

## **FIELD CROPS - COTTON - MEDIUM**

### General Information

#### GENERAL INFORMATION

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

This product is to be mixed with water and applied as a spray for selective control of weeds in certain crops and for non-selective weed control on non-cropland areas. It is non-corrosive to equipment, non-flammable and non-volatile. This product may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time; the degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soils low in clay or organic matter to obtain equivalent herbicide performance. Moisture is required to activate the chemical; best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks of application. This product, applied pre-emergence, before emergence of crop and weeds, is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling state before they compete with the crop. With favorable moisture conditions, this product continues to control weeds for some time as the crop becomes better able to compete. Should weed seedlings begin to break through the pre-emergence 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 temperatures of 70°F or higher. Addition of a non-ionic surfactant to the spray (where recommended) increases contact effects of this product. This product may be used as a directed post-emergence application. Avoid contact of crop foliage and/or fruit with spray or mist to avoid injury on the following crops: Artichokes, Corn (field), Cotton, Sorghum (grain), Sugarcane and established plantings of Apples, Bananas, Blueberries,

Caneberries, Citrus, Gooseberries, Filberts, Grapes, Macadamia nuts, Olives, Papayas, Peaches, Pears, Pecans, Plantains, Walnuts and certain Tree plantings. Under specified conditions (see \"DIRECTIONS FOR USE\"), this product without surfactant may be applied over the top of Alfalfa (established, dormant or semidormant), Asparagus (established), Birdsfoot trefoil (established, dormant), Grass seed crops (established), Oats, Pineapples, Plumousus fern (established, mowed), Red clover (established, dormant), Sugarcane and Wheat. Weed species vary in susceptibility to this product and they may be more difficult to control when under stress. Combinations of this product with other herbicides (as registered) increase the number of species controlled; consult labels of the companion products for this and other information. Since the effect of this product varies with soils, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas. Observe all use precautions and limitations on labeling of all products used in mixtures. Follow the most restrictive label.

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

**RESISTANCE**

When herbicides affecting the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. It may be necessary to retreat the problem area using a product affecting a different site of action, if weed control is unsatisfactory.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

## APPLICATION DIRECTIONS

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

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

**PRE-EMERGENCE:** Use sufficient spray volume and pressure to uniformly distribute

the spray solution over treated soil. Pre-emergence weed control will be reduced on high organic matter soils such as peat or muck.

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

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

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

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

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

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

rate on larger weeds.

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

Limitations, Restrictions, and Exceptions

FIELD CROPS (See Soil Limitations)

A good seedbed must be prepared before pre-emergence use of this product as crop injury may result if application is made to ground which is cloddy or compacted, resulting in improperly planted seed. Plant seed to depth specified. Unless otherwise directed, surface of the soil 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 the emergence of crops while weeds are small enough to be controlled by mechanical means.

Cotton

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.

**DO NOT SPRAY OVER THE TOP OF COTTON PLANTS.** Do not apply to sand or loamy sand soils. Do not use on soils with less than 1% organic matter as crop injury may result.

Do not use this product in pre-plant or pre-emergence applications where soil-applied organophosphate insecticides are used due to potential for severe cotton injury and possible stand loss. Do not allow livestock to graze treated Cotton.

Note: When using this product in a sequential treatment program, allow a minimum of 21 days between applications.

Method

[Broadcast/Foliar Ground](#)

[Band application](#)

Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

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Restricted Entry Interval

12 hours

Timings

[N.A.](#)