

## **TREE PLANTINGS (ID, OR, WA) - COARSE SOIL**

### General Information

### PRODUCT INFORMATION

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.EP, C01-0132C, (W.D.WA). For further information, please refer to <http://www.epa.gov/espp/wtc/>.

Alligare Diuron 4L is a 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 noncropland areas. It is noncorrosive to equipment, nonflammable, and nonvolatile.

Alligare Diuron 4L 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 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.

Alligare Diuron 4L 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 specified) increases contact effects of Alligare Diuron 4L.

Alligare Diuron 4L 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 USE INSTRUCTIONS), 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.

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

Since the effect of Alligare Diuron 4L varies with soils, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

#### **IMPORTANT USE PRECAUTIONS:**

Injury to or loss of desirable trees or other plants may result from failure to observe the following: Draining or flushing 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 may injure these plants. Do not use on home plantings of trees, shrubs, or herbaceous plants or lawns, walks, driveways, tennis courts, or similar areas. Trees or other desirable plants whose roots extend into a treated crop use area may be injured. 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).

## RESISTANCE MANAGEMENT

Biotypes of certain weeds listed on the label are resistant to Alligare Diuron 4L and other herbicides with the same mode of action, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species that are identical in appearance but have slightly different genetic compositions; the mode of action of an herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to retreat problem areas using a product with a different mode of action.

If resistant weed biotypes are suspected or known to be present, use a combination of tillage, retreatment, tank-mix partners, and/or sequential herbicide applications with Alligare Diuron 4L to help control these biotypes, or use a planned herbicide rotation program where other herbicides having different modes of action are used.

## APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## APPLICATION DIRECTIONS

**AERIAL APPLICATION:** For alfalfa, barley (winter), cotton (preplant or preemergence only), grass seed crops (PNW only), sugarcane, wheat (winter) and rights-of-way, application may be made by aircraft in a minimum of 3 gallons of water per acre unless otherwise noted. 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, use sufficient spray volume and pressure to uniformly distribute the spray solution over treated soil. Preemergence weed control will be reduced on high organic matter soils such as peat or muck.

**POSTEMERGENCE:** For postemergence application, use sufficient spray volume and pressure for thorough coverage of weed foliage. For selective applications and applications near sensitive crops, use low spray pressure to keep spray drift to a minimum. This product at 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 specified) increases contact effects of Alligare Diuron 4L. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures over 70°F or higher.

**RATES:** All rates of Alligare 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 the 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, 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%.

**FIELD CROPS (see SOIL LIMITATIONS):** A good seedbed must be prepared before preemergence use of this product as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Unless otherwise directed, the surface of the soil should not be cultivated or disturbed after application of Alligare Diuron 4L and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, a shallow cultivation (rotary hoe preferred) should be made after emergence of crops while weeds are small enough to be controlled by mechanical means.

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

Limitations, Restrictions, and Exceptions

**TREE PLANTINGS**

Aerial application is prohibited.

Idaho, Oregon, Washington: Diuron 4L is recommended for control of weeds to aid in the establishment of hybrid poplar plantings. 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 Diuron 4L into the weed root zone before weeds become well established. If weeds are present at time of treatment, add a surfactant at 1 to 2 quarts per 100 gallons of spray solution.

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

POST-PLANT (BROADCAST): It is best to wait until rain or irrigation has settled the soil around the newly planted trees before applying Diuron 4L. 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 Diuron 4L from contact with trees, as injury may result. During the growing season (from bud swell to leaf drop), Diuron 4L may be applied (alone or with tank mix) between tree rows in shielded and directed sprays.

Diuron 4L can be tank mixed with a glyphosate herbicide preplant and as a directed spray to broaden the spectrum of weeds controlled and improve post-emergence activity. Use 0.8 to 2.4 quarts Diuron 4L plus glyphosate herbicide (according to label recommendations) depending upon soil type and weeds to be controlled. Note: There are several formulations of glyphosate herbicide. Check the glyphosate herbicide label to verify that the intended use as a pre-plant or post-directed spray on hybrid poplar plantations is allowed. Avoid contact of glyphosate herbicide with foliage, green stems, trees, or other desirable vegetation because severe damage or destruction may result.

Method

Broadcast/Foliar Ground

Rates

field\_rates 0

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Restricted Entry Interval

12 hours

Soils

Coarse

Timings

Preemergence (Weed)

Postemergence (Weed)

In late winter or early spring.