

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Mr. Scott Baker Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286

JAN 30 2009

SUBJECT: Label Notification(s) for Pesticide Registration Notice PRN 2007-4 Request Storage and disposal changes EPA Reg. No. 34704-854 Application Dated November 14, 2008

Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated 11/14/2008 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 2007-4 and finds that the action(s) requested does not clearly fall within the scope of PRN 2007-4 and will require additional administrative review of the related files. A summary of our findings include:

The container disposal statements for greater than 56 gallons go beyond the scope of PRN 2007-4. Additional container statement must be reviewed as an amendment.

Therefore, the RD has determined that this action is denied and will be further processed as an amendment and our records have been updated accordingly. The label submitted with the application is considered proposed drafts and has been forwarded to Venus Eagle (PM 1) for further processing.

If you have any questions, please call me directly at 703-305-6249 or Banza Djapao of my staff at 703-305-7269

Sincerely,

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Linda Arrington Notifications & Minor Formulations Team Leader Registration Division (7505P) Office of Pesticide Programs

<u>Please read instructions</u>		everse before complet	ing form.	٤	¥.	_ Form Ap	proved	. OMB No. ;	2070-0060	2. Approval expires 2-28-95
SEPA		Ui Environmental Washir	nited States <b>Protectio</b> ngton, DC 20	on Agency	,			Registra Amendr Other	ntion ment	OPP Identifier Number
			Application	on for Pest	ticic	le - Sec	tion	<u> </u>		· · · · · · · · · · · · · · · · · · ·
1. Company/Product Nu 34704-854	mber			2. E Jim	PA P	roduct Mai npkins	nager		3. Pro	posed Classification
4. Company/Product (Name) Diuron 4L			PM	PM#						
5. Name and Address o	f App	licant (Include ZIP Co	de)	6. 6	Expe	dited Re	veiw.	in accorda	nce with	FIFRA Section 3(c)(3)
Loveland Products, Inc. P.O. Box 1286 Greeley, Colorado 80632-1286			(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. NoJAN 3 0 2009							
	<u> </u>	· · · · · · · · · · · · · · · · · · ·		Section	- I			, , , , , , , , , , , , , , , , ,	····	· · ·
Amendment - Explain below.       Final printed labels in repsonse to Agency letter dated         Resubmission in response to Agency letter dated       "Me Too" Application.         Notification - Explain below.       Other - Explain below.         Explanation: Use additional page(s) if necessary. (For section I and Section II.)       Other - Explain below.         "Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notice 2007-4 and the requirement EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement of Formula for this product.			d the requirements of e labeling or the any false statement to							
156.156, this product	may t	ie in violation of FIFR/	A and I may b	be subject to enf	force	ment action	n and p	penalties und	er sections	12 and 14 of FIFRA."
1. Material This Produc	t Will	Be Packaged In:						- <del>r-</del>		
Child-Resistant Packagi Yes Vo	ing	Unit Packaging Yes Vo		Water Solut Yes No	ole Pa	ackaging		2. Type of	Container Metal Plastic Glass	
* Certification mus be submitted	st	lf "Yes" Unit Packaging wgt.	No. per container	Package wo	gt	No. per contain	Ier		Other (S	Specify)
3. Location of Net Cont	tents C	Information ontainer	4. Size(s) Re 1, 2.5, 3	otail Container 30, 50, 260 gal	lons	& Bulk	5. Lo	on cont	bel Directio ainer labe	
		Arrixed to Product	Pape Stend	graph r glued ciled				essure sensio	ve sen aun	ening labels of primed on bag.
				Section	- 11	/				
1. Contact Point (Com	plete	items directly below f	for identificati	on of individual	to be	contacted	l, if ne	cessery, to p	rocess this	application.)
Name John T. Tice				Title Manager F	Regi	strations			<b>Telephon</b> 970-347-	e No. (Include Area Code) 1484
l certify that the l acknowledge th both under appli	state nat an cable	nents I have made on γ knowlinglly false or law.	Certific this form an misleading st	ation d all attachment atement may be	ts the e pur	ireto are tr ishable by	ue, acc fine or	urate and co imprisonmer	mplete. nt or	6. Date Application Received (Stamped)
2. Signatur John	1.	John Tice	@UAP.COM	3. Title Manag	ger R	egistrations				
4. Typed Name John T. Tice		January 6, 2009								



Performance

Quality

November 14, 2008

Document Processing Desk (NOTIF) U.S. EPA, Office of Pesticide Programs 2777 S. Crystal Drive Arlington, VA 22202

RE: Notification: Storage and Disposal Changes In Accordance with PRN 2007-4, For Diuron 4L, EPA Reg, No. 34704-854

Dear Notification Desk:

Enclosed please find the revised label/notification for the product identified above. This label contains additional disposal statements required by PRN 2007-4. Enclosed please find EPA Form 8570-1 and five copies of the revised/updated label.

Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

If you have any questions, please feel free to call or contact me at 970-347-1484 or email at john.tice@uap.com.

Sincerely,

John Tice Manager Registrations Loveland Products, Inc.

Attachments



# DIURON 4L HERBICIDE

## NOTIFICATION

JAN 3 0 2009

## **Diuron Liquid Flowable Herbicide**

## For Control of Many Annual and Perennial Grasses and Herbaceous Weeds

ACTIVE INGREDIENT:			•
Diuron: 3-(3,4-dichlorophenyl)-	,1-dimethylurea		40.0%
INERT INGREDIENTS:			60.0%
		TOTAL	100.0%

Contains 4.0 Pounds of Diuron Per Gallon

## KEEP OUT OF REACH OF CHILDREN CAUTION

## EPA REG. NO. 34704-854

EPA EST. NO. 70989-MO-001

NET CONTENTS 2½ GALS. (9.46 L)

#### 102907 V4D 01009

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

## CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category chart.

cal-resistance category chart. All pilots, flaggers and groundboom applicators must wear: Long-sleeved shirt and long pants, and shoes plus socks.

All mixers, loaders, other applicators, and other handlers must wear: longsleeved shirt and long pants, shoes plus socks, chemical resistant gloves such as polyethylene or polyvinylchloride and a NIOSH approved particulate filtering respirator equipped with any N, R, or P class filter media with NIOSH approval number prefix TC-84A. It is recommended that the respirator wearer be fit tested, and trained in the use, maintenance, and limitations of the respirator. A chemical-resistant apron with mixing, loading, or cleaning equipment or spills.

See Engineering controls for additional requirements.

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

#### Engineering controls statements:

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 Worker Protection Standard (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 hands 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

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

•	FINGT AID
If on skin	Take off contaminated clothing.
or clothing:	<ul> <li>Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> </ul>
	Call a poison control center or doctor for treatment advice.
If in eyes:	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15</li></ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If swallowed:	Call poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	• Do not induce vomiting unless told to do so by the poison control center or doctor.
	• Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-301-7976.

## ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters. 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls, chemical resistant gloves made of any waterproof material 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 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. Non-crop weed control is not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter treated areas until sprays have dried.

#### 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

Make aerial or ground applications only when the wind speed is less than or equal to 10 miles per hour.

Do not make aerial or ground applications into temperature inversions.

Apply with medium or coarser spray (according to ASAE standard 572) for standard nozzles

#### Additional Requirements for ground applications:

When applying to crops, apply with nozzle height no more than 2 feet above the ground or crop canopy. When applying to non-crop areas, use lowest nozzle height consistent with safety and efficacy. Direct spray into target vegetation.

#### Additional requirements for aerial applications:

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wingspan or 90% of rotor blade diameter.

#### Use upwind swath displacement.

When applying to crops, do not release spray at a height greater than 6 to10 feet above the ground or crop canopy. When applying to non-crop areas, apply at a minimum safe altitude above the area being treated.

Do not apply by air if sensitive non-target crops are within 100 feet of the application site.

Use of this product 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, v. EPA C01-0143C (W.D. WA). For further information, please refer to www.epa.gov/espp

### **GENERAL INFORMATION**

This product should be used only in accordance with directions on this label, or in separate directions published by Loveland Products, Inc.

To the extent allowed by applicable law Loveland Products Inc. will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by Loveland Products Inc. User assumes all risk associated with such non-recommended use.

This product is liquid flowable to be mixed with water and applied as a spray for selective control of weeds in certain crops and for nonselective 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 tex-ture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter for equivalent herbicide perfor-mance. Moisture is required to activate the herbicide. Best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks of application.

This product applied before emergence of crop and weeds is an effective proce-dure because susceptible weeds are controlled in an early, vulnerable seedling stage 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. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should 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 temperature of 70°F or higher. Addition of a surfactant to the spray (where recommended) increases contact effects of this product.

This product may be used as a directed postemergence application. Contact of crop foliage and/or fruit with spray or mist must be avoided on the following crops: artichoke, corn (field), cotton, sorghum (grain), sugarcane and established plantings of apples, bananas, plantains, blueberries, caneberries, gooseberries, citrus, grapes, macadamia nuts, olives, papayas, peaches, pears, pecans, walnuts and certain tree plantings as injury may occur.

Under specified conditions (see USES) 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, red clover (established, dormant) sugarcane, wheat and pineapple.

Weeds 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 weed species controlled. Consult labels of the companion product for this and other information. Observe all precautions and limitations on labeling of all products used in mixtures.

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.

#### 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), 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 or 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 sink holes. Avoid storage of pesticides near well sites. Keep from contact with fertilizers, insecticides, fungicides and seeds. Calibrate sprayers only with clean water away from well sites. Do not apply this product through any type of irrigation system.

Thoroughly clean all traces of this product from application equipment immediately after use. Flush tank, pumps, hoses and boom with several changes of water after removing nozzle tips and screens (clean parts separately).

## SELECTIVE USE IN CROPS

Preemergence Use (Germinating Weeds): The following rates provide guidance for control of the grasses listed. Do not exceed the maximum application rate specified for each individual use/crop in the following "Uses" section.

<u>0.6 to 0.8 qu</u>	ari	ts/acre
Barnyardgrass (Watergrass)		Pigweed
Crabgrass		Purslane
Lambsquarters		Ragweed

1.2 to 1.6 guarts/acre*				
Bluegrass, Annual	Pennycress			
Chickweed	Rattail Fescue			
Corn Spurry	Red Sprangletop			
Dogfennel	Shepherdspurse			
Fiddleneck (Amsinckia)	Tansymustard			
Foxtail	Velvetgrass			
Gromwell	Vernaigrass, Sweet, Annual			
Groundcherry, Annual	Wild Buckwheat			
Knawel	Wild Lettuce			
Morningglory, Annual	Wild Mustard			

1.6 to 4.8	uarts/acre*
Ageratum	Pepperg
Corn Speedwell	Pineapp
Dayflower	Pokewee
Flora's Paintbrush	Rabbit T
Hawksbeard	Ricegras
Horseweed	Ryegras
Johnsongrass (Seedlir	ng) Sandbur
Kyllinger (Kyllinga)	Smartwe
Lovegrass, Annual	Sowthis
Marigold	Spanish
Mexican Clover	Velvetle
Orchardorass	Wild Ba

Peppergrass Pineappleweed Pokeweed Rabbit Tobacco Ricegrass Ryegrass, Annual Sandbur Smartweed, Annual Sowthistle, Annual Spanish Needles Velvetleaf (Buttonweed) Wild Radish

#### Partial control:

<u>0.8</u>	quarts/acre
Cocklebur	Sesbania
Morninggiory, Annual	Sicklepod
Prickly Sida (Teaweed)	•

Do not exceed the maximum application rate specified for each individual use/crop in the following "Uses" section.

Horsenettle	3.2 quarts/acre* Quackgrass
Guineagrass	6.4 to 8.0 quarts/acre
Maidencane	Pangolagrass

\* Do not exceed the maximum application rate specified for each individual use/crop in the following "Uses" section.

#### **APPLICATION DIRECTIONS**

AERIAL APPLICATION: For alfalfa, barley (winter), cotton (preplant or preemer-gence only), grass seed crops grown in the Pacific Northwest, rights-of-way applications, sugarcane and wheat (winter), application may be made by aircraft in 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.

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**GROUND APPLICATION:** Use a boom power sprayer properly calibrated to a constant speed and rate of delivery. Openings in screens should 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 by-pass or return line is used, it should terminate at bottom of tank. Avoid overlapping and shut off spray booms while starting, turning, slowing or stopping or injury to crop may result.

**PREEMERGENCE:** For preemergence application, sufficient spray volume and pressure to uniformly distribute the spray solution over treated soil. Preemergence weed control will be reduced on high organic matter soils such as peat or muck.

**POSTEMERGENCE:** For postemergence application, use sufficient spray 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 listed rates controls seedling annual weeds such as annual morningglory, barnyardgrass (watergrass), crabgrass, crowfoot, goosegrass, pigweed and purslane. Addition of a surfactant to the spray (where recommended) 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 recommended, dilute with 10 parts of water and add as last ingredient to nearly full spray tank.

**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.

**RATES:** All rates of this product are expressed as broadcast rates. Where band applications are specified use proportionately less. For example, use 1/3 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 postemergence application, use the lower rate on smaller weeds and the higher rate on the larger weeds.

SOIL LIMITATIONS: Crop injury may result from failure to observe the following:

Unless otherwise directed, do not use on sand, loamy sand, gravelly soils or exposed subsoils; nor on pecans where organic matter is less than 0.5%; nor on alfalfa, apples, artichoke, 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%.

FIELD CROPS (See Soil Limitations): A good seedbed must be prepared before preemergence 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, the surface of the soil should 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, a shallow cultivation (rotary hoe preferred) should be made after emergence of crops while weeds are small enough to be controlled by mechanical means.

FRUIT AND NUT CROPS (See Soil Limitations): Unless otherwise directed, make single application per year as a directed spray, avoiding contact of foliage and fruit with spray or drift. Do not graze livestock in treated orchards or groves.

#### USES

ALFALFA Treat only stands established for 1 year or more. 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 (such as on shallow hard pans), alkali spots, nor to flooded fields as crop injury may result. Do not spray on snow-cover ed or frozen ground. Maximum application rate per crop cycle: 2.4 quarts of product (or 2.4 pounds a.i.) per acre.

Apply a maximum of one application per year.

Arizona, Nevada: Use 1.2 to 2.4 quarts per acre. Apply in fail after alfalfa becomes dormant but no later than January.

California (Dormant and Semi-Dormant Varieties): Use 1.2 to 2.4 quarts per acre. For control of volunteer alfalfa use 2.4 quarts per acre. Apply in fall or winter alfalfa becomes dormant or semidormant, 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 California after February 1. Treated areas may be replanted to any crop after 1 year from last application if rate does not exceed 1.6 quarts per acre.

Eastern Colorado, Kansas: For control of tansymustard, apply 0.8 quarts per acre shortly after emergence of mustard in the fall or winter. Use 1.6 quarts per acre if weeds are 2 to 4 inches in height. Alternatively, if other annual weeds are present, apply 1.6 to 2.4 quarts per acre in February or March.

Idaho, Oregon, Washington: For control of annual weeds, use 1.2 to 2.4 quarts / [3 per acre. For control of volunteer alfalfa use 2.4 quarts per acre. Apply in fail after alfalfa becomes dormant but no later than mid December.

Other Areas Where Alfalfa Becomes Winter Dormant: Use 1.2 to 2.4 quarts per acre (1.2 to 1.6 quarts per acre East of Appalachian Mountains). Apply in March or early April, but before spring growth begins.

#### APPLE

Aerial application is prohibited.

Maximum rate per application: 3.2 quarts product (3.2 pounds a.i.) per acre. Maximum application rate per crop cycle: 3.2 quarts product (3.2 pounds a.i.) per acre. Apply a maximum of two applications per year. Minimum retreatment interval: 90 days.

Use this product alone, or apply as a tank mixture with Sinbar® Herbicide.

This product 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 quarts per acre in the spring from March through May. In the Far West, apply 3.2 quarts per acre to small weeds less than 2 inches in height or diameter under dormant trees. Alternatively, treatments to small weeds may be applied at 1.6 quarts per acre postharvest followed by 1.6 quarts per acre prior to bud break.

Georgia: Apply 1.6 to 2.4 quarts per acre in the spring. Repeat application in the fail but do not use more than 3.2 quarts per acre per year. Add a surfactant to improve control of small, emerged weeds.

This product plus Sinbar: 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					
	1 to 2 % Organic Matter			More Than 2% Organic Matter		
Soil Texture	This Product Qts./Acre		Sinbar Lbs./Acre	This Product Qts./Acre		Sinbar Lbs./Acre
Sandy loam	0.8	+	1.0	1,2	+	1.5
Loam, Silt Ioam, Silt	1.2	+	1.5	1.6	+	2.0
Clay loam, Clay	1.6	+	2.0	1.6	+	2.0

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 growing season.

## ARTICHOKE (California)

Aerial application is prohibited.

Apply 1.6 to 3.2 quarts per acre in late fall or early winter after the last cultivation. Apply 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 crop plants at a minimum.

#### ASPARAGUS

#### Aerial application is prohibited.

Apply as a band or broadcast treatment. Do not apply to young plants during the first growing season (except as noted below), nor to newly seeded asparagus, nor on plants with exposed roots, as severe injury may result. Preemergence weed control will be reduced on soils with greater than 5% organic matter.

Established Plantings: On light sandy soils and other soils low in clay or organic matter, apply 0.8 to 1.6 quarts per acre. On soils high in clay or organic matter, use 1.6 to 3.2 quarts per acre. Two applications may be used. The first application should be made 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 following completion of harvest provided rainfall is expected. When two applications are used in one season, do not exceed 2.4 quarts per acre per application. In Washington (irrigated crop), apply a single treatment of 3.2 quarts per acre. If treatment is delayed until late winter or early spring, incorporation of the chemical in the top 1 to 2 inches of soil may substitute for lack of rain to activate the herbicide.

Newly Planted Crowns - San Joaquin Delta, California: Make a single treatment of 1.6 to 3.2 quarts per acre on soils high in clay or organic matter. Use the lower rate on clay loams and the higher rate on peat soils. Do not use on soils containing less than 2% organic matter. Soil must be settled by rainfall or irrigation prior to treatment. Do not treat crowns planted to a depth of less than 2 inches.

#### BANANA and PLANTAIN

Aerial application is prohibited.

**New Plantings:** To control annual weeds, apply 1.2 to 2.4 quarts per acre after planting but before weed or crop emergence. Do not apply to loose soil directly over the planting material.

Established Plantings: For control of annuals and for top-kill of perennials such as bermudagrass, birdseed grass and guineagrass, apply 2.4 to 4.8 quarts per acre plus surfactant. Avoid contact of banana and plantain 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 surfactant from the spray mixture. Repeat treatment as needed. Apply at 6 week intervals or longer for a maximum of 9.6 quarts this product per acre (broadcast basis) in 12 months.

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.

#### BARLEY (Winter)

Western Oregon and Western Washington: For drill planted barley, make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting but before emergence of barley.

Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

## BERMUDAGRASS PASTURES (Newly-Sprigged)

#### Aerial application is prohibited.

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 quart per acre; 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. 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.

### **BIRDSFOOT TREFOIL (Lotus)**

Western Oregon: Treat only stands established for at least 1 year. Do not apply to seedling trefoil as injury may result. Make a single application of 1.6 quarts per acre when trefoil is dormant (October 15 to December 15). 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.

#### BLUEBERRY, CANEBERRY, GOOSEBERRY

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. Aerial application is prohibited.

Arkansas, Florida, Georgia, Mississippi, Missouri, New Hampshire, North Carolina, South Carolina - Blueberry: Apply 1.2 to 1.6 quarts per acre in the spring and repeat treatment after harvest in the fall. Add a surfactant to improve control of small, emerged weeds.

California - Blackberry, Boysenberry, Dewberry, Loganberry, Raspberry: For control of winter annual weeds, apply 1.6 quarts per acre in October or November. Repeat at the same rate in late spring to control summer annuals. A single application of 2.4 quarts per acre in January or February will control annual weeds in some areas, but the separate fall and spring schedule is preferred

Indiana, Michigan, Ohio - Blueberry: Apply 1.6 to 3.2 guarts per acre in late spring. Alternatively, apply 1.6 quarts per acre in the fall and repeat at the same rate in the spring

Indiana, Michigan, Ohio - Raspberry: Apply 2.4 quarts per acre in late spring.

Maine, Massachusetts - Blueberry: Apply 1.6 quarts per acre in late spring.

Maryland, New Jersey - Blueberry: For control of winter annual weeds, apply 1.6 quarts per acre from October to December, or make a single application of 2.0 quarts per acre in early to mid-spring.

#### Western Oregon, Western Washington - Blueberry, Caneberry, Gooseberry:

For control of winter annual weeds, apply 1.6 quarts per acre in October or November. Repeat at the same rate in late spring to control summer annual weeds. A single application of 2.4 quarts per acre in January or February will control both winter and summer annual weeds in some areas, but the separate fall and spring schedule is preferred.

#### CITRUS

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. Aerial application is prohibited.

Addition is provided. Citrus (all areas except Flatwoods FL) Maximum single application rate is 3.2 quarts of product (3.2 lbs a.i.) per acre. Maximum annual application rate is 6.4 quarts of product (6.4 lbs a.i.) per acre. - for trees less than four years old - minimum attractment in four years old

- minimum retreatment interval is 60-days
- \* maximum of 2 applications per year.
- for trees 4 years or older

minimum retreatment interval is 80-days

maximum of 2 applications per year.

This product may be applied in citrus in combination with Gramoxone Inteon™, and other labeled paraquat formulations, and in combination with Makaze™ and other labeled glyphosate formulations. Read and follow specific label instructions, precautions, and restrictions on the label of the tankmix partner when applying this product in combination with other products.

Arizona (except Yuma area) and California (except Imperial and Coachella Valleys): Apply 2.4 to 3.2 quarts per acre shortly after grove has been laid-up in

final form (non-tillage program) in late fall or early winter. Alternatively, apply 1.6  $\frac{1}{13}$  quarts per acre in October or November and repeat at the same rate in March or April: Subsequent annual applications of 1.6 to 2.4 quarts per acre will usually give adequate weed control.

Florida: Use only as a band application. Do not use "Trunk to Trunk". East Coast/Flatwoods Area - (low permeable soils) Citrus (Flatwoods Florida area only)

Maximum single application rate is 6.4 guarts of product (6.4 lbs a.i.) per acre. Maximum annual application rate is 6.4 quarts of product (6.4 lbs a.i.) per acre

- for trees less than four years old
  - minimum retreatment interval is 60-days
  - maximum of 2 applications per year.
- for trees 4 years or older
  - minimum retreatment interval is 80-days

maximum of 2 applications per year. Apply from 1.6 quarts per acre to a maximum of 6.4 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds. Do not use more than 6.4 quarts per treated acre in any one application. Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of diuron, the active ingredient in this product. The maximum allowable use rate for diuron is 6.4 pounds a.i. per treated acre per year inclusive of all diuron formulations used within 1 year. Ridge Areas - Except Highlands County - (highly permeable soils) Apply from 1.6 quarts per acre to a maximum of 3.2 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds. Do not use more than 3.2 quarts per treated acre in any one application. Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of diuron, the active ingredient in this product. The maximum allowable use rate for diuron is 6.4 pounds a.i. per treated area per year inclusive of all diuron formulations used within 1 year. **Ridge Areas - Highlands County - (highly permeable soils)** Apply from 1.6 quarts per acre to a maximum of 3.2 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds. Do not use more than 3.2 quarts per treated acre in any one application. Do not apply more than 4.8 quarts per treated acre per year. This amount corresponds to 4.8 pounds of diuron, the active ingredient in this product. The maximum allowable use rate for diuron is 4.8 pounds a.i. per treated area per year inclusive of all diuron formulations used within 1 year. Do not use at less than 60 day intervals.

Puerto Rico: Make a single application of 3.2 quarts per acre or apply 2.4 to 3.2 quarts per acre followed by the same rate 4 to 6 months later. On bearing citrus, apply any time when seasonal rains are expected. On non-bearing trees, apply when winter banks are pulled down.

Texas: Apply 1.6 to 3.2 guarts per acre for annual weeds. Use 3.2 guarts per acre for control of seedling johnsongrass. Spring treatments give best results. Well established weeds should be eliminated by cultivation prior to treatment.

#### CORN (Field)

**Postemergence:** Make a single application of 0.6 quart per acre in combination with nonpressure nitrogen solution. If nitrogen solution is not used, apply 0.8 quart per acre with surfactant. Apply as directed spray when corn is at least 20 inches high and weeds are no taller than 3 inches. Aerial application is prohibited.

#### DO NOT APPLY OVER TOP OF CORN.

Do not replant to any crop within 1 year after last application as injury to subsequent crops may result. Exception: cotton, corn, and grain sorghum may be planted the spring following treatment.

Preemergence - Arkansas, Louisiana, Mississippi, Tennessee: Make a single application of 0.5 to 0.8 quart per acre as a broadcast or band treatment after planting but before corn emerges. Plant corn at least 1.5 inches deep.

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 injury to subsequent crops may result.

#### COTTON

Precautions: During a single crop season, do not exceed the following amount of this product per acre as injury to subsequent crops may result; 0.8 quart on loamy sand, 1.2 quarts on sandy loam, 1.6 quarts on clay loam, and 2.2 quarts on clay.

#### 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.

Seedling disease may weaken plants and increase the possibility of injury from the use of Trilin® or other trifluralin products followed by this product. These treatments should be used only in conjunction with a standard fungicide seed treatment plus a good supplemental soil fungicide program such as captan-PCNB mixture.

Do not use this product in preplant or preemergence applications where soil-applied organophosphate insecticides are used due to potential for severe cotton injury and possible stand loss.

Cotton (preplant/preemergence/postemergence)

Maximum application rate per crop cycle:

- .8 quarts of product (0.8 pounds a.i.) per acre in coarse soils,

- 1.5 quarts of product (1.5 pounds a.i.) per acre in medium soils, and - 2.2 quarts of product (2.2 pounds a.i.) per acre in fine soils.

Apply a maximum of three applications per year.

Minimum retreatment interval 21 days.

Do not allow livestock to graze treated cotton.

Preplant – Arizona, California: Use this product alone or apply as a separate operation following preplant broadcast treatment with Trilin® or other trifluralin products (incorporated according to directions on the trifluralin 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 performed prior to lay-by, or deep furrows are many bottoms.

This product alone: Apply at 0.8 to 2.0 quarts per acre.

This product following Trilin or other trifluralin products:

	RATE/ACRE	
Soil Texture	Trilin or other trifluralin products	This Product
Sandy loam, Loam, Silt loam, Silt	1 pt.	0.5 to 0.8 qt.
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay, Clay	1.5 pts.	0.8 to 1.0 qt.

Preplant (Except Arizona and California): 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 recommended. Tillage following application should be avoided 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 quarts/acre from 15 to 45 days prior to anticipated planting. Refer to the table below for use rates in preplant 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 preplant, subsequent preemergence applications of this product may be made. However, the total combined application rate for this product applied preplant and preemergence may not exceed the maximum suggested use rate for either application method.

This Product Alone:	
Soil Texture	Rate/Acre
Sandy loam, Loam, Silt loam, Silt	0.8 qt.
Sandy clay loam, Clay loam, Silty clay loam,	1.0 qt.
Sandy clay	
Silty clay, Clay	1.6 gts.

Preemergence application of herbicides with a similar mode of action to that of diuron following preplant application of this product may result in cotton injury. When preplant applications of this product are followed by preemergence applications of herbicides with a similar mode of action, e.g., Meturon®, Cotoran®, or other products containing fluometuron, the product containing fluometuron should be used 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 preplant, on coarse textured soils, and on soils low in organic matter. The risk of injury from preplant applications of this product is reduced where substantial rainfall (> 0.5") occurs between application and planting. Read and follow any additional precautions on the this product label when using this product for preplant weed control in cotton.

Preplant Tank Mixes: When emerged weeds taller than 2 inches or weeds not listed on the this product label are present, this product may be tank mixed with other products labeled for preplant applications in cotton, including Gramoxone Inteon, Makaze, Roundup UltraMAX®, and Touchdown®. 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 preplant applications of this product. To avoid crop injury following replanting, avoid disturbing the original bed.

Preemergence (Except Arizona and California): Use this product alone or apply as a separate operation following preplant treatment with Trilin or other trifluralin products. Apply this product after planting but before cotton emerges. Do not treat cotton in deep fuirows 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. A wide press wheel should be used on the planter to provide a level seedbed for subsequent early season postemergence treatments. If moisture is insufficient to activate this product or if soil becomes crusted before crop emerges, a shallow rotary hoeing (no deeper than 0.25 inch) should be made before weeds become established.

This product should not be applied preemergence following application of the maximum rate for a given soil applied preplant. If less than the maximum rate is used preplant, additional product may be applied preemergence. However, the total amount of this product applied preplant and preemergence must not exceed the maximum suggested use rate for either preplant or preemergence applications.

This product alone: Make a single application as a broadcast or band spray, using the following broadcast rates. Use proportionately less for band treatment.

Soil Texture Sandviloam, Loam	Rate/Acre
Silt loam, Silt Sandy clay loam, Clay loam, Silty	1.0 at.
clay loam, Sandy clay Silty clay, Clay	1.6 gts.

Preemergence Applications of this product following Trilin or other trifluralin products: Apply Trilin or other trifluralin products prior to planting as a broadcast or band treatment. Incorporate according to the directions on the Trilin or other trifluralin label. As a separate operation apply this product after planting, but before cotton emerges. Use the following broadcast rates. For band treatment, use proportionately less.

RATE/ACRE				
Soil Texture	Trilin or other trifluralin products	This Product		
Sandy Ioam, Loam, Silt Ioam, Silt	1 pt.	0.8 qt.		
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay, Clay, Silty clay	1.5 pts.	1.0 - 1.6 qts.		

**Postemergence - U.S.:** Apply this product 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 not actively growing and do not exceed 2 inches in height. Apply as a band or broadcast treatment at the following rate. Two applications may be made if needed.

Annual Weed Problem	
(Up to 2 inches tall)	Rate/Acre
Cotton 6-8"	0.4 qt.
Cotton 8-12"	0.6 qt.

For control of seedling perennial grass such as johnsongrass in directed sprays and partial control of nutsedge or when weed growth is under drought stress or over 2 inches in height, add 2.0 to 3.5 pounds active DSMA or 1.65 to 2.0 pounds active MSMA to above spray mixture. If DSMA or MSMA are used, do not apply after first bloom.

For enhanced weed control in hooded/shielded sprayer applications add MSMA or DSMA as suggested above; or Gramoxone Inteon, Roundup UltraMAX, or Touchdown according to label recommendations. Consult product labels for specific recommendations and precautions for hooded sprayer applications.

Late Season (Lay-by): Apply 0.8 to 1.2 quarts (0.8 to 1.6 quarts in Arizona and California) per acre when cotton is at least 12 inches high (at least 20 inches for Pima S2). 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, to 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 (4 inches or less in height) at lay-by time, make a single application in combination with surfactant, or use 0.4 to 0.6 quarts per acre plus surfactant and repeat later if needed.

**Replanting:** If initial seeding fails to produce a stand, cotton may be replanted in soil treated preemergence with this product alone or following preplant application of Trilin or other trifluralin products. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as 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 preplant or preemergence application of herbicide during the same crop year as injury to crop may result.

## SUBSEQUENT CROPS

#### This Product Type of Application Band pre or postemergence

Band pre plus postemergence

Broadcast preemergence (and preplant) or

Broadcast preemergence plus band postemergence

Broadcast postemergence (lay-by)

That May Follow Treated Cotton Any crop 4 months after last application

Cotton, soybeans, corn or grain sorghums (not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within 1 year after last application as injury to subsequent crops may result.

Cotton, corn, grain sorghums (not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within 1 year after fast application as injury to subsequent crops may result.

For subsequent crops in fields where Trilin (or other trifluralin products) is used, follow instructions on the trifluralin product label.

#### FILBERTS (Not registered for use in California)

This product may be used for control of certain weeds in filbert orchards established for at least one year.

Aerial application is prohibited.

Maximum rate per application: 2.2 quarts of product (2.2 pounds a.i.) per acre. Maximum application rate per crop cycle: 3.2 quarts of product (3.2 pounds a.i.) per acre. Apply a maximum of two applications per year. Minimum retreatment interval: 150 days.

Apply this product as a directed spray, avoiding contact on the foliage and fruit with spray or drift. Make an initial treatment of up to 2.2 quarts per acre in the late fall or early winter after harvest. Repeat annually with 2.2 quarts per acre, or apply 1.6 quarts per acre in October or November after harvest and repeat at the same rate in March or April.

Do not apply when nuts are on the ground.

Do not graze livestock in treated orchards.

Do not use on light sandy soils.

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.

#### GRAPE

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

Aerial application is prohibited.

Maximum rate per application: 4 quarts of product (4 pounds a.i.) per acre. Maximum application rate per crop cycle: 8 quarts of product (8 pounds a.i.) per acre. Apply a maximum of two applications per year. Minimum retreatment interval: 90 days.

New York and Pennsylvania - Grasses: Use only in established vineyards (at least 4 years old) for spot control of perennial grasses such as orchardgrass, quackgrass and ryegrass. Apply in the spring as a band treatment to ridged soil (2 to 4 inches high) under trellis at the rate of up to 4 quarts per acre. Band width should not exceed 30 inches. Do not apply more than once every 4 years. Use only on heavy soil types such as loarns, silt loarns, clay loarns. Do not use in areas where grape roots are shallow or exposed because of high bedrock, poor drainage or erosion, as injury to grapevines may result.

East of the Rocky Mountains: On soils low in clay or organic matter (1 to 2%), apply 1.6 to 2.4 quarts per acre. On soils high in clay or organic matter, apply 2.4 to 4 quarts per acre. 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 quarts per acre. Subsequent annual applications of 1.6 quarts per acre will usually give adequate weed control. Do not apply to vines with trunks less than 1.5 inches in diameter as injury may result.

GRASS SEED CROPS (Perennial except where specifically indicated) Except as noted, apply only to established plantings at least 1 year old. Maximum rate per application: 4 quarts of product (4 pounds a.i.) per acre. Maximum application rate per crop cycle: 8 quarts of product (8 pounds a.i. per acre). Apply a maximum of two applications per year. Minimum retreatment interval: 90 days. **Colorado, Kansas, New Mexico, Oklahoma:** On sand bluestem, side-oats grama and switchgrass, apply 1.6 to 2.4 quarts per acre 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 quarts per acre. Spread unburned chaff or straw with a harrow or chopper before application. Aerial application is prohibited in these states.

Eastern Oregon, Eastern Washington: On perennial bluegrass and fescue apply 0.8 to 2.4 quarts per acre 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 (1-4 leaf). DO NOT use on coarse (sand) textured soils.

Western Oregon, Western Washington: On alta fescue, Astoria bentgrass, Highland bentgrass, Kentucky bluegrass (Merion bluegrass) and orchardgrass apply 1.6 to 3.2 quarts per acre between October 1 and November 15. In fields where ash residues have accumulated from burning straw, use 2.4 to 3.2 quarts per acre. Spread unburned chaff or straw with a harrow or chopper before application. If perennial veivetgrass (*Holcus lanatus*) is a problem, use 3.2 quarts per acre. For best results apply as soon as possible after fall rains start. Established weeds beyond two to four leaf stage should be removed 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.; apply 1.6 quarts per acre.

**Oregon, Washington:** Apply in the fall to perennial ryegrass at the rate of 0.8 to 1.6 quarts per acre and to tall fescue at the rate of 1.6 to 3.2 quarts per acre. Use a sufficient volume of water, a minimum of 25 gallons per acre, 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 1 through November 15). Established weeds beyond the 2-4 leaf stage should be removed 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 quarts per acre as a directed or shielded spray so the intended crop row area is not treated. These applications should be made 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 postemergence 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 recommended.

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 quarts per acre 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 may be used 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 one to two 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 1/2 to 1 inch of rainfall or sprinkler irrigation is needed to move this product into 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 a tank mix with other herbicides, use 0.8 to 1.2 quarts per acre 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 a certain tank mix for the first time, limit use to a small area to determine safety before treating large areas.

Precautions: Do not replant treated areas to any crop within 2 years of last application as injury to subsequent crops may result.

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, insect or disease, or damage from other herbicides.

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New Plantings - Oregon, Washington: For 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 15 pounds per acre of crop where row spacing is 20 inches (300 pounds per acre broadcast basis). Mount nozzles to apply directly over seed rows to prevent crop injury. Follow with this product as a single broadcast spray at the rate of 2.0 to 2.4 quarts per acre. 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.

#### MACADAMIA NUT

Hawaii: Use only under trees established in the orchard for at least 1 year. Apply 1.6 to 4.8 quarts per acre immediately after harvest, preferably before weeds emerge. If weeds have emerged, add surfactant. Retreat as needed but do not exceed 8.0 quarts per acre per year. Aerial application is prohibited.

#### OATS

Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result. Aerial application is prohibited.

Drill Planted Spring Oats - Idaho, Eastern Oregon, Eastern Washington: Use in areas where average annual rainfall exceeds 16 inches. Make a single application of 0.8 to 1.2 quarts per acre 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 in height.

Drill Planted Winter Oats and Mixture with Peas or Vetch - Western Oregon, Western Washington: Make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting but before crop emergence.

#### OLIVE (California)

Use only under trees established in the grove for at least 1 year. Apply 1.6 guarts per acre after the grove has been laidup in final form in late October or November. Repeat at same rate in March or April. Remove weed growth prior to treatment. Aerial application is prohibited.

#### PAPAYA

Use only under trees established in the orchard for at least 1 year. Apply 2.0 to 4.0 quarts per acre, preferably before weeds emerge. If weeds have emerged, add surfactant

Aerial application is prohibited.

#### PEAS (Austrian Field)

Western Oregon: This product may be used for selective control of certain weeds in Austrian field peas.

Aerial application is prohibited.

Apply 1.2 to 1.6 quarts of this product per acre as a broadcast spray with air or ground equipment as soon as possible after planting but before crop emerges for control of weeds such as chickweed, sheperdspurse, wild mustard, fiddleneck, lambsquarters, piqweed and annual bluegrass. Use lower rate on coarse-textured soils and higher rate on fine-textured soils.

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

#### PEACH

This product may be applied alone or as a tank mix with Sinbar.

Aerial application is prohibited. Do not apply within 3 months of harvest.

All except California:

Maximum rate per application: 2.2 guarts of product (2.2 pounds a.i.) per acre. California only:

Maximum rate per application: crop cycle: 2.4 guarts of product (or 2.4 pounds a.i.) per acre. Apply a maximum of one application per year.

Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above water line), 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 growing season.

This product alone: Use only under trees established in the orchard for at least 3 years. Apply 1.6 to 2.2 quarts per acre in the early spring before weeds emerge or during the early seedling stage of weed growth. Do not apply within 3 months of harvest. In the Far West, do not apply within 8 months of harvest

Georgia: On trees established for at least 2 years, apply 1.6 to 2.2 quarts per acre in the spring. Repeat application in the fall but do not exceed 4.0 quarts per acre per year. Add surfactant to improve control of small, emerged weeds.

This product plus Sinbar: 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.

	1 to 2 %	1 to 2 % Organic Matter			More Than 2% Organic Matter			
Soil Texture	This Product Qts./Acre	-	Sinbar Lbs/Acre	This Product Qts./Acre		Sinbar Lbs./Acre		
Sandy loam	0.8	+	1.0	1.2	+	1.5		
Loam, Silt Ioam, Silt	1.2	+	1.5	1.6	+	2.0		
Clay loam, Clay	1.6	+	2.0	1.6	+	20		

#### PEAR

Use only under trees established in the orchard for at least 1 year. Aerial application is prohibited. Do not treat varieties grafted on full-dwarf root stocks. Apply 3.2 quarts per acre in the spring

from March through May. In the Far West, apply 3.2 quarts per acre to weeds less than 2 inches in height or diameter under dormant trees. Alternatively, apply to small weeds at 1.6 quarts per acre postharvest followed by 1.6 quarts per acre prior to budbreak.

#### PECAN

Use this product alone or as a tank mix with Sinbar. 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

Aerial application is prohibited.

	RAT	E/ACRE				
	Tank mix **					
	This Product	OR	This			
Soil Texture	Alone*		Product	+	Sinbar	
Sandy loam	1.6 qts.		1.2 gts.		1.5 lbs.	
Loam, Silt loam, Silt	2.4 qts.		1.4 qts.		1.75 lbs.	
Clay loam, Clay	3.2 qts.		1.6 qts.		2.0 lbs.	

Use only under trees established in the grove for at least 3 years, and on soils with at least 0.5% organic matter.

Use only under trees established in the grove for at least 1 year, and on soils with at least 1% organic matter.

Note: 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 may occur.

#### PEPPERMINT

Aerial application is prohibited.

Washington, Oregon, Idaho: Apply this product at 0.6 to 0.8 quarts per acre on soils having 1.0% to 2.0% organic matter.

Apply this product at 0.8 to 1.6 quarts per acre on soils having 2.1 to 3.0% organic matter.

Apply this product at 1.6 to 2.4 quarts per acre on soils having more than 3.0% organic matter.

Precautions: 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 soil, 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.

Application Timing: Apply this product to established (at least one year) stands of mint 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 time of application, the use of a surfactant at 0.25% volume/volume or crop oil concentrate at 1.0% volume/volume may be used to increase the performance of this product postemergence 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 this product use rate range 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.

#### PINEAPPLE

### Aerial application is prohibited.

Hawaii: Apply 1.6 to 4.8 quarts per acre as a broadcast spray just before or immediately after planting but prior to weed emergence. Use 1.6 to 3.2 quarts per acre after harvesting the plant crop or ratoon crop (for first ratoon crop as well as subsequent ration 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 quarts per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 1.6 quarts per acre. Do not apply more than 9.6 quarts per acre nor more than 12.8 quarts total per acre per plant crop. Treated areas may be planted to pineapple or sugarcane 1 year after last application.

Florida: Apply 3.2 to 5.0 quarts per acre as a broadcast spray just before or immediately after planting but prior to weed emergence. For ratoon crop use 3.2 quarts per acre after harvesting plant 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 quarts per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 1.6 quarts per acre. Do not apply more than three broadcast sprays (maximum 9.6 quarts per acre) prior to differentiation nor more than 12.8 quarts total per acre per plant crop. Treated areas may be planted to pineapple or sugarcane 1 year after last application.

Puerto Rico: Apply 3.0 to 5.0 quarts per acre as a broadcast spray before or immediately after planting but prior to weed emergence. Preemergence application controls weeds such as pigweed, crotalaria, morningglory, purslane, crabgrass, foxtail, goosegrass, fall panicum and sourgrass.

#### RED CLOVER

Western Oregon: Make a single application of 1.6 quarts per acre on established red clover stands at least 9 months old. Apply when red clover is dormant between October 15 and December 15. Do not apply to seedling red clover. Do not replant treated area to any crop within 1 year after last application as injury to subsequent crops may result. AERIAL APPLICATION IS PROHIBITED.

Treatment will control annual weeds such as bluegrass, chickweed, hawksbeard, rattail fescue, ryegrass and velvetgrass.

#### SORGHUM (Grain)

#### DO NOT SPRAY OVER TOP OF SORGHUM. Aerial application is prohibited.

Southwestern States: Apply 0.2 to 0.4 quart per acre plus surfactant. Apply as a directed postemergence spray after sorghum is 15 inches tall to control weeds 2 to 4 inches in height. Use 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. Do not exceed 0.4 quart per acre. Treatment of weeds under drought stress is usually ineffective.

Do not replant treated areas to crops other than cotton or corn within 4 months following band treatment and 6 months following broadcast treatment as injury to subsequent crops may result.

#### SUGARCANE

To prevent possible crop injury on new cane varieties, test tolerance to this product prior to adoption as a field practice. Do not treat sugarcane growing on thinly covered sub-soils or rocky areas as crop injury may result. Temporary chlorosis and stunting of the crop may result from application over emerged cane. Application over emerged cane should be made only as directed below, without the addition of a surfactant or crop oil concentrate. To minimize chlorosis and stunting, use directed postemergence sprays.

**Preemergence - Florida:** For high organic soils, apply 1.6 to 3.2 quarts per acre as a broadcast or band spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop).

Postemergence - Florida: Make one or two applications of 1.6 quarts per acre as needed by directed spray inter-row. Alternatively, for panicum control, make up to three applications of 0.4 to 0.8 quarts per acre 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 4.8 quarts total per acre between planting (or ratooning) and harvest.

Hawaii: Apply 1.6 to 4.8 quarts per acre 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 quarts per acre 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 three treatments nor more than 9.6 quarts per acre in Hawaii between planting (or rationing) and harvest. Treated areas may be replanted to sugarcane or pineapple 1 year after last application.

Puerto Rico: Apply 3.2 to 5.0 quarts per acre as a broadcast spray prior to weed emergence after planting or after harvesting plant crop or ratoon crop. A second and third application of 1.6 to 3.2 quarts per acre may be made as a broadcast spray over emerged cane or by directed spray inter-row.

If weeds are emerged, add a surfactant and apply as a directed spray.

Do not apply more than three treatments nor more than 8 quarts per acre in Puerto Rico between planting (or ratooning) and harvest. Treated areas may be replanted to sugarcane or pineapple 1 year after last application.

**Louisiana, Texas:** Apply at 2.4 - 3.0 quarts per acre. 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.

This product may be applied as a post-directed spray immediately after the last cultivation. Direct the spray application to the base (no more than 1/3 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 1.0% V/V to the spray mix.

**Precautions:** Temporary leaf yellowing may occur following application. Do not apply more than 6 quarts per acre broadcast per year. For band application, reduce the above broadcast rates proportionately to the width of the band using the following formula:

#### Band width in inches

	х	Broadcast Rate	= Band Rate per Acre
Row width in inches			

#### TREE PLANTINGS

Colorado, Montana, Nebraska, North Dakota, South Dakota, Wyoming: 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 2.0 to 4.0 quarts per acre. Apply as a band 4 feet wide in the tree row (2 feet on each side of row). For example, 1.6 ounces this product treats 135 feet of tree row (2 feet on each side of row) at the rate of 4.0 quarts per acre. Apply as a directed spray in early spring before weeds emerge and before trees leaf out. Do not apply to foliage of trees, nor under trees growing in low areas as injury may result.

Aerial application is prohibited.

Idaho, Oregon, Washington: This product is recommended for control of weeds to aid in the establishment of hybrid poplar plantings. Apply at 0.8 to 2.4 quarts per acre depending upon soil texture and organic matter content. Use 0.8 to 1.6 quarts per acre on coarse textured soils and 1.6 to 2.4 quarts per acre 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 are 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.

Pre-plant: 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 planted 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 growing season (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 (Roundup Pro® Herbicide or Roundup Original® Herbicide) pre-plant and as a directed spray to broaden the spectrum of weeds controlled and improve post-emergence activity. Use 0.8 to 2.4 quarts this product plus glyphosate herbicide (according to label recommendations) 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.

#### WALNUT (English)

Aerial application is prohibited. Apply a maximum of two applications per year. Minimum retreatment interval: 150 days

#### All areas except California:

Maximum rate per application: 2.2 quarts of product (2.2 pounds a.i.) per acre, maximum application rate per crop cycle: 3.2 quarts of product (3.2 pounds a.i.) per acre.

#### California only:

Maximum rate per application: 3 quarts of product (3.0 pounds a.i.) per acre, maximum application rate per crop cycle: 3 quarts of product (3.0 pounds a.i.) per acre.

**California, Oregon, Washington:** Use only under trees established in orchards for at least 1 year. As an initial treatment, apply 2.4 to 4.0 quarts per acre after the orchard has been laid-up in final form (non-tillage program) in late fall or early winter. Retreat annually with 1.6 to 2.4 quarts per acre. Alternatively, apply 1.6 quarts per acre in October or November and repeat at the same rate in March or April.

Do not use on sand, loamy sand, gravelly soils or exposed sub-soils, nor where organic matter is less than 1%. Do not graze livestock in treated orchards and groves.

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#### WHEAT (Winter)

Precautions: Crop injury may result where severe winter stress, disease or insect damage follows application. Winter-sensitive varieties may be less tolerant of this product than winter-hardy varieties. Crop injury may result from failure to observe the following: Do not use on sand or loamy sand soils, nor on gravely or sandy loams with less than 1% organic matter. Do not use on thinly covered or exposed sub-soil area (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 specified otherwise, do not use with surfactants or nitrogen solution. 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.

Idaho, Oregon, Washington - East of Cascade Range: Where average annual rainfall exceeds 16 inches, make a single application of 0.8 to 1.2 quarts per acre.

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. Application should not be made after soil freezes in the fall. Wheat planted in late October should not be treated until the following spring.

Spring Treatment: Apply as soon as wheat starts to grow. Treatment made prior to April 10 will usually give good results, provided weed growth is less then 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 0.25 pound bromoxynil per acre as a tank mixture, in either the fall after wheat has emerged but before soil freezes or in the spring as soon as soil thaws. Apply before weeds are more than 2 inches tall or across.

Where average annual rainfall is 10 to 16 inches following fall planting, make a single application of 0.8 to 1.2 quarts per acre when sufficient moisture is available to germinate wheat seed. Apply before soil freezes and weeds are 2 inches tall. Application later than March 1 may give poor results.

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. Spring wheat should not be planted before April 1 and only after deep discing and plowing to a depth of 4 to 6 inches prior to planting. Do not make a second application during the same crop year or injury to the crop may result.

Oregon, Washington - West of Cascade Range: Make a single application of 1.2 to 1.6 quarts per acre 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 Oregon and Washington: 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.

Kansas, Oklahoma, Texas: Do not use on sand or sandy loam soils. Use 0.8 quart per acre on silt and silt loam soils and 1.2 to 1.6 quarts per acre on clay, clay loam and silty clay loam soils.

Central Plains, Midwest: Use 0.8 to 1.6 quarts per acre.

Northeast: Use 0.8 to 1.2 guarts per acre.

#### NON-CROP WEED CONTROL

This product is an effective herbicide for the control of listed weeds. The degree of control and duration of effect will vary with amount of chemical applied, soil texture, rainfall and other conditions. This product may be used as a preemergence treatment at any time of the 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 applied shortly before weed growth begins. If dense growth is present, remove tops and spray the ground.

Maximum rate per year: 12 lbs ai (12 quarts product) per acre per year. Rights of way/non-crop areas:

Maximum rate per application:

- 12 quarts of product (12.0 pounds a.i.) per acre in areas of high rainfall or dense vegetation,

- 8 quarts of product (8.0 pounds a.i.) per acre in all other areas

Apply a maximum of two applications per year.

Minimum retreatment interval 90 days.

Increased contact activity on established weeds may be obtained by the addition of a non-ionic 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 insure a constant rate of application. Mix proper amount of this product into volume of water necessary to obtain uniform coverage. If a surfactant is used, dilute with ten parts of water and add as last ingredient to 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, it should terminate at bottom of tank to minimize foaming. Use 50 mesh screen or larger.

General Weed Control: To control most annual weeds for an extended period of

time on non-cropland such as utility, highway, pipeline and railroad right of ways, petroleum tank farms, lumberyards, storage areas, industrial plant sites, around /(3 farm buildings and similar areas apply 4 to 12 quarts per acre to control annual weeds including:

Knawel

Marigold

Pennycress

Pigweed

Pokeweed

Purslane

Lambsquarters

Mexican Clover

Pineappleweed

Morningglory, Annual

## Broadleaves

Grasses

Crabgrass

Guineagrass

Maidencane

Pangolagrass

Foxtail

4 to 12 quarts/acre Ageratum Chickweed Cocklebur Corn Speedwell Corn Spurry Dayflower Dogfennel Fiddleneck (Amsinckia) , Flora's Paintbrush Gromwell Groundcherry, Annual Hawksbeard Horsenettle Horseweed

4 to 6.4 quarts/acre

Johnsongrass (Seedling)

Bluegrass, Annual

Kyllinger (Kyllinga)

6.4 to 12 quarts/acre

Barnyardgrass (Watergrass) Lovegrass, Annual Orchardgrass Peppergrass

Red Sprangletop

Quackgrass Rattail Fescue

Prickly Lettuce Wild Buckwheat Prickly Sida (Teaweed) Wild Lettuce Wild Mustard Rabbit Tobacco Wild Radish

Ricegrass Ryegrass, Annual Sandbur Velvetgrass Vernalgrass, Sweet, Annual

Ragweed

Sesbania

Sicklepod

Shepherdspurse

Smartweed, Annual

Velvetleaf (Buttonweed)

Sowthistle, Annual

Spanish Needles

Tansymustard

Irrigation and drainage ditches: Apply 4 to 12 quarts per acre to control most annual weeds as shown above. Apply only when water is not in the ditch. For irrigation ditches, apply during the non-crop season and when the ditch is not in use. To avoid crop injury, it is essential to minimize movement of this product in irrigation water. 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.

ATTENTION: This product contains Diuron, a chemical known to the State of California to cause cancer in laboratory animals.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. PESTICIDE STORAGE: Store product in original container only, away from other pesticides, fertilizer, food or feed.

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

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

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. For packages up to 5 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in

#### Storage & Disposal cont'd.:

the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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

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

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

Red text for identification of package sizes.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVE-LAND PRODUCTS, INC. or the seller is authorized to vary in any way.

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

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

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

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

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## NOTHICATION

## JAN 3 0 2009