASS, TALL FESCUE, KENTUCKY BLUEGRASS AND FINE FESCUE (GROWN FOR SEED)—OR ONLY

#### **RESTRICTIONS:**

- DO NOT apply this product through any type of irrigation system.
- Aerial application is limited only to the Pacific Northwest.
- DO NOT apply more than 1 application per year.

#### Use Specific Restrictions for Perennial Ryegrass (Established):

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) per application.
- **DO NOT** apply more than 1.6 gts/A (1.6 lbs ai/A) per year.

# **Use Specific Restrictions for Tall Fescue (Established)**

- DO NOT apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.

# Use Specific Restrictions for Kentucky Bluegrass (Established stands East of the Cascade Mountains)

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- **DO NOT** use on *Poa trivialis* grass seed varieties.

# Use Specific Restrictions for Fine Fescue, OR Only (Illahee, Rainier, Chewings and related varieties including Hard fescue) (Established stands West of the Cascade Mountains)

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT use this product more than two years in succession in the same field.

#### Use Specific Restrictions for Established Perennial Bluegrass (ID and WA only)

- DO NOT apply more than 1.0 qts/A (1.0 lbs ai/A) of this product per application.
- DO NOT apply more than 1.0 qts/A (1.0 lbs ai/A) of this product per year.
- DO NOT use on coarse (sandy) textured soils.

For control of certain Broadleaf weeds and annual grasses apply this product only to well-established vigorous stands of grasses as directed below. Use sufficient water, a minimum of 25 gallons per acre, for thorough coverage of weed foliage. For best results, make application at the onset of Fall rains and before weeds become established (typically October 1 through November 15). Weeds beyond the 2- to 4-leaf stage will usually not be controlled. Use higher rates within the range listed when treating larger weeds and heavier weed infestation.

Weed control may be reduced where straw or ash residues have accumulated on the soil surface. Lack of moisture to activate the herbicide may reduce weed control. Tank mixtures or sequential treatments with other herbicides may reduce crop tolerance and increase risk of crop injury. When using this product in a tank mix or in a sequential treatment with other herbicides, **DO NOT** use the maximum rates listed below unless compatibility and the potential for phytotoxicity have been evaluated. Crop tolerance may be reduced and the likelihood of crop injury may increase when crop is under stress caused by weather, diseases and insects.

**Perennial Ryegrass (Established):** Apply 0.8 to 1.6 qts/A (0.8 to I.6 lbs ai/A) per year (October 1 through mid-January) to control Seedling grasses and Broadleaf weeds including, Annual bluegrass and others named on the product label.

**Tall Fescue (Established):** Apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) per year (October 1 through mid-January) to control Seedling grasses and Broadleaf weeds including, Rattail fescue and others named on the product label. **DO NOT** apply more than 1 application per year. Aerial applications are limited to the Pacific Northwest.

**Kentucky Bluegrass (Established stands East of the Cascade Mountains):** Apply 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A) per year (October 1 through mid-January) for suppression of Rattail fescue and certain other Seedling grasses and Broadleaf weeds named on the product label. Downy brome is not controlled. **DO NOT** use on *Poa trivialis* grass seed varieties.

Fine Fescue (Illahee, Rainier, Chewings and related varieties including Hard fescue) (Established stands West of the Cascade Mountains): Apply 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) for suppression of Rattail fescue and certain other Seedling grasses and Broadleaf weeds named on the product label. Make only 1 application per year. **DO NOT** use this product more than two years in succession in the same field.

# ESTABLISHED PERENNIAL BLUEGRASS (GROWN FOR SEED) (ID AND WA ONLY) RESTRICTIONS:

- **DO NOT** apply more than 1.0 qt/A (1.0 lb ai/A) of this product per application.
- DO NOT apply more than 1.0 qt/A (1.0 lb ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- **DO NOT** use on Coarse (Sandy) textured soils.
- **DO NOT** apply this product through any type of irrigation system.

Broadcast 0.4 to 1.0 quart of this product per acre in enough diluent to get even distribution. Apply in Spring before rapid growth of Bluegrass begins and when Windgrass is still small (1- to 4-leaf).

# OATS (DRILL PLANTED)

#### **RESTRICTIONS:**

#### Preemergence/Postemergence/Directed/Ground:

- **DO NOT** apply more than 1.2 qts/A (1.2 lbs ai/A) of this product per application in year in ID, Eastern OR and Eastern WA.
- **DO NOT** apply more than 1.2 qts/A (1.2 lbs ai/A) of this product per year in ID, Eastern OR and Eastern WA.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.

#### **Preemergence/Broadcast or Band/Ground:**

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in Western OR and Western WA.
- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year in Western OR and Western WA.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.
- **DO NOT** replant treated areas to any crop within one year after last application as injury to subsequent crops may result.

**Drill-Planted Spring Oats—ID, Eastern OR, Eastern WA:** Use in areas where average annual rainfall exceeds 16 inches. Make a single application of 0.8 to 1.2 qts/A (0.8 to 1.2 lbs ai/A) after planting, either before or after Oats emerge but within 6 weeks of planting. Best results are usually obtained when application is made 3 to 4 weeks after planting. Apply before weeds are 3 to 4 inches tall.

**Drill-Planted Winter Oats and Mixtures with Peas or Vetch—Western OR and Western WA**: Make a single application of 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) as soon as possible after planting but before emergence of the crop.

#### PEAS, AUSTRIAN FIELD—WESTERN OR

#### **RESTRICTIONS:**

#### Preemergence/Broadcast or Band/Ground:

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- AERIAL APPLICATION IS PROHIBITED.
- **DO NOT** use this product on Sand, Sandy loam, Gravelly soils or exposed subsoils or on soils having less than 1% organic matter as crop injury may result.
- **DO NOT** replant treated area to another crop within one year of application.

This product is for selective control of certain weeds in Austrian field peas.

Apply 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) of this product as a broadcast spray with air or ground equipment as soon as possible after planting but before crop emerges for control of weeds including, Annual bluegrass, Chickweed, Fiddleneck, Lambsquarter, Pigweed, Shepherdspurse and Wild mustard. Use lower rate on coarse-textured soils and higher rate on fine-textured soils.

Crop injury may result if severe winter stress, disease or insect damage to the crop follows application.

# PEPPERMINT TOPS—PACIFIC NORTHWEST

#### **RESTRICTIONS:**

#### **Preemergence/Dormant Broadcast or Band/Ground:**

- AERIAL APPLICATION IS PROHIBITED.
- Maximum single application rate:
  - Soils with 1 to 2% organic matter: **DO NOT** apply more than 0.8 qt/A (0.8 lb ai/A) of this product per application.
  - Soils 2.1 to 3% organic matter: DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
  - Soils > 3% organic matter: **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- Maximum annual application rate:
  - Soils with 1 to 2% organic matter: DO NOT apply more than 0.8 qt/A (0.8 lb ai/A) of this product per year.
  - Soils 2.1 to 3% organic matter: DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
  - Soils > 3% organic matter: **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) per of this product year.
- DO NOT apply more than 1 application per year.
- DO NOT cultivate after application.
- Applications can only be made to stands established for one year.
- **DO NOT** apply to stands of mint suffering from stress due to low fertility, drought, winter injury, insects, disease or damage from other herbicides or other causes.
- DO NOT apply to snow covered or frozen ground as injury to the crop or poor weed control may result.
- DO NOT apply to Sand, Loamy sand, Gravelly soils or exposed subsoils.
- **DO NOT** apply to soils that have a high salt content and/or high water table or poor drainage that retards Mint root development resulting in a shallow root system.
- **DO NOT** apply to soils having less than 1% organic matter.

# Use Rates:

Rate of This Product Per Acre		
1-2% Organic Matter	2.1-3% Organic Matter	More than 3% Organic Matter
0.6 to 0.8 qt (0.6 to 0.8 lb ai/A)	0.8 to 1.6 qts (0.8 to 1.6 lbs ai/A)	1.6 to 2.4 qts (1.6 to 2.4 lbs ai/A)

**Application Timing:** Apply this product to established stands of Mint at least one year during the late Winter dormant period or after flaming in the Spring prior to the emergence of new growth. **DO NOT** cultivate after application. If weeds are present at the time of application, the use of a surfactant at 0.25% v/v or crop oil concentrate at 1.0% v/v may be used to increase the performance of this product post-emergence to weeds.

**Tank Mixes and Sequential Treatments:** This product can be applied either alone or in a program involving tank mixes and/or sequential treatments with other herbicides and adjuvants providing this product is not applied to actively growing Mint plants.

When using a tank mix with other herbicides, use the lower end of the rate range of this product unless prior experience indicates it is safe to use higher rates. Tank mixes and sequential treatments with other herbicides can increase the risk of crop injury. When using a certain tank mix or sequential treatment for the first time, limit use to a small area to determine safety before treating large areas.

# RED CLOVER—WESTERN OR RESTRICTIONS:

#### Dormant/Broadcast/Ground:

- **DO NOT** apply more than 1.6 gts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- Application made only to stands established at least 9 months.
- **DO NOT** apply to seedling Red clover.
- **DO NOT** replant treated area to any crop within one year after last application, as injury to subsequent crops may result.
- AERIAL APPLICATION IS PROHIBITED.

Make a single application of 1.6 qts/A (1.6 lbs ai/A) on established Red clover stands (at least 9 months). Apply this product when Red clover is dormant (October 15 to December 15). Treatment will control annual weeds including, Bluegrass, Chickweed, Hawksbeard, Rattail fescue, Ryegrass and Velvetgrass.

# SORGHUM-GRAIN—SOUTHWESTERN STATES RESTRICTIONS:

#### Postemergence/Direct Spray/Ground:

- Broadleaves that are 2 inches: **DO NOT** apply more than 0.2 qt/A (0.2 lb ai/A) of this product per application.
- Grasses/Broadleaves that are 2-4 inches: **DO NOT** apply more than 0.4 qt/A (0.4 lb ai/A) of this product per application.
- **DO NOT** apply more than 0.4 qt/A (0.4 lb ai/A) of this product per year.
- For Broadleaves: DO NOT apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval 30 days.
- Do not treat weeds under drought stress.
- DO NOT SPRAY OVER TOP OF SORGHUM.
- **DO NOT** replant treated areas to crops other than Corn or Cotton within 4 months following band treatment and 6 months following broadcast treatment as crop injury may result.
- AERIAL APPLICATION IS PROHIBITED.

Apply 0.2 to 0.4 qt/A (0.2 to 0.4 lb ai/A). Add a surfactant. Apply as a directed post-emergence broadcast or band spray after Sorghum is 15 inches tall to control weeds 2 to 4 inches in height. Use the lower rate on Broadleaf weeds up to 2 inches tall; use the higher rate on grasses up to 2 inches and Broadleaf weeds up to 4 inches tall. When the lower rate is used, a second application may be made, if needed, provided the amount applied in one crop year does not exceed 0.4 qt/A (0.4 lb ai/A). Treatment of weeds under drought stress is usually ineffective.

#### **SUGARCANE**

#### **RESTRICTIONS:**

• **DO NOT** treat Sugarcane growing on thinly covered subsoils or rocky areas as crop injury may result.

# Preemergence/Broadcast/Band/Ground or Aerial:

### **Use Specific Restrictions for FL**

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per year inclusive of all applications (preemergence and postemergence) between planting (or ratooning) and harvest.
- **DO NOT** apply more than 1 preemergence application per year.

#### Postemergence/Direct Spray/Ground or Aerial:

#### **Use Specific Restrictions for FL**

- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per postemergence application.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) postemergence of this product.
- **DO NOT** make more than 2 postemergence applications per year.
- Minimum retreatment interval is 30 days.
- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per year inclusive of all applications (preemergence and postemergence) between planting (or ratooning) and harvest.

#### **Use Specific Restrictions for HI**

- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per application.
- **DO NOT** apply more than 9.6 qts/A (9.6 lbs ai/A) of this product per year.
- **DO NOT** apply more than 3 applications per year when using reduced rates.
- Minimum retreatment interval 30 days.

#### **Use Specific Restrictions for PR**

- **DO NOT** apply more than 5.0 qts/A (5.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 8.0 qts/A (8.0 lbs ai/A) of this product per year.
- **DO NOT** apply more than 3 applications per year when using reduced rates.
- Minimum retreatment interval 30 days.

# Use Specific Restrictions for LA, TX

- **DO NOT** apply more than 3.0 qts/A (3.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 3.0 qts/A (3.0 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

To prevent possible crop injury on new cane varieties, determine tolerance to this product prior to adoption as field practice. **DO NOT** treat Sugarcane growing on thinly covered subsoils or rocky areas as crop injury may result. Temporary chlorosis of the crop may result from application over emerged cane. Make application over emerged cane only as directed below, without the addition of a surfactant or crop oil concentrate. To minimize chlorosis and stunting, use directed post-emergence sprays.

**FL** (**Pre-emergence**): Apply 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A) as a broadcast or band spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop) for high organic soils.

**FL** (**Post-emergence**): Make 1 or 2 applications of 1.6 qts/A (1.6 lbs ai/A) as needed by directed spray interrow. Alternatively, for Panicum control, make up to 3 applications of 0.4 to 0.8 qt/A (0.4 to 0.8 lb ai/A) plus surfactant as a directed spray after cane has emerged but before Panicum exceeds 2 inches in height. Adjust nozzles to spray beneath cane plants and between rows to cover weed foliage and to minimize contact of cane leaves with spray or drift. **DO NOT** apply more than a total of 4.8 qts/A (4.8 lbs ai/A) between planting (or ratooning) and harvest.

**HI:** Apply 1.6 to 4.8 qts/A (1.6 to 4.8 lbs ai/A) as a broadcast spray prior to weed emergence after planting or after harvesting plant crop or ratoon crop. Sequential applications of 1.6 to 3 qts/A (1.6 to 3 lbs ai/A) may be made as a broadcast spray over emerged cane or by directed spray inter-row. If weeds are emerged, add a surfactant to spray mixture at the rate of 1 to 2 quarts per 100 gallons and apply as a directed spray.

**DO NOT** apply more than 3 treatments nor more than 9.6 qts/A (9.6 lbs ai/A) in Hawaii between planting (or ratooning) and harvest. Treated areas may be replanted to Sugarcane or Pineapple 1 year after last application.

**Puerto Rico:** Apply 3.2 to 5 qts/A (3.2 to 5 lbs ai/A) as a broadcast spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop). A second and third application of 1.6 to 3.2 qts/A (1.6 to 3.2 lbs

ai/A) may be made as a broadcast spray over emerged cane or by directed spray inter-row. If weeds are emerged, add a surfactant to the spray per 100 gallons and apply as a directed spray. **DO NOT** apply more than 3 treatments, nor more than 8 qts/A (8 lbs ai/A) between planting (or ratooning) and harvest. Treated areas may be replanted to Pineapple or Sugarcane one year after last application.

**LA, TX:** Apply 2.4 to 3 qts/A (2.4 to 3 lbs ai/A). This product may be applied as a broadcast spray after planting and following the harvesting of Sugarcane. This product may also be applied broadcast in late Winter. Application is best when made prior to weed emergence.

Apply this product as a post-directed spray immediately after the last cultivation. Direct the spray application to the base (no more than one-third of the plant height) of the Sugarcane plants. When small weeds (3 inches or less) are present at application, add a surfactant at 0.25% v/v or crop oil concentrate at 1% v/v to the spray mix.

**USE PRECAUTIONS:** Temporary leaf yellowing may occur following application. For band application, reduce the above broadcast rates proportionately to the width of the band using the following formula:

Band width in inches

Row width in inches

X Broadcast Rate = Band Rate Per Acre

# WHEAT (WINTER)

#### **RESTRICTIONS:**

- **DO NOT** treat Wheat plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity or other causes.
- Unless otherwise specified, DO NOT use with surfactants or nitrogen solutions.
- **DO NOT** replant treated areas to any other crop within 1 year after last treatment (except as noted) as injury to subsequent crops may result.
- DO NOT retreat field with a second application during the same crop year as injury to the crops may
  result.
- **DO NOT** use on Sand or Loamy sand soils nor on Gravelly or Sand loams low in organic matter (less than 1%), nor on thinly covered or exposed subsoil areas (clay knolls).
- **DO NOT** treat Wheat planted less than 1 inch deep.
- DO NOT treat Wheat where Winter climatic conditions have caused "heaving" of plants.

#### Preemergence/Postemergence/Broadcast or Band/Ground of Aerial:

#### Use Specific Restrictions for ID, OR, WA—East of Cascade Range

- DO NOT apply more than 1.2 qts/A (1.2 lbs ai/A) of this product per application.
- DO NOT apply more than 1.2 gts/A (1.2 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- DO NOT apply after Wheat has reached the "boot" stage of maturity.

# Use Specific Restrictions for OR, WA—West of Cascade Range; Other Areas

- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 1.6 gts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- Applications after wheat reaches the "boot" stage is prohibitive.

#### Postemergence/Broadcast or Band/Ground or Aerial:

# Use Specific Restrictions for KS, OK, TX

Silt, silt-loam soils:

- **DO NOT** apply more than 0.8 qts/A (0.8 lbs ai/A) of this product per application.
- **DO NOT** apply more than 0.8 gts/A (0.8 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

Clay, Clay loam soil

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

### Use Specific Restrictions for Central Plains, Midwest

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.

#### **Use Specific Restrictions for Northeast**

- **DO NOT** apply more than 1.2 qts/A (1.2 lbs ai/A) of this product per application.
- DO NOT apply more than 1.2 qts/A (1.2 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

Crop injury may result where severe Winter stress, disease or insect damage follows application. Wintersensitive varieties may be less tolerant of this product than Winter-hardy varieties. Crop injury may also result from failure to observe the following: **DO NOT** use on Sand or Loamy sand soils nor on Gravelly or Sand loams low in organic matter (less than 1%), nor on thinly covered or exposed subsoil areas (clay knolls); **DO NOT** treat Wheat planted less than 1 inch deep; **DO NOT** treat Wheat where Winter climatic conditions have caused "heaving" of plants; **DO NOT** treat Wheat plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity or other causes; **DO NOT** apply after Wheat has reached the "boot" stage of maturity. Unless otherwise specified, **DO NOT** use with surfactants or nitrogen solutions. **DO NOT** replant treated areas to any other crop within 1 year after last treatment (except as noted) as injury to subsequent crops may result.

**ID, OR and WA (East of Cascade Range):** In areas where average annual rainfall exceeds 16 inches, make a single application of 0.8 to 1.2 qts/A (0.8 to 1.2 lbs ai/A). **Fall Treatment:** For early Fall-planted Wheat (seeded before September 10), apply 3 to 6 weeks after planting but before weeds are 3 to 4 inches tall. Treatment after October 1 has generally given best results. Make application after soil freezes in the Fall. **DO NOT** treat wheat planted in late October until the following Spring. **Spring Treatment:** Apply as soon as Wheat starts to grow in the Spring. Treatment made prior to April 10 will usually give good results provided weed growth is less than 4 inches tall. Application later than May 1 may give poor results. Alternatively, make a single application of 0.4 to 0.8 quart of this product plus bromoxynil according to labeled rates as a tank mixture, either in the Fall after Wheat has emerged but before soil freezes or in the Spring as soon as soil thaws; apply before weeds are 2 inches tall or across. In areas where average annual rainfall is 10 to 16 inches, following Fall planting, make a single application of 0.8 to 1.2 qts/A (0.8 to 1.2 lbs ai/A) when sufficient moisture is available to germinate Wheat seed. Apply before soil freezes and before weeds are 2 inches tall. Application later than March 1 may give poor results.

**NOTE:** If Fall-planted Wheat fails to grow due to Winter kill or adverse growing conditions after Fall treatment, only fields treated before November 1 may be replanted to Spring Wheat. **DO NOT** plant wheat before April 1 and only after deep discing and plowing to a depth of 4 to 6 inches prior to planting. **DO NOT** retreat field with a second application during the same crop year as injury to the crop may result.

**OR and WA—West of Cascade Range:** Make a single application of 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) as soon as possible after planting; if Wheat and weeds have emerged, apply before weeds are 3 to 4 inches tall. Alternatively, apply a tank mixture of this product plus bromoxynil as detailed above for "East of Cascade Range".

**Other Areas of OR and WA:** Make a single application in the Spring as soon as Wheat (Fall-planted) starts to grow and before weeds are 2 inches tall. Application later than May 1 may give poor results.

Central Plains and Midwest: Use 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A).

**KS, OK and TX: DO NOT** use on Sand or Sandy loam soils. Use 0.8 qt/A (0.8 lb ai/A) on Silt and Silt loam soils and 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) on Clay, Clay loam and Silty clay loam soils.

**Northeast:** Use 0.8 to 1.2 gts/A (0.8 to 1.2 lbs ai/A).

# FRUIT AND NUT CROPS (See Soil Limitations)

AERIAL APPLICATION IS PROHIBITED.

Unless otherwise directed, make a single application per year as directed spray, avoiding contact of foliage and fruit with spray or drift. **DO NOT** graze livestock in treated orchards or groves.

#### **APPLES**

#### **RESTRICTIONS:**

# Postemergence/Broadcast, Directed or Band/Ground:

- AERIAL APPLICATION IS PROHIBITED.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- Maximum split application rate: **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product at dormancy plus a second application of 1.6 qts/A (1.6 lbs ai/A) post-harvest.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 90 days.
- Use only under trees established in the orchard for at least 1 year.
- **DO NOT** treat varieties grafted on full-dwarf root stocks.

# Use Restrictions when Applied with Terbacil

- Use only under trees established in the orchard for at least 2 years.
- **DO NOT** treat trees planted in the bottom of irrigation furrows, nor trees grown under flat flood or basin irrigation, as injury to trees may result.
- Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above waterline), apply only as a band treatment.

Use this product alone or apply as a tank mix with Terbacil.

This Product Applied Alone: Use only under trees established in the orchard for at least 1 year; **DO NOT** treat varieties grafted on full-dwarf root stocks. Apply 3.2 qts/A (3.2 lbs ai/A) in the Spring (March through May). In the Far West, apply 3.2 qts/A (3.2 lbs ai/A) to small weeds less than 2 inches in height or diameter under dormant trees or apply 1.6 qts/A (1.6 lbs ai/A) as a post-harvest treatment followed by 1.6 qts/A (1.6 lbs ai/A) prior to bud break.

**GA:** Apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) in the Spring. Repeat application in the Fall but **DO NOT** use more than 3.2 qts/A (3.2 lbs ai/A) per year. Add a surfactant to improve control of small, emerged weeds.

**This Product plus Terbacil:** Use only under trees established in the orchard for at least 2 years. Apply either in the Spring or after harvest in the Fall before weeds emerge or during early seedling stage of weed growth.

	Rate Per Acre	
Soil Texture	1-2% Organic Matter	More than 2% Organic Matter
Sandy loam	0.8 qt/A (0.8 lb ai/A)	1.2 qts/A (1.2 lbs ai/A)
Loam, Silt loam, Silt	1.2 qts/A (1.2 lbs ai/A)	1.6 qts/A (1.6 lbs ai/A)
Clay loam, Clay	1.6 qts/A (1.6 lbs ai/A)	1.6 qts/A (1.6 lbs ai/A)

Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above waterline), apply only as a band treatment. **DO NOT** treat trees planted in the bottom of irrigation furrows, nor trees grown under flat flood or basin irrigation, as injury to trees may result. Where complete weed control to harvest is desired, additional weed control measures may be required during the year.

# **BANANAS AND PLANTAINS**

#### **RESTRICTIONS:**

#### **New plantings**

# Preemergence (to weed emergence)/Broadcast and Band/Ground:

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

#### Established plantings

# Postemergence/Broadcast or Band/Ground:

- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per application.
- **DO NOT** apply more than 9.6 qts/A (9.6 lbs ai/A) of this product per year.

- **DO NOT** apply more than 2 applications per year.
- Minimum retreatment interval is 45 days.
- DO NOT apply to loose soil directly over the planting material.
- **DO NOT** replant treated area to any crop within 2 years after last application as injury to subsequent crops may result. Exception: Sugarcane or Pineapple may be planted after 1 year.

**New Plantings:** To control annual weeds, apply 1.2 to 2.4 qts/A (1.2 to 2.4 lbs ai/A) after planting but before weeds or crop emerge. **DO NOT** apply to loose soil directly over the planting material.

**Established Plantings:** For control of annuals and for top-kill of Perennials including, Bermudagrass, Birdseed grass and Guineagrass, apply 2.4 to 4.8 qts/A (2.4 to 4.8 lbs ai/A) plus a surfactant. Avoid contact of plants with spray or drift as injury may result. When tall, dense weed growth is present, remove weed growth before application. If application is made to soil free of weeds, omit the surfactant from the spray. Repeat treatment as needed. Apply at 6-week intervals or longer but no more than a total of 9.6 qts/A (9.6 lbs ai/A) (broadcast basis) in a 12-month period. **DO NOT** replant treated area to any crop within 2 years after last application as injury to subsequent crops may result. Exception: Sugarcane or Pineapple may be planted after 1 year.

# BLUEBERRIES, CANEBERRIES AND GOOSEBERRIES RESTRICTIONS:

- Use only in fields which have been established for at least 1 year.
- **DO NOT** apply to Berries interplanted with fruit trees.
- **DO NOT** apply to plants whose roots are exposed as injury may result.

#### Postemergence/Band/Ground:

# Use Specific Restrictions for AR, FL, GA, MS, MO, NC, NH, SC—Blueberries

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Minimum retreatment interval is 90 days.

#### Use Specific Restrictions for IN, MI and OH—Blueberries

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- Maximum split application rate (as needed):**DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in the Fall and repeat application of 1.6 qts/A (1.6 lbs ai/A) in the Spring.
- DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- **DO NOT** apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 90 days.

#### Use Specific Restrictions for IN, MI, OH—Raspberries

- DO NOT apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

# Use Specific Restrictions for MA, ME—Blueberries

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

# Use Specific Restrictions for MD, NJ—Blueberries

- DO NOT apply more than 2.0 qts/A (2.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.0 gts/A (2.0 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

# Use Specific Restrictions for CA—Raspberries, Blackberries, Boysenberries, Dewberries and Loganberries

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 90 days.

# Use Specific Restrictions for Western OR and Western WA—Blueberries, Caneberries and Gooseberries

- DO NOT apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 90 days.

Use only in fields which have been established for at least 1 year. **DO NOT** apply to Berries interplanted with fruit trees. **DO NOT apply to plants whose roots are exposed as injury may result.** Apply as a band treatment at base of canes or bushes. For Spring application, apply before germination and growth of annual weeds.

AR, FL, GA, MS, MO, NC, NH, SC—Blueberries: Apply 1.2 to 1.6 qts/A (1.2 to 1.6 lbs ai/A) in the Spring and repeat treatment after harvest in the Fall. Add surfactant to the spray mixture to improve control of small, emerged weeds.

**IN, MI and OH—Blueberries:** Apply 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A) in late Spring. Alternatively, apply 1.6 qts/A (1.6 lbs ai/A) in the Fall and repeat at same rate in the Spring.

IN, MI, OH—Raspberries: Apply 2.4 qts/A (2.4 lbs ai/A) in the late Spring.

MA, ME—Blueberries: Apply 1.6 qts/A (1.6 lbs ai/A) in late Spring.

**MD**, **NJ—Blueberries**: For control of Winter annuals, apply 1.6 qts/A (1.6 lbs ai/A) in October to December or a single application of 2 qts/A (2 lbs ai/A) may be applied in early to mid-Spring.

**CA—Raspberries, Blackberries, Boysenberries, Dewberries and Loganberries:** For control of Winter annuals, apply 1.6 qts/A (1.6 lbs ai/A) in October or November. Repeat at same rate in late Spring to control Summer annuals. A single application of 2.4 qts/A (2.4 lbs ai/A) in January or February will control both Winter and Summer annuals in some areas, but the separate Fall and Spring schedule is preferred.

Western OR and Western WA—Blueberries, Caneberries and Gooseberries: For control of Winter annual weeds, apply 1.6 qts/A (1.6 lbs ai/A) in October or November. Repeat at the same rate in late Spring to control Summer annuals. A single application of 2.4 qts/A (2.4 lbs ai/A) in January or February will control both Winter and Summer annuals in some areas, but the separate Fall and Spring schedule is preferred.

CITRUS FRUIT, INCLUDING CALAMONDIN, CITRUS CITRON, CITRUS HYBRIDS (CHIRONJA, TANGELO, TANGOR), GRAPEFRUIT, KUMQUAT, LIME, MANDARIN (TANGERINE), ORANGE, PUMMELO, STATSUMA MANDARIN

#### **RESTRICTIONS:**

AERIAL APPLICATION IS PROHIBITED.

#### Postemergence/Broadcast or Band/Ground:

#### Use Specific Restrictions for Citrus (Flatwood, FL area)

- **DO NOT** apply more than 6.4 qts/A (6.4 lbs ai/A) of this product per application.
- DO NOT apply more than 6.4 qts/A (6.4 lbs ai/A) this product per year.
- **DO NOT** apply more than 2 applications per year when using reduced rates.
- For Trees < 4 years: Minimum retreatment interval is 60 days.
- For Trees > 4 years: Minimum retreatment interval is 80 days.

#### **Use Specific Restrictions for Citrus (Other than Flatwood, FL area)**

- DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- **DO NOT** apply more than 6.4 qts/A (6.4 lbs ai/A) this product per year.
- **DO NOT** apply more than 2 applications per year when applied at the lower rate, but **DO NOT** apply more than the maximum annual rate.
- For Trees < 4 years: Minimum retreatment interval is 60 days.</li>
- For Trees > 4 years: Minimum retreatment interval is 80 days.
- Use only as a band application. **DO NOT** use "Trunk to Trunk".

# Use Specific Restrictions for Highly Permeable Soils

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per year inclusive of all diuron formulations used with 1 year.
- **DO NOT** apply more than 2 application per year when applied at the lower rate, but **DO NOT** apply more than the maximum annual rate.

# Use Specific Restrictions for AZ (except Yuma area) and CA (except Imperial and Coachella Valleys)

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application
- Maximum split application rate (as needed): DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in the Fall with a repeat application of 1.6 qts/A (1.6 lbs ai/A) of this product in the Spring.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year inclusive of all diuron formulations used within 1 year.
- **DO NOT** apply more than 2 applications per year when applying at a lower rate.
- Minimum retreatment interval is 150 days.

#### **Use Specific Restrictions for PR**

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- Maximum split application rate (as needed): **DO NOT** apply more than **3.2** qts/A (3.2 lbs ai/A) of this product per application followed by a repeat application of 3.2 qts/A (3.2 lbs ai/A) of this product.
- DO NOT apply more than 6.4 qts/A (6.4 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year
- In bedded groves, **DO NOT** treat water furrows between the beds as injury to the trees may result.
- Minimum retreatment interval is 120 days.

#### **Use Specific Restrictions for TX**

- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- **DO NOT** apply more than 6.4 qts/A (6.4 lbs ai/A) of this product) per year.
- DO NOT apply more than 2 applications per year.
- Minimum retreatment interval is 120 days.

Time application as indicated for specific areas. However, application may be made any time of the year where sprinkler or flood irrigation can be timed to activate the herbicide. Established Perennial weeds require other special control procedures.

This product may be applied in Citrus in combination with Boa, and other labeled paraquat formulations, and in combination with registered paraquat and glyphosate formulations. Read and follow specific label instructions, precautions and restrictions on the label of the tank mix partner when applying this product in combination with other products. Always follow the most restrictive label.

**NOTE:** For trees 4 years of age or less, **DO NOT** make more than 2 applications per year. Allow a minimum of 60 days between applications when this product is used in a sequential program. For trees 4 years of age or more **DO NOT** make more than 2 applications per year. Allow a minimum of 80 days between applications when this product is used in a sequential treatment program.

**AZ** (except Yuma area) and CA (except Imperial and Coachella Valleys): Apply 2.4 to 3.2 qts/A (2.4 to 3.2 lbs ai/A) shortly after grove has been laid-up in final form (no-tillage program) in late Fall or early Winter. Alternatively, apply 1.6 qts/A (1.6 lbs ai/A) in October or November and repeat at the same rate in March or April. Subsequent annual applications of 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) will usually give adequate weed control.

**FL:** Use only as a band application. **DO NOT** use "Trunk to Trunk". **East Coast/Flatwoods Areas (Low permeable soils):** Apply from 1.6 qts/A (1.6 lbs ai/A) to a maximum of 6.4 qts/A (6.4 lbs ai/A) for control of Annual broadleaf weeds and Annual grasses. Addition of an approved surfactant will improve control of emerged weeds. **DO NOT** apply more than 6.4 qts/A (6.4 lbs ai/A) per treated acre in any one application. **DO NOT** apply more than 6.4 qts/A (6.4 lbs ai/A) per treated acre per year inclusive of all diuron formulations used within 1 year. **Ridge Areas, except Highland Co. (Highly permeable soils):** Apply from 1.6 qts/A (1.6 lbs ai/A) to a maximum of 3.2 qts/A (3.2 lbs ai/A) for control of Annual broadleaved weeds and Annual grasses. Addition of an approved surfactant will improve control of emerged weeds.

Ridge Areas, Highland Co. (Highly permeable soils): Apply from 1.6 qts/A (1.6 lbs ai/A) to a maximum of 3.2 qts/A (3.2 lbs ai/A) for control of Annual broadleaved weeds and Annual grasses. Addition of an approved surfactant will improve control of emerged weeds.

**Puerto Rico:** Make a single application of 3.2 qts/A (3.2 lbs ai/A) per application or apply 2.4 to 3.2 qts/A (2.4 to 3.2 lbs ai/A) followed by the same rate 4 to 6 months later. On bearing Citrus, apply any time when seasonal rains are expected. On nonbearing trees, apply when Winter banks are pulled down. For control of Guineagrass, Loosestrife, Maidencane, Paragrass, Primrose willow and Seamyrtle in ditches adjacent to Citrus groves, use 2.3 fl. ozs. per 1,000 square feet (3.2 lbs. ai per acre) in sufficient water (minimum 4 gallons per 1,000 square feet) to provide thorough and uniform coverage. Apply in the Spring before weed growth starts or after removal of vegetation. Repeat treatment on a spot basis to control hard-to-kill species including, Guineagrass.

**TX:** Apply 1.6 to 3.2 (1.6 to 3.2 lbs ai/A) for annual weeds. Use 3.2 qts/A (3.2 lbs ai/A) for control of Johnsongrass seedlings. Best results accompany application in the Spring. Eliminate well-established weeds by cultivation prior to treatment.

#### FILBERTS—EXCEPT CA

#### **RESTRICTIONS:**

#### Postemergence/Directed Spray/Ground:

- **DO NOT** apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application
- Maximum split application rate (as needed):**DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in the Fall with a repeat application of 1.6 qts/A (1.6 lbs ai/A) in the Spring.
- **DO NOT** apply more than 3.2 gts/A (3.2 lbs ai/A) of this product per year.
- **DO NOT** apply more than 2 applications per year when applying at a lower rate.
- Minimum retreatment interval is 150 days.
- DO NOT apply when nuts are on the ground.
- DO NOT graze livestock in treated orchards.
- DO NOT use on Light sandy soils.
- Minimum retreatment interval is 150 days when using this product in a sequential treatment program.

Use this product to control certain weeds in Filbert orchards established for at least one year. Apply this product as a directed spray. Avoid contact of foliage and fruit with spray or drift. Make an initial treatment of 2.2 qts/A (2.2 lbs ai/A) in the late Fall or early Winter after harvest. Repeat annually with 2.2 qts/A (2.2 lbs ai/A) or apply 1.6 qts/A (1.6 lbs ai/A) in October or November after harvest and repeat at the same rate in March or April.

If trees are planted on hillsides, the elimination of weeds and ground cover may cause excessive soil erosion. Under these conditions strip applications of this product (at proportionately lower rates) may be made near the trees or to the tree rows perpendicular to the slope.

#### **GRAPES**

# **RESTRICTIONS:**

#### Postemergence/Band/Ground:

- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 8.0 gts/A (8.0 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Apply only to established vineyards (at least 3 years old) as a band treatment to Grape rows.
- When using this product in a sequential treatment program, allow a minimum of 90 days between applications.

#### **Use Specific Restrictions for East of the Rocky Mountains**

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product on soils low in clay or organic matter (1 to 2%) per application.
- **DO NOT** apply more than 4 qts/A (4 lbs ai/A) of this product on soils high in clay or organic matter per application.

- **DO NOT** apply more than 8.0 qts/A (8.0 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Apply only to established vineyards (at least 3 years old) as a band treatment to Grape rows.
- When using this product in a sequential treatment program, allow a minimum of 90 days between applications.

# **Use Specific Restrictions for West of the Rocky Mountains**

- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per application.
- DO NOT apply more than 8.0 qts/A (8.0 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Apply only to established vineyards (at least 3 years old) as a band treatment to Grape rows.
- When using this product in a sequential treatment program, allow a minimum of 90 days between applications.
- DO NOT apply to vines with trunks less than 1.5 inches in diameter as injury may result.

### Use Specific Restrictions for NY and PA—Grasses

- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per year.
- DO NOT apply more than once every 4 years.
- When using this product in a sequential treatment program, allow a minimum of 90 days between applications.
- Apply only to established vineyards (at least 3 years old) as a band treatment to Grape rows.
- Use only on heavy soils including, Loams, Silt loams and Clay loams.
- **DO NOT** use in areas where Grape roots are shallow or exposed because of high bedrock; poor drainage or erosion as injury to Grapes may result.

Apply only to established vineyards (at least 3 years old) as a band treatment to Grape rows. On soils low in clay or organic matter (1 to 2%), severe plant injury may result if heavy rainfall or more than one inch of irrigation occurs soon after treatment. This risk must be assumed by the user.

Avoid contact of foliage and green bark (non-barked vines except for undesirable suckers) with spray drift.

**East of the Rocky Mountains:** On soils low in clay or organic matter (1 to 2%), apply 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) per application. On soils high in clay or organic matter, apply 2.4 to 4.0 qts/A (2.4 to 4.0 lbs ai/A) per application. Apply in the Spring just prior to germination of Annual weeds.

West of the Rocky Mountains: For best results, apply during the Winter months when weeds are less than 2 inches in height or diameter. Rainfall or overhead sprinkler irrigation sufficient to wet the soil to a depth of 2 inches is necessary to activate the herbicide. Abnormally heavy rainfall following application just before Spring growth may move the herbicide into the root zone of Grapes which could result in injury. For initial treatment, apply 2.4 to 3.2 qts/A (2.4 to 3.2 lbs ai/A); subsequent annual applications of 1.6 qts/A (1.6 lbs ai/A) will usually give adequate weed control. **DO NOT** apply to vines with trunks less than 1.5 inches in diameter as injury may result.

**NY and PA—Grasses:** Use only in established vineyards (at least 4 years old) for spot control of Perennial grasses including, Orchardgrass, Quackgrass and Ryegrass. Apply in the Spring as a band treatment to ridged soil (2- to 4-inches high) under the trellis at the rate of 4.0 qts/A (4.0 lbs ai/A) per application. Ensure band width does not exceed 30 inches. **DO NOT** apply more than once every 4 years. Use only on heavy soils, including, Loams, Silt loams and Clay loams. **DO NOT** use in areas where Grape roots are shallow or exposed because of high bedrock; poor drainage or erosion as injury to Grapes may result.

#### **MACADAMIA NUTS**

#### **RESTRICTIONS:**

#### Postemergence/Directed/Ground:

- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per application
- Maximum split application rate (as needed): **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application in the Fall with a repeat application of 2.4 qts/A (2.4 lbs ai/A) in the Spring.
- **DO NOT** apply more than 8.0 gts/A (8.0 lbs ai/A) of this product per year.
- **DO NOT** apply more than 2 applications per year, when applied at the lower rate, but **DO NOT** exceed the maximum allowable application rate per acre.
- Minimum retreatment interval is 150 days.

#### **Use Specific Restrictions for HI**

• Use only under trees established in the orchard for at least 1 year.

**HI:** Apply 1.6 to 4.8 qts/A (1.6 to 4.8 lbs ai/A) immediately after harvest, preferably before weeds emerge. If weeds have emerged, add surfactant. Retreat as needed but **DO NOT** exceed 8.0 qts/A (8.0 lbs ai/A) per year.

#### **OLIVES**

#### **RESTRICTIONS:**

#### Postemergence/Directed/Ground:

- **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- Maximum split application rate (as needed):**DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in the Fall with a repeat application of 1.6 qts/A (1.6 lbs ai/A) in the Spring.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Minimum retreatment interval is 150 days.
- Use only under trees established in the grove for at least 1 year.

**CA:** Apply 1.6 qts/A (1.6 lbs ai/A) after grove has been laid-up in final form in late October or November; repeat at same rate in March or April. Remove weed growth prior to treatment.

#### **PAPAYAS**

#### **RESTRICTIONS:**

#### Postemergence/Directed/Ground:

- DO NOT apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- Use only under trees established in the orchard for at least 1 year.

Apply 2.0 to 4.0 qts/A (2.0 to 4.0 lbs ai/A), preferably before weeds emerge. If weeds have emerged, add surfactant.

#### **PEACHES**

#### **RESTRICTIONS:**

#### Postemergence/Broadcast or Band/Ground:

- DO NOT apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application in all areas except CA.
- **DO NOT** apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per year in all areas except CA and GA.
- DO NOT apply more than 1 application per year.
- Where crop is grown under furrow-irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above waterline), apply only as a band treatment.
- **DO NOT** treat trees planted in the bottom of irrigation furrows nor trees grown under flat flood or basin irrigation, as injury to trees may result.

• **DO NOT** apply within 3 months of harvest (8 months in the western U.S.).

#### **Use Specific Restrictions for CA**

- Use only under trees established in the orchard for at least 3 years.
- **DO NOT** apply more than 3.0 qts/A (3.0 lbs ai/A) of this product per application.
- DO NOT apply more than 3.0 qts/A (3.0 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.
- **DO NOT** apply within 3 months of harvest (8 months in the western U.S.).

# **Use Specific Restrictions for GA**

- Use only on trees established for a minimum of 2 years.
- **DO NOT** apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application.
- Maximum split application rate: DO NOT apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application in the Spring with a repeat application of up to 1.8 qts/A (1.8 lbs ai/A) in the Fall.
- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Minimum retreatment interval is 150 days.

Use this product alone or apply as a tank mixture with Terbacil. Where complete weed control to harvest is desired, additional weed control measures may be required during the year.

**In all areas except California: DO NOT** apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application. **California ONLY: DO NOT** apply more than 3.0 qts/A (3.0 lbs ai/A) of this product per application.

**This Product Alone:** Use only under trees established in the orchard for at least 3 years. Apply 1.6 to 2.2 qts/A (1.6 to 2.2 lbs ai/A) in the early Spring before weeds emerge or during the early seedling stage of weed growth. In California, apply 1.6 to 3.0 qts/A (1.6 to 3.0 lbs ai/A).

**GA:** On trees established for at least 2 years, apply 1.6 to 2.2 qts/A (1.6 to 2.2 lbs ai/A) in the Spring. Repeat application in the Fall but **DO NOT** exceed 4.0 qts/A (4.0 lbs ai/A) per year. Add surfactant to improve control of small, emerged weeds.

**This Product plus Terbacil:** Use only under trees established in the orchard for at least 2 years. Apply either in the Spring or after harvest in the Fall before weeds emerge or during early seedling stage of weed growth.

	Rate Per Acre	
Soil Texture	1-2% Organic Matter	More than 2% Organic Matter
Sandy loam	0.8 qt/A (0.8 lb ai/A)	1.2 qts/A (1.2 lbs ai/A)
Loam, Silt loam, Silt	1.2 qts/A (1.2 lbs ai/A)	1.6 qts/A (1.6 lbs ai/A)
Clay loam, Clay	1.6 qts/A (1.6 lbs ai/A)	1.6 qts/A (1.6 lbs ai/A)

#### **PEARS**

#### **RESTRICTIONS:**

#### Postemergence/Directed or Band/Ground:

- DO NOT apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
- Maximum split application rate (as needed):DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this
  product per application for post-harvest followed by a repeat application of 1.6 qts/A (1.6 lbs ai/A) prior
  to bud break.
- **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
- DO NOT apply more than 2 applications per year.
- Minimum retreatment interval is 150 days.
- Use only under trees established in the orchard for at least 1 year.
- DO NOT treat varieties grafted on full-dwarf root stocks.

Apply 3.2 qts/A (3.2 lbs ai/A) in the Spring (March through May). In the Far West, apply 3.2 qts/A (3.2 lbs ai/A) to weeds less than 2 inches in height or diameter under dormant trees. Alternatively, apply to small weeds at 1.6 qts/A (1.6 lbs ai/A) post-harvest followed by 1.6 qts/A (1.6 lbs ai/A) prior to budbreak.

#### **PECANS**

#### **RESTRICTIONS:**

# Postemergence/Broadcast or Band/Ground:

- Use only on trees established in the grove for at least 3 years and on soil with at least 0.5 % organic matter.
- **DO NOT** apply within 3 months of harvest.
- **DO NOT** use on eroded areas where subsoil or roots are exposed, nor on trees that are diseased or lacking in vigor or on trees planted in irrigation furrows as injury to the trees may result.

#### Use Specific Restrictions by soil type

- Sandy loam soils:
  - **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
  - **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per year.
  - **DO NOT** apply more than 1 application per year.
- Loam, Silt loam, Silt soils:
  - **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
  - **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
  - DO NOT apply more than 1 application per year.
- · Clay loam, Clay soils:
  - **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per application.
  - **DO NOT** apply more than 3.2 qts/A (3.2 lbs ai/A) of this product per year.
  - **DO NOT** apply more than 1 application per year.

# Use Specific Restrictions for application with Terbacil

• Use on trees established in the grove for at least 1 year and on soil with at least 1% organic matter. Use this product alone or apply as a tank mixture with Terbacil. Make a single band or broadcast application as a directed spray using a minimum of 30 gallons of water per acre. Apply in the Spring before weeds emerge or during the early seedling stage of growth.

Soil Texture	Rate Per Acre		
	This Product Alone*		This Product + Terbacil**
Sandy loam	1.6 qts (1.6 lbs ai/A)	OR	1.2 qts (1.2 lbs ai/A)
Loam, Silt loam, Silt	2.4 qts (2.4 lbs ai/A)	- OK	1.2 qts (1.2 lbs ai/A)
Clay loam, Clay	3.2 qts (3.2 lbs ai/A)	7	1.4 qts (1.4 lbs ai/A)

<sup>\*</sup>Use only on trees established in the grove for at least 3 years and on soil with at least 0.5% organic matter.

\*\*Use on trees established in the grove for at least 1 year and on soil with at least 1% organic matter.

#### RESTRICTIONS:

#### Preemergence/Postemergence/Broadcast or Band/Ground:

#### **Use Specific Restrictions for HI**

- **DO NOT** apply more than 4.8 qts/A (4.8 lbs ai/A) of this product per application.
- Maximum retreat application rate (plant crop only):DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.
- Prior to differentiation; **DO NOT** apply more than 9.6 gts/A (9.6 lbs ai/A) of this product per year.
- DO NOT apply more than 12.8 qts/A (12.8 lbs ai/A) of this product per year.
- **DO NOT** apply more than 2 applications per year.
- Minimum retreatment interval is 60 days.

#### Use Specific Restrictions for FL

- **DO NOT** apply more than 5.0 qts/A (4.8 lbs ai/A) of this product per application.
- Maximum retreat application rate (plant crop only):DO NOT apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application.

PINEAPPLES

- Prior to differentiation; DO NOT apply more than 9.6 qts/A (9.6 lbs ai/A) of this product per year.
- **DO NOT** apply more than 12.8 qts/A (12.8 lbs ai/A) of this product per year.
- **DO NOT** apply more than 3 applications per year when applied at a lower rate.
- Minimum retreatment interval is 60 days.

#### **Use Specific Restrictions for PR**

- DO NOT apply more than 5.0 qts/A (5.0 lbs ai/A) of this product per application (Preplant/Preemergence).
- **DO NOT** apply more than 5.0 qts/A (5.0 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

**HI:** Apply 1.6 to 4.8 qts/A (1.6 to 4.8 lbs ai/A) as a broadcast spray just before or immediately after planting but prior to weed emergence. Use 1.6 to 3.2 qts/A (1.6 to 3.2 lbs ai/A) after harvesting the plant crop or ratoon crop (for first ratoon crop as well as subsequent ratoon crops) but before differentiation. For plant crop only, additional broadcast or interspace applications may be made prior to differentiation at the rate of 1.6 qts/A (1.6 lbs ai/A) at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 1.6 qts/A (1.6 lbs ai/A). Treated areas may be planted to Pineapple or Sugarcane 1 year after last application.

**FL:** Apply 3.2 to 5.0 qts/A (3.2 to 5.0 lbs ai/A) as a broadcast spray just before or immediately after planting but prior to weed emergence. Use 3.2 qts/A (3.2 lbs ai/A) after harvesting plant crop (for ratoon crop). For plant crop only, a second and third broadcast or interspace application may be made prior to differentiation at the rate of 1.6 qts/A (1.6 lbs ai/A) at intervals of not less than 2 months. Treated areas may be planted to Pineapple or Sugarcane 1 year after last application.

**Puerto Rico:** Apply 3.0 to 5.0 qts/A (3.0 to 5.0 lbs ai/A) as a broadcast spray just before or immediately after planting but prior to weed emergence. Pre-emergence application controls weeds including, Crabgrass, Crotolaria, Fall panicum, Foxtail, Goosegrass, Morningglory, Pigweed, Purslane and Sourgrass. Treated areas may be planted to Pineapple or Sugarcane 1 year after last application.

#### **WALNUTS (ENGLISH)**

#### **RESTRICTIONS:**

# Postemergence/Directed or Band/Ground:

- Use only under trees established in the orchard for at least 1 year.
- **DO NOT** use on Sand, Loamy sand, Gravelly soils or exposed subsoils, nor where organic matter is less than 1%.
- DO NOT graze livestock in treated orchards and groves.

#### Use Specific Restrictions for OR, WA

- **DO NOT** apply more than 2.2 qts/A (2.2 lbs ai/A) of this product per application.
- DO NOT apply more than 2.2 gts/A (2.2 lbs ai/A) of this product per year.
- DO NOT apply more than 1 application per year.

#### **Use Specific Restrictions for CA**

- Maximum single application rate is 3 qts/A (3 lbs ai/A).
- Maximum split application rate: **DO NOT** apply more than 1.6 qts/A (1.6 lbs ai/A) of this product per application in the Fall followed by a repeat application rate of 1.6 qts/A (1.6 lbs ai/A) in the Spring.
- Maximum single annual application rate 3 qts/A (3 lbs ai/A) per year.
- Maximum split annual application rate is 3.2 qts/A (3.2 lbs ai/A) per year.
- DO NOT apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 150 days.

**OR, WA:** As an initial treatment, apply 2.2 qts/A (2.2 lbs ai/A) after the orchard has been laid up in final form (no-tillage program) in late Fall or early Winter; retreat annually with 1.6 to 2.2 qts/A (1.6 to 2.2 lbs ai/A).

**CA:** Apply 1.6 to 3 qts/A (1.6 to 3.0 lbs ai/A). Alternatively, apply 1.6 qts/A (1.6 lbs ai/A) in October or November and repeat at same rate in March or April.

#### TREE PLANTINGS

#### RESTRICTIONS:

#### Preemergence/Broadcast/Ground:

- AERIAL APPLICATION IS PROHIBITED.
- DO NOT apply to foliage of trees, nor under trees growing in low areas as injury may result.

### Use Specific Restrictions for CO, MT, NE, ND, SD, WY

- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per application.
- **DO NOT** apply more than 4.0 qts/A (4.0 lbs ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.
- Use only under established plantings (1 year or older) of American elm, caragana, cottonwood, Douglas fir, green ash, honeysuckle, Ponderosa pine, red cedar, Russian olive and Siberian elm.

#### Use Specific Restrictions for ID, OR, WA

- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per application.
- **DO NOT** apply more than 2.4 qts/A (2.4 lbs ai/A) of this product per year.
- **DO NOT** apply more than 1 application per year.

**CO, MT, NE, ND, SD, WY:** Use 2.0 to 4.0 qts/A (2.0 to 4.0 lbs ai/A); apply as a band 4 ft. wide in the tree row (2 ft on each side of row). For example,1.6 ounces of this product treats 135 feet of tree row (2 ft. on each side of row) at the rate of 4.0 qts/A (4.0 lbs ai/A). Apply as a directed spray in early spring before weeds emerge and before trees leaf out.

**ID, OR, WA:** This product is advised for control of weeds to aid in the establishment of hybrid poplar plantings. Apply 0.8 to 2.4 qts/A (0.8 to 2.4lbs ai/A) depending upon soil texture and organic matter content. Use 0.8 to 1.6 qts/A (0.8 to 1.6 lbs ai/A) on coarse–textured soils and 1.6 to 2.4 qts/A (1.6 to 2.4 lbs ai/A) on medium to fine textured soils. **DO NOT** use on gravelly soils or on any soil having less than 0.5% organic matter as injury to trees may result. Injury may result from applications to poplar plantings grown on sandy soil with low organic matter with sprinkler irrigation. When applied in a band, the application rate will be in proportion to the area banded on a per acre basis.

Apply in late winter or early spring as a uniform broadcast spray before or after planting but prior to bud swell or as a directed spray after bud swell. Apply before weeds emerge or after emergence while weeds area small. Some rainfall or water is necessary to move this product into the weed root zone before weeds become well established. If weeds are present at time of treatment, add a surfactant at 1 to 2 quarts per 100 gallons of spray solution.

**Preplant:** Take precautions to prevent treated soil (usually top 1 inch) from coming into contact with roots of trees during the planting process as injury may result.

**Post-plant (Broadcast):** It is best to wait until rain or irrigation has settled the soil around the newly plant trees before applying this product. If trees are dormant, a broadcast application can be made.

**Post-plant (Directed):** If buds have started to swell, use a directed spray pattern that prevents this product from contact with trees as injury may result. During the year (from bud swell to leaf drop), this product may be applied (alone or with tank mix) between tree rows in shielded and directed sprays.

This product can be tank mixed with a glyphosate herbicide preplant and as a directed spray to broaden the spectrum of weeds controlled and improve post-emergence activity. Use 0.8 to 2.4 quarts of this product plus glyphosate herbicide (according to label specifications) depending upon soil type and weeds to be controlled.

Note: There are several formulations of glyphosate herbicide. Check the glyphosate herbicide label to verify that the intended use as a pre-plant or post-directed spray on hybrid poplar plantations is allowed. Avoid contact of glyphosate herbicide with foliage, green stems, trees, or other desirable vegetation because severe damage or destruction may result.

NON-CROP WEED CONTROL: UNCULTIVATED NON-CROPLAND INCLUDING, UTILITY, HIGHWAY, PIPELINE, AND RAILROAD RIGHTS-OF-WAY, PETROLEUM TANK FARMS, LUMBERYARDS, STORAGE AREAS, INDUSTRIAL PLANT SITES, AND AROUND FARM BUILDINGS RESTRICTIONS:

- **DO NOT** apply more than 12.0 qts/A (12.0 lbs ai/A) of this product per application in areas of high rainfall or dense vegetation.
- **DO NOT** apply more than 8.0 qts/A (8.0 lbs ai/A) of this product per application in all other areas.
- **DO NOT** apply more than 12.0 qts/A (12.0 lbs ai/A) of this product per year.
- **DO NOT** apply more than 2 applications per year when using reduced rates.
- Minimum retreatment interval is 90 days.

This product is an effective herbicide for the control of many weeds. The degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. This product may be used as a pre-emergence treatment at any time of year, except when ground is frozen, provided adequate moisture is supplied by rainfall or artificial means to activate the herbicide. Best results are obtained if applications made to the soil are applied shortly before weed growth begins. If dense growth is present, remove tops and spray the ground. Increased contact activity on established weeds may be obtained using a surfactant. Apply as a drenching spray to actively growing weeds during warm weather when daily temperature will exceed 70°F.

Use a fixed-boom power sprayer, properly calibrated, to ensure a constant rate of application. Mix proper amount of this product into volume of water necessary to obtain uniform coverage. If surfactant is used, dilute with ten parts of water and add as last ingredient to a nearly full tank. This product must be kept in suspension at all times. Agitate by mechanical or hydraulic means in the spray tank. If bypass or return line is used, ensure it terminates at bottom of tank to minimize foaming. Use 50-mesh screen or larger.

Aerial application is prohibited EXCEPT for weed control in rights-of way where this product may be applied by air or ground equipment.

**Weed Control:** For weed control in uncultivated non-cropland including, utility, highway, pipeline and railroad rights-of-way, petroleum tank farms, lumberyards, storage areas, industrial plant sites and around farm buildings, apply 4.0 to 12.0 qts/A (4.0 to 12.0 lbs ai/A) to control annual weeds including:

BROADLEAVES - 4.0-12.0 qts/A (4.0 to 12.0 lbs ai/A)		
Ageratum	Knawel	Sesbania
Chickweed	Lambsquarters	Shepherdspurse
Cocklebur	Marigold	Sicklepod
Corn speedwell	Mexican clover	Smartweed, Annual
Corn spurry	Morningglory,	Sowthistle, Annual
Dayflower	Annual	Spanishneedles
Dogfennel	Pennycress	Tansy mustard
Fiddleneck (Amsinckia)	Pigweed	Velvetleaf (Buttonweed)
Flora's paintbrush	Pineappleweed	Wild buckwheat
Gromwell	Pokeweed	Wild lettuce
Groundcherry,	Prickly lettuce	Wild mustard
Annual	Prickly sida (Teaweed)	Wild radish
Hawksbeard	Purslane	
Horsenettle	Rabbit tobacco	
Horseweed	Ragweed	

GRASSES - 4.0-6.4 qts/A (4.0 to 6.4 lbs ai/A)		
Barnyardgrass	Orchardgrass	Sandbur
(Watergrass)	Peppergrass	Seedling Johnsongrass
Bluegrass, Annual	Quackgrass	Velvetgrass
Crabgrass	Rattail fescue	Vernalgrass,
Foxtail	Red sprangletop	Sweet, Annual
Kyllinga	Ricegrass	
Lovegrass, Annual	Ryegrass, Annual	

GRASSES - 6.4-12.0 qts/A (6.4 to 12.0 lbs ai/A)		
Guineagrass	Maidengrass	Pangolagrass

**Irrigation and Drainage Ditches:** Apply 4.0 to 12.0 qts/A (4.0 to 12.0 lbs ai/A) to control most annual weeds shown in the preceding table. Apply only when water is not in the ditch. For irrigation ditches, apply during the non-crop season and when ditch is not in use. Minimize movement of this product with irrigation water to avoid crop injury. The herbicide must be fixed in the soil by moisture. Apply before expected seasonal rainfall, if possible, when soil in the ditch is still moist. Following treatment, if rainfall has not totaled at least 4 inches, fill ditch with water and allow to stand for 72 hours; drain off any waste water remaining before using ditch. **DO NOT** treat any ditch area into which roots of trees or other desirable plants may extend as injury may result.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Avoid storage at high temperatures. **DO NOT** stack over 2 pallets high. **DO NOT** move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original container only. If the contents are leaking or material is spilled, follow these steps:

- 1. Collect and place in suitable containers for disposal.
- 2. Wash area with soap and water to remove remaining pesticide.
- 3. Follow washing with clean water rinse.
- 4. **DO NOT** allow runoff to enter sewer or contaminate water supplies.
- 5. Dispose of waste as indicated below:

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

#### **CONTAINER HANDLING:**

Nonrefillable Container (rigid material; less than or equal to 5 gallons): Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth 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. Offer empty container for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

Nonrefillable Container (rigid material; greater than 5 gallons): Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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. Offer empty container for recycling if available, or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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

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

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[EPA APPROVAL DATE]