 <p><b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b>  <b>Office of Pesticide Programs</b>  <b>Registration Division (7505P)</b>  <b>Ariel Rios Building</b>  <b>1200 Pennsylvania Ave., NW</b>  <b>Washington, D.C. 20460</b></p> <p>NOTICE OF PESTICIDE:  <input checked="" type="checkbox"/> Registration  <input type="checkbox"/> Reregistration</p> <p>(under FIFRA, as amended)</p>	EPA Registration Number:  85678-24	Date of Issuance:  <b>JAN 10 2012</b>
	Term of Issuance: <b>Unconditional</b>	
	Name of Pesticide Product:  <b>Diuron 4L</b>	

Name and Address of Registrant (include ZIP Code):

<b>RedEagle International, LLC</b>	<b>c/o Wagner Regulatory Associates, Inc.</b>
<b>1925 East Edgewood Drive, Suite 105</b>	<b>P.O. Box 640</b>
<b>Lakeland, FL 33803</b>	<b>Hockessin, DE 19707</b>

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

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

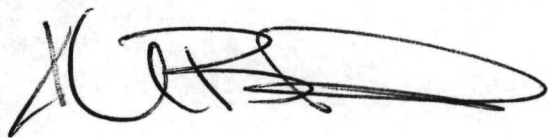
This product is registered in accordance with FIFRA provided that you:

1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
2. Submit one-year Storage Stability (Guideline 830.6317) and Corrosion Characteristics (Guideline 830.6320) studies within eighteen (18) months from the date of this notice.

The Basic Confidential Statement of Formula (CSF) dated October 14, 2011 is acceptable.

A stamped copy of the label is enclosed for your records. Submit one (1) copy of the revised final printed label before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions regarding this Notice, please contact Mindy Ondish at (703)605-0723 or at [ondish.mindy@epa.gov](mailto:ondish.mindy@epa.gov).

Signature of Approving Official:  <b>Kable Bo Davis</b> <b>Product Manager 25</b> <b>Herbicide Branch</b> <b>Registration Division (7505P)</b> 	Date:  <b>JAN 10 2012</b>
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**Group 7 Herbicide**

# Diuron 4L

Diuron Liquid Flowable Herbicide

For Control of Many Annual and Perennial Grasses and Herbaceous Weeds

**ACTIVE INGREDIENT:**

Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea.....40.0%

**OTHER INGREDIENTS:**.....60.0%

**TOTAL**.....100.0%

Contains 4.0 Pounds of Diuron Per Gallon

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

FIRST AID	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222.</p> <p>For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at 1-800-424-9300.</p>	

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

EPA Reg. No. 85678-24

EPA Est. No.

NET CONTENTS: \_\_\_\_\_

Manufactured for: RedEagle International LLC  
1925 E Edgewood Drive, Ste 105  
Lakeland, FL 33803

<p><b>ACCEPTED</b></p> <p>JAN 10 2012</p> <p>Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. <u>85678-24</u></p>
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**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.

**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:**

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical resistant gloves such as polyethylene or polyvinylchloride, and
- NIOSH-approved dust/mist filtering respirator with any N, R, P, or HE filter or an NIOSH-approved dust/mist filtering respirator with approval number prefix TC-21C.
- 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 exist, 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 thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. 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 determines 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 ASABE standard S572.1) 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 to 10 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 C01-0132C (W.D. W.A.). For information, please refer to <http://www.epa.gov/espp/litstatus/wtc>.

**PRODUCT INFORMATION**

This product must be used only in accordance with directions on this label, or in separate published directions.

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 non-volatile.

**Restrictions:**

- 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.
- Do not apply this product through any type of irrigation system.

**Precautions:****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.
- Keep from contact with fertilizers, insecticides, fungicides and seeds.
- Calibrate sprayers only with clean water away from well sites.
- 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).

This product may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time. The degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall, and other conditions. Soils high in clay or organic matter require higher dosages than soil low in clay or organic matter for equivalent herbicide performance. 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 procedure 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 CROP 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 restrictions, 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.

### SELECTIVE USE IN CROPS

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

**Preemergence Use (Germinating Weeds):** Diuron 4L, at specified rates, controls annual weeds and grasses such as:

<p><b><u>0.6 to 0.8 quarts/acre</u></b>            Barnyardgrass (Watergrass)            Crabgrass            Lambsquarters            Pigweed            Purslane            Ragweed</p>	<p><b><u>1.2 to 1.6 quarts/acre</u></b>            Bluegrass, Annual            Chickweed            Corn Spurry            Dogfennel            Fiddleneck (Amsinckia)            Foxtail            Gromwell            Groundcherry, Annual            Knawel            Morningglory, Annual            Pennycress            Rattail Fescue            Red Sprangletop            Shepherdspurse            Tansymustard            Velvetgrass            Vernalgrass, Sweet, Annual            Wild Buckwheat            Wild Lettuce            Wild Mustard</p>	<p><b><u>1.6 to 4.8 quarts/acre</u></b>            Ageratum            Corn Speedwell            Dayflower            Flora's Paintbrush            Hawksbeard            Horseweed            Johnsongrass (Seedling)            Kyllinger (Kyllinga)            Lovegrass, Annual            Marigold            Mexican Clover            Orchardgrass            Peppergrass            Pineappleweed            Pokeweed            Rabbit Tobacco            Ricegrass            Ryegrass, Annual            Sandbur            Smartweed, Annual            Sowthistle, Annual            Spanish Needles            Velvetleaf (Buttonweed)            Wild Radish</p>
<p><b>Partial control:</b></p>		
<p><b><u>0.8 quarts/acre</u></b>            Cocklebur            Morningglory, Annual            Prickly Sida (Teaweed)            Sesbania            Sicklepod</p>	<p><b><u>3.2 quarts/acre</u></b>            Horsenettle            Quackgrass</p>	<p><b><u>6.4 to 8.0 quarts/acre</u></b>            Guineagrass            Maidencane            Pangolagrass</p>

**APPLICATION DIRECTIONS**

**AERIAL APPLICATION:** For alfalfa, barley (winter), cotton (preplant or preemergence 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.

**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. Diuron 4L at specified 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 Diuron 4L. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures of 70°F or higher.

**SPRAY PREPARATION:** Mix specified amount of Diuron 4L 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 Diuron 4L 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, corn, 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 Diuron 4L, 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):**

**Restriction:**

- Do not graze livestock in treated orchards or groves.

Unless otherwise directed, make single application per year as a directed spray, avoiding contact of foliage and fruit with spray or drift.

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**CROP USES**

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**ALFALFA**

**Restrictions:**

- Do not spray on snow-covered or frozen ground.
- Maximum application rate per crop cycle: 2.4 quarts of product (or 2.4 pounds ai) per acre.
- Apply a maximum of one application per year.
- 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.

**Arizona, Nevada:** Use 1.2 to 2.4 quarts per acre. Apply in fall 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 after alfalfa becomes dormant or semi-dormant, but before growth begins in the spring. Crop injury may result if application is made to actively growing alfalfa. For best results, apply before weeds have emerged or become established (2 inches in height or diameter). Control of established weeds is improved by applying this product with a suitable contact herbicide registered for such use. Sufficient rainfall for soil activation of this product is unlikely in 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 per acre. For control of volunteer alfalfa use 2.4 Quarts per acre. Apply in fall 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

##### Restrictions:

- Aerial application is prohibited.
- Maximum rate per application: 3.2 quarts product (3.2 pounds ai) per acre.
- Maximum application rate per crop cycle: 3.2 quarts product (3.2 pounds ai) 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.

**Diuron 4L 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 fall but do not use more than 3.2 quarts per acre per year. Add a surfactant to improve control of small, emerged weeds.

**DIURON 4L 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						
Soil Texture	1 to 2% Organic Matter			More Than 2% Organic Matter		
	Diuron 4L Qts/Acre		Sinbar Lbs/Acre	Diuron 4L Qts/Acre		Sinbar Lbs/Acre
Sandy loam	0.8	+	1.0	1.2	+	1.5
Loam, Silt loam, 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 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.

**ARTICHOKE (California)****Restriction:**

- 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****Restriction:**

- Aerial application is prohibited.
- 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.

Apply as a band or broadcast treatment. Preemergence weed control will be reduced on soils with greater than 5% organic matter.

**Established Plantings:** On light 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 after the last cultivation. A second application may be made 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****Restriction:**

- Aerial application is prohibited.
- Do not replant treated area to any crop within 2 years after last application as injury to subsequent crops may result. Exception: sugarcane or pineapple may be planted after 1 year.

**New Plantings:** To control annual weeds, apply 1.2 to 2.4 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 of Diuron 4L per acre (broadcast basis) in 12 months.

#### **BARLEY (Winter)**

##### **Restriction:**

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

**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.

#### **BERMUDAGRASS PASTURES (Newly Sprigged)**

##### **Restrictions:**

- Aerial application is prohibited.
- Do not graze or feed foliage from treated areas to livestock within 70 days after application.

Apply 0.8 to 2.4 quarts after planting and before emergence of Bermudagrass or weeds. Alternatively, for control of emerged annual weeds up to 4 inches in height, apply 0.4 to 0.8 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.

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

##### **Restriction:**

- 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.

**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).

#### **BLUEBERRY, CANEBERRY, GOOSEBERRY**

##### **Restriction:**

- Aerial application is prohibited.
- 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.

**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 quarts 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

### Restriction:

- Aerial application is prohibited.

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.

Diuron 4L may be applied in citrus in combination with registered paraquat and glyphosate formulations. Read and follow specific label instructions, precautions, and restrictions on the label of the tank mix partner when applying Diuron 4L in combination with other products.

For citrus trees less than four years old:

- Minimum retreatment interval is 60 days
- Maximum of 2 applications per year

For citrus trees 4 years or older:

- Minimum retreatment interval is 80 days
- Maximum of 2 applications per year

**Citrus (all areas except Flatwoods FL)**

**Restrictions:**

- Maximum single application rate is 3.2 quarts of product (3.2 lbs ai) per acre.
- Maximum annual application rate is 6.4 quarts of product (6.4 lbs ai) per acre.

**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 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)**

**Restrictions:**

- Maximum single application rate is 6.4 quarts of product (6.4 lbs ai) per acre.
- Maximum annual application rate is 6.4 quarts of product (6.4 lbs ai) per acre.
- 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.

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.

**Ridge Areas - Except Highlands County – (Highly permeable soils)**

**Restrictions:**

- Maximum single application rate is 3.2 quarts of product (3.2 lbs ai) per acre.
- Maximum annual application rate is 6.4 quarts of product (6.4 lbs ai) per acre.
- The maximum allowable use rate for diuron is 6.4 pounds ai per treated acre per year inclusive of all diuron formulations used within 1 year.

Apply from 1.6 quarts per acre to a maximum of 3.2 quarts per acre for control of annual broad leaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds.

**Ridge Areas - Highlands County – (Highly permeable soils)**

**Restrictions:**

- Maximum single application rate is 3.2 quarts of product (3.2 lbs ai) per acre.
- Maximum annual application rate is 4.8 quarts of product (4.8 lbs ai) per acre.
- The maximum allowable use rate for diuron is 4.8 pounds ai per treated acre per year inclusive of all diuron formulations used within 1 year.
- Do not use at less than 60 day intervals.

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.

**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 quarts per acre for annual weeds. Use 3.2 quarts 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)**

#### **Restrictions:**

- 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.
- 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.

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

**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.

### **PREPLANT BURNDOWN APPLICATION - EAST OF ROCKY MOUNTAINS**

#### **Restrictions:**

- Aerial application is prohibited.
- Do not apply more than a total of 1.6 quarts of Diuron 4L per treated acre per year from all application timings.
- Do not apply Diuron 4L to frozen ground.
- Do not replant treated areas to crops other than corn or cotton within 8 months following either a band or broadcast treatment of Diuron 4L as injury to subsequent crops may result. Always consult the tank mix partner(s) label to determine any additional rotation or plant back restrictions.

Apply Diuron 4L from fall through spring at up to 30 days prior to planting corn (preplant burndown). Apply preplant burndown applications of Diuron 4L at rates of 0.5 to 0.8 quarts product per acre as a broadcast application. The degree and duration of herbicidal efficacy from Diuron 4L will vary with the amount of chemical applied, soil texture, rainfall and other conditions.

Soils high in clay or organic matter will require higher dosages than soil low in clay or organic matter for equivalent herbicide performance. Moisture following application is required to activate the herbicide. Best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks after application. Plant corn at least 1.5 inches deep and make sure that the seed slot is closed. Diuron 4L may also be tank mixed with other herbicides labeled for use in preplant burndown application in corn. If weeds are emerged at the time of application apply Diuron 4L or Diuron 4L plus any tank mix partner with an adjuvant. If tank mixed with other herbicides please read and follow all product labels for use rates, adjuvant recommendations, and any application restrictions associated with any tank mix partner.

**COTTON:****Restrictions:**

- Do not spray over the top of cotton plants.
- Cotton (preplant/preemergence/postemergence)
  - Maximum application rate per crop cycle
    - 0.8 quarts of product (0.8 pounds ai) per acre in coarse soils,
    - 1.5 quarts of product (1.5 pounds ai) per acre in medium soils, and
    - 2.2 quarts of product (2.2 pounds ai) 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.
- Do not apply to sand or loamy sand soils.
- Do not use on soils with less than 1% organic matter as crop injury may result.
- Do not use this product in preplant or preemergence applications where soil-applied organophosphate insecticides are used due to potential for severe cotton injury and possible stand loss.

Seedling disease may weaken plants and increase the possibility of injury from the use of 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.

**Preplant - Arizona, California:** Use this product alone or apply as a separate operation following preplant broadcast treatment with 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 made early, weed control may be reduced in the furrow bottoms.

**Diuron 4L Alone:** Apply at 0.8 to 2.0 quarts per acre.



**Diuron 4L following trifluralin products:**

Soil Texture	Rate/Acre	
	Trifluralin 4 lbs/gal	Diuron 4L
Sandy loam, Loam, Silt loam, Silt	1 pt	0.5 to 0.8 qts.
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay, Clay	1.5 pts	0.8 to 1.0 qts.

**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 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 use rate for either application method.

**Diuron 4L Alone:**

Soil Texture	Rate/Acre
Sandy loam, Loam, Silt loam, Silt	0.8 qt.
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay	1.0 qt.
Silty clay, Clay	1.6 qts.

Preemergence application of herbicides with a similar mode of action to that of diuron following preplant application of Diuron 4L may result in cotton injury. When preplant applications of Diuron 4L are followed by preemergence applications of herbicides with a similar mode of action, e.g., 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 Diuron 4L 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 Diuron 4L is reduced where substantial rainfall (> 0.5") occurs between application and planting. Read and follow any additional restrictions on this label when using Diuron 4L for preplant weed control in cotton.

**Preplant Tank Mixes:** When emerged weeds taller than 2 inches or weeds not listed on this product label are present, this product may be tank mixed with other products labeled for preplant applications in cotton. The addition of dry spray grade ammonium sulfate at the rate of 2.0% w/w (17 pounds per 100 gallons finished spray solution) is suggested to enhance performance of this product plus glyphosate tank mixes.

**Replanting:** Only cotton and corn may be planted within 6 months of 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 trifluralin products. Apply this product after planting but before cotton emerges. Do not treat cotton in deep furrows as crop injury may result. Use only where cotton is planted on flat or raised seedbeds. Shallow incorporation (no deeper than 0.25 inch) with a rotary hoe or similar equipment following planting usually improves results, especially during dry weather. 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.

Do not apply this product 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 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	Rate/Acre
Sandy loam, Loam, Silt loam, Silt	0.8 qt.
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay	1.0 qt.
Silty clay, Clay	1.6 qts.

**PREEMERGENCE APPLICATIONS OF Diuron 4L FOLLOWING TRIFLURALIN PRODUCTS:**

Apply trifluralin products prior to planting as a broadcast or band treatment. Incorporate according to the directions on the trifluralin label. As a separate operation apply Diuron 4L after planting, but before cotton emerges. Use the following broadcast rates. For band treatment, use proportionately less.

Soil Texture	RATE/ACRE	
	trifluralin 4 lbs/gal	Diuron 4L
Sandy loam, Loam, Silt loam, Silt	1 pt	0.8 qt
Sandy clay loam, Clay loam, Silty clay loam, Sandy clay, Clay, Silty clay	1.5 pts	1.0 to 1.6 qts

**Postemergence - U.S.:**

Apply Diuron 4L only as a directed spray to cover weed foliage. Adjust nozzles to minimize contact of cotton leaves with spray or drift or crop injury may result. Applications may also be made in hooded/shielded sprayers.

**Early Season:** Apply when cotton is at least 6 inches tall and when weeds are actively growing and do not exceed 2 inches in height. Apply as a band 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 inches	0.4 qt
Cotton 8 - 12 inches	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 1.65 to 2.0 pounds active MSMA to above spray mixture. If MSMA is used, do not apply after first bloom.

For enhanced weed control in hooded/shielded sprayer applications add MSMA as directed above; or add registered paraquat or glyphosate formulations according to label instructions. Consult product labels for specific instructions and precautions for hooded sprayer applications.

**Late Season (Lay-by):** Apply 0.8 to 1.2 quarts per acre (0.8 to 1.6 quarts per acre in Arizona and California) when cotton is at least 12 inches high (at least 20 inches for Pima varieties). 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 or corn may be replanted in soil treated preemergence with Diuron 4L alone or following preplant application of 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

Diuron 4L	
Type of Application	That May Follow Treated Cotton
Band pre or postemergence	Any crop 4 months after last application
Band pre plus postemergence or Broadcast preemergence (and preplant) or Broadcast preemergence plus band postemergence	Cotton, soybeans, corn or grain sorghums (not sorghos 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.
Broadcast postemergence (lay-by)	Cotton, corn, grain sorghums (not sorghos 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.
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For subsequent crops in fields where trifluralin products are used, follow instructions on the trifluralin product label.

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

#### **Restrictions:**

- Aerial application is prohibited.
- Maximum rate per application: 2.2 quarts of product (2.2 pounds ai) per acre.
- Maximum application rate per crop cycle: 3.2 quarts of product (3.2 pounds ai) per acre.
- Apply a maximum of two applications per year.
- Minimum retreatment interval: 150 days.
- Do not apply when nuts are on the ground.
- Do not graze livestock in treated orchards.
- Do not use on light sandy soils.

Diuron 4L is for control of certain weeds in filbert orchards established for at least one year.

Apply Diuron 4L as a directed spray, avoiding contact on the foliage and fruit with spray or drift. Make an initial treatment of 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.

If trees are planted on hillsides, the elimination of weeds and ground cover may cause excessive soil erosion. Under these conditions, strip applications of Diuron 4L (at proportionately lower rates) may be made near the trees or to the tree rows perpendicular to the slope.

### **GRAPE**

#### **Restrictions:**

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

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.

### **NEW YORK AND PENNSYLVANIA:**

#### **Restrictions:**

- Do not apply more than once every 4 years.
- Use only on heavy soil types such as loams, silt loams, clay loams.
- Do not use in areas where grape roots are shallow or exposed because of high bedrock, poor drainage or erosion, as injury to grapevines may result.

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.

**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:**

**Restriction:**

- Do not apply to vines with trunks less than 1.5 inches in diameter as injury may result.

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.

**GRASS SEED CROPS (PERENNIAL EXCEPT WHERE SPECIFICALLY INDICATED)**

**Restrictions:**

- Maximum application rate per crop cycle: 2.4 quarts of product (2.4 pounds a.i. per acre).
- Apply a maximum of one application per year.
- Aerial application is prohibited except in the Pacific Northwest.

Except as noted, apply only to established plantings at least 1 year old.

**COLORADO, KANSAS, NEW MEXICO, OKLAHOMA:**

**Restriction:**

- Aerial application is prohibited in these states.

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.

**EASTERN OREGON, EASTERN WASHINGTON:**

**Restriction:**

- Do not use on coarse (sand) textured soils.

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).

**WESTERN OREGON/WESTERN WASHINGTON:** On alta fescue, Astoria bentgrass, Highland bentgrass, Kentucky bluegrass (Merion bluegrass) and orchardgrass apply 1.6 to 2.4 quarts per acre between October 1 and November 15. 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. 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 2.4 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. Diuron 4L 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 low pressure nozzles, shielded nozzles, or drop nozzles to reduce spray movement into the intended crop row area.

**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:** Diuron 4L is for use on healthy, vigorous stands of fine fescue. Diuron 4L 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 Diuron 4L 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 Diuron 4L 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.

**Restrictions:**

- 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.

**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**

**Restrictions:**

- Aerial application is prohibited.
- Do not exceed 8.0 quarts per acre per year.

**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.

**OATS**

**Restriction:**

- 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.

**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)**

**Restriction:**

- Aerial application is prohibited.

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

**PAPAYA**

**Restriction:**

- Aerial application is prohibited.

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.

**PEAS (AUSTRIAN FIELD)**

**Restriction:**

- Aerial application is prohibited.
- Do not use this product on sand, sandy loam, gravelly soils or exposed subsoils or on soils having less than 1% organic matter as crop injury may result.
- Do not replant treated area to another crop within one year of application.
- Crop injury may result if severe winter stress, disease or insect damage to the crop follows application.

**WESTERN OREGON:** Diuron 4L is for selective control of certain weeds in Austrian field peas. Apply 1.2 to 1.6 quarts Diuron 4L per acre as a broadcast spray with ground equipment as soon as possible after planting but before crop emerges for control of weeds such as chickweed, shepherdspurse, wild mustard, fiddleneck, lambsquarters, pigweed and annual bluegrass. Use lower rate on coarse-textured soils and higher rate on fine-textured soils.



**PEACH****Restrictions:**

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

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

All except California:

Maximum rate per application: 2.2 quarts of product (2.2 pounds ai) per acre.

California only:

Maximum rate per application: crop cycle: 2.4 quarts of product (or 2.4 pounds ai) 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. Where complete weed control to harvest is desired, additional weed control measures may be required during the growing season.

**This product alone:****Restriction:**

- Do not apply within 3 months of harvest. In the Far West, do not apply within 8 months of harvest.

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.

**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.

	RATE/ACRE					
	1 to 2% Organic Matter			More Than 2% Organic Matter		
Soil Texture	Diuron 4L Qts/Acre		Sinbar Lbs/Acre	Diuron 4L Qts/Acre		Sinbar Lbs/Acre
Sandy loam	0.8	+	1.0	1.2	+	1.5
Loam, Silt loam, Silt	1.2	+	1.5	1.6	+	2.0
Clay loam, Clay	1.6	+	2.0	1.6	+	2.0

**PEAR****Restriction:**

- Aerial application is prohibited.
- 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 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****Restriction:**

- Aerial application is prohibited.
- 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.

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.

**Diuron 4L plus Sinbar**

Soil Texture	RATE/ACRE				
	Diuron 4L Alone*	or	Tank mix **		
	Quarts		Diuron 4L Quarts	+	Sinbar Pounds
Sandy loam	1.6		1.2	+	1.5
Loam, Silt loam, Silt	2.4		1.4	+	1.75
Clay loam, Clay	3.2		1.6	+	2.0

\* 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.

**PEPPERMINT, SPEARMINT****Restriction:**

- Aerial application is prohibited.
- 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.

**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.

**APPLICATION TIMING:** Apply Diuron 4L 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 Diuron 4L postemergence to weeds.

**TANK MIXES AND SEQUENTIAL TREATMENTS:** Diuron 4L can be applied either alone or in a program involving tank mixes and/or sequential treatments with other herbicides and adjuvants providing Diuron 4L is not applied to actively growing mint plants.

When using a tank mix with other herbicides, use the lower end of the Diuron 4L 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****Restriction:**

- 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 ratoon crops) but before differentiation. For plant crop only, additional broadcast or interspace applications may be made prior to differentiation at the rate of 1.6 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**

##### **Restriction:**

- Aerial application is prohibited.
- 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.

**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.

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

#### **SORGHUM (GRAIN)**

##### **Restrictions:**

- Aerial application is prohibited.
- Do not spray over top of sorghum.
- Do not exceed 0.4 quart per acre.
- 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.

**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. Treatment of weeds under drought stress is usually ineffective.

#### **SUGARCANE**

To prevent possible crop injury on new cane varieties, test tolerance to Diuron 4L 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.

**FLORIDA:****Restriction:**

- Do not apply more than 4.8 quarts total per acre between planting (or ratooning) and harvest.

**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.

**HAWAII:****Restrictions:**

- Do not apply more than three treatments nor more than 9.6 quarts per acre in Hawaii between planting (or ratooning) and harvest.
- Treated areas may be replanted to sugarcane or pineapple 1 year after last application.

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.

**PUERTO RICO:****Restrictions:**

- 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.

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.

**LOUISIANA, TEXAS:****Restriction:**

- Do not apply more than 6 quarts per acre broadcast per year.

Apply at 2.4 - 3.0 quarts per acre. Diuron 4L may be applied as a broadcast spray after planting and following the harvesting of sugarcane. Diuron 4L may also be applied broadcast in late winter. Application is best when made prior to weed emergence.

Diuron 4L 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.

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

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast Rate} = \text{Band Rate per Acre}$$

### TREE PLANTINGS

**Colorado, Montana, Nebraska, North Dakota, South Dakota, Wyoming:**

#### Restriction:

- Aerial application is prohibited.
- Do not apply to foliage of trees, nor under trees growing in low areas as injury may result.

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.

**Idaho, Oregon, Washington:** This product is 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 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 directions) 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.

### **TRITICALE (Oregon only)**

#### **Restriction:**

- Aerial application is prohibited.

Crop injury may result where severe winter stress, disease, or insect damage follows application. Winter sensitive varieties may be less tolerant of Diuron 4L 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 gravelly or sandy loams with less than 1% organic matter. Do not use on thinly covered or exposed subsoils (clay knolls). Do not treat triticale planted less than 1 inch deep. Do not treat triticale where winter climatic conditions have caused "heaving" of plants. Do not treat triticale plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity, or other causes. Do not apply after triticale 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 one year after last treatment (except as noted) as injury to subsequent crops may result.

**East of Cascade Range:** Where average annual rainfall exceeds 16 inches, make a single application at the rate of 0.8 to 1.2 quarts per acre. For early fall planted triticale (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. Do not apply after soil freezes in the fall. Do not treat triticale planted in late October until the following spring. For spring treatment, apply as soon as triticale starts to grow. Treatment made prior to April 10 will usually give good results, provided weed growth is less than 4 inches tall. Application later than May 1 may give poor results. Alternatively, make a single application of 0.4 to 0.8 quart Diuron 4L plus 0.25 lb bromoxynil per acre as a tank mix, in either the fall after triticale 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 where sufficient moisture is available to germinate triticale seed. Apply before soil freezes and before weeds are two inches tall. Application later than March 1 may give poor results. If fall planted triticale 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 triticale. Spring triticale 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.

**West of Cascade Range:** Make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting. If triticale and weeds have emerged, apply before weeds are 3 to 4 inches tall (alternatively, apply a tank mixture of Diuron 4L plus bromoxynil as detailed above in East of Cascade Range section.

**Other areas:** Make a single application in the spring as soon as triticale (fall-planted) starts to before weeds are 2 inches tall. Application later than May 1 may give poor results.

## WALNUT (ENGLISH)

### Restrictions:

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

**CALIFORNIA, OREGON, WASHINGTON:** Use only under trees established in orchards for at least 1 year. As an initial treatment, apply 2.2 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 2.2 quarts per acre. In California apply 1.6 to 3.0 quarts per acre. Alternatively, apply 1.6 quarts per acre in October or November and repeat at the same rate in March or April.

## WHEAT (WINTER)

- Crop injury may result where severe winter stress, disease or insect damage follows application.
- Winter-sensitive varieties may be less tolerant of Diuron 4L than winter-hardy varieties.
- Crop injury may result from failure to observe the following:
  - Do not use on sand or loamy sand soils, or on gravelly 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.



- o 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 than 4 inches tall. Application later than May 1 may give poor results.

Alternatively, make a single application of 0.4 to 0.8 quart Diuron 4L 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 Diuron 4L 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:**

**Restriction:**

- 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 quarts per acre.

**ORNAMENTAL CROPS (See Soil Limitations)**

**Restriction:**

- Aerial application is prohibited.

**Ornamental Bulb Crops (Bulbous Iris, Narcissus)**

**Western Washington:** Make a single application of 3.2 quarts per acre. Apply after planting, but no later than 4 weeks prior to bulb emergence (usually late September or October). Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

**Plumosus Fern**

**Florida:** Hand weed and mow fern, then make a single application of 2.4 quarts per acre within 3 to 5 days. Do not cultivate or disturb soil after application as crop injury may result. Treat only established stands at least 1 year old.

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**NON-CROP WEED CONTROL**

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**Restrictions:**

- Maximum rate per year: 12 quarts of product (12.0 pounds a.i.) per acre per year.
- 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.

Diuron 4L 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. Diuron 4L 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.

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 Diuron 4L 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. Diuron 4L 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.

**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 farm buildings and similar areas apply 4 to 12 quarts per acre to control annual weeds including:

**BROADLEAVES  
4 -12 QUARTS/ACRE**

Ageratum	Hawksbeard	Pokeweed	Spanish Needles
Chickweed	Horsenettle	Prickly Lettuce	Tansymustard
Cocklebur	Horseweed	Prickly Sida (Teaweed)	Velvetleaf
Corn Speedwell	Knawel	Purslane	(Buttonweed)
Corn Spurry	Lambsquarter	Rabbit Tobacco	Wild Buckwheat
Dayflower	Marigold	Ragweed	Wild Lettuce
Dogfennel	Mexican Clover	Sesbania	Wild Mustard
Fiddleneck (Amsinckia)	Morningglory, Annual	Shepherdspurse	Wild Radish
Flora's Paintbrush	Pennycress	Sicklepod	
Gromwell	Pigweed	Smartweed, Annual	
Groundcherry, Annual	Pineappleweed	Sowthistle, Annual	

**GRASSES  
4 - 6.4 QUARTS/ACRE**

Barnyardgrass (Watergrass)	Johnsongrass (Seedling)	Quackgrass	Sandbur
Bluegrass, Annual	Kyllinger (Kyllinga)	Rattail Fescue	Velvetgrass
Crabgrass	Lovegrass, Annual	Red Sprangletop	Vernalgrass,
Foxtail	Orchardgrass	Ricegrass	Sweet, Annual
	Peppergrass	Ryegrass, Annual	

**6.4 -12 QUARTS/ACRE**

Guineagrass	Maidencane	Pangolagrass
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**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 Diuron 4L 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.

**Pesticide Disposal:** Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:****Nonrefillable container (less than 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  $\frac{1}{4}$  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. Offer for recycling if available, or dispose of bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke

**Nonrefillable container (greater than 5 gallons):**

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling if available, or dispose of bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke

**For refillable containers:**

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

available, or dispose of bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke

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

**IMPORTANT INFORMATION  
READ BEFORE USING PRODUCT**

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

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

The Directions for Use of this product must be followed carefully. The Directions for Use of this product reflect the opinion of experts based on field use and tests. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RedEagle International LLC or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of RedEagle International LLC and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold RedEagle International LLC and Seller harmless for any claims relating to such factors.

RedEagle International LLC 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or RedEagle International LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, REDEAGLE INTERNATIONAL LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, RedEagle International LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF REDEAGLE INTERNATIONAL LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF REDEAGLE INTERNATIONAL LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

RedEagle International LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of RedEagle International LLC.

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