

45115-34

4-30-82

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U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (WH-567) WASHINGTON, D.C. 20460	EPA REGISTRATION NO. 45115-34	DATE OF ISSUANCE APR 30 1982
	TERM OF ISSUANCE Conditional	
	NAME OF PESTICIDE PRODUCT EPA's Diphon 4L	

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
 (Under the Federal Insecticide, Fungicide,
 and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

EPA's, Inc.
 2438 Pennsylvania Street
 P.O. Box 9483
 Memphis, TN 38109

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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.

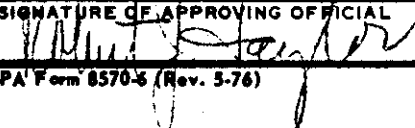
This product is conditionally registered in accordance with the provisions of Section 3(c)(7)(B) of the Act, since you have agreed that you will submit and/or cite all data required for registration/reregistration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with Section 6(e) of the Act.

Robert J. Taylor
 Product Manager (25)
 Fungicide-Herbicide Branch
 Registration Division (25-757C)

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL



DATE

4/30/82

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ACCEPTED
APR 30 1982
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 45115-34

DIURON 4L HERBICIDE

For Control of Many Annual and Perennial Grasses and Herbaceous Weeds

ACTIVE INGREDIENT:

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

INERT INGREDIENTS: 60.0%

*Contains 4.0 lbs. of Diuron per gallon.

**KEEP OUT OF THE REACH OF CHILDREN
CAUTION**

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.
IF SPLASHED IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.
IF SPILLED ON SKIN: Immediately remove contaminated clothing, INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

See Side Panel For Additional Precautionary Statements.

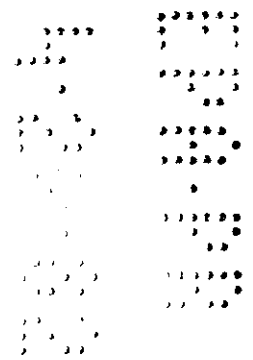
EPA Reg. No. 45115-34
EPA Est. No.

NET CONTENTS

GALLONS

LITERS

Ida, Inc. P.O. Box 9453,
Memphis, TN 38109



PRECAUTIONARY STATEMENTS

Hazards to humans and domestic animals.

CAUTION: HARMFUL IF SWALLOWED: Avoid Breathing of Spray. Do Not Take Internally. Avoid Contact with Skin and Eyes. Wear regular long-sleeved work clothing. Change to clean clothing daily. Wash hands and face before eating. Wash thoroughly after handling.

ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes.

GENERAL INFORMATION: IDA Diuron 4L is to be mixed with water and applied as a spray for control of weeds. Effects are slow to appear and will not become apparent until the chemical has been carried into the root zone of the weeds by moisture.

IMPORTANT: Do not apply (except as recommended 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 lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants. Do not contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Apply this product only as specified on this label.

Thoroughly clean all traces of IDA Diuron 4L from application equipment immediately after use; otherwise, crop injury may result when equipment is used again. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips, and creens (clean parts separately). Do not contaminate water by cleaning of equipment, or disposal of wastes.

DIRECTIONS FOR USE: SHAKE OR STIR WELL BEFORE USING.

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Before spraying, calibrate equipment to determine quantity of water necessary to uniformly cover measured area to be treated. Carefully

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measure proper amount and mix into necessary volume of water. Water serves only as a carrier.

Material must be kept in suspension at all times by continuous agitation. Except for small areas, use fixed-boom power sprayers properly calibrated to insure constant rate of application. Openings in screens should be equal to or larger than 50 mesh. Agitate by mechanical or hydraulic means in the spray tank. If by-pass or return line is used, it should terminate at bottom of tank to minimize foaming. Do not use air agitation. For general weed control in small areas, tank-type hand sprayer or sprinkling can may be used; shake or stir frequently.

NON-CROP WEED CONTROL: IDA Diuron 4L is an effective general herbicide for the control of many annual and perennial grasses and herbaceous weeds on non-cropland areas where bare ground is desired. The degree of control and duration of effect will vary with the amount of chemical applied, soil type, rain-fall, and other conditions. May be used at any time for non-cropland weed control, except when ground is frozen, provided adequate moisture is supplied by rainfall or artificial means. Best results are obtained if applied shortly before weed growth begins. If dense growth is present, remove tops and spray the ground.

To control most weeds for an extended period of time on non-cropland such as Utility, Highway, Pipeline, and Railroad Rights-Of-Way, Petroleum Tank Farms, Lumberyards, Storage Areas, Industrial Plant Sites, and around Farm Buildings-Apply 1 to 4 gallons per acre to control most annual weeds. Use 4 to 8 gallons per acre to control both annual and perennial weeds. Repeat treatment may be required where a longer period of control is desired or when hard-to-kill, deep-rooted perennial weeds such as Johnsongrass are present.

For irrigation and drainage ditches, apply 1 1/2 pints per 1,000 sq. ft. (8 gallons per acre). For irrigation ditches apply during the non-crop season, and when ditch is not in use. To minimize movement of Diuron 4L with irrigation water and avoid crop injury, it is essential that it be fixed in the treated soil by moisture. Apply before expected seasonal rainfall, if possible when soil in the ditch is still moist. If rainfall has not totaled at least 4 inches following treatment and before intended use of irrigation ditch, fill with water and allow to stand for 72 hours; drain off and waste remaining water before using ditch. Do not treat any ditch area into which roots of trees or other desirable plants may extend.

For small areas apply 1/2 pint per 270 sq. ft. (approximately 10 gallons per acre).

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SELECTIVE USE IN CROPS

WEEDS CONTROLLED: Diuron 4L as a pre-emergence treatment selectively controls germinating seedling weeds in certain crops. Rates of 1 to 1 1/2 pints per acre control some annuals including crabgrass, barnyardgrass, pigweed, purslane, lambsquarters and ragweed. At 1 to 1 1/2 quarts per acre, seedling weeds such as annual bluegrass (Poa. annua), annual sweet vernalgrass, foxtail, rattail, fescue, red sprangle-top, velvetgrass, chickweed, corn spurry, dogfennel, Amsinckia (fiddle-neck), gromwell, groundsel, knawel, shepherdspurse, tansy-mustard, wild lettuce, wild mustard, annual groundcherry and annual morning-glory are controlled. In addition, 1 1/2 to 5 quarts per acre will control weeds such as annual lovegrass, annual ryegrass, sandbur, ricegrass, orchardgrass, seedling Johnsongrass, annual smartweed, annual sow-thistle, buttonweed, corn speedwell, dayflower, horseweed, kochia, kyllinga, marigold, Mexican clover, hawksbeard, peppergrass, pineapple-weed, pokeweed, rabbit tobacco, ageratum, Spanishneedles and wild radish.

Partial control of cocklebur, prickly sida (teaweed), sesbania, sicklepod, and annual morning-glory usually occurs with 3/4 quarts per acre. Partial control of quackgrass and horsenettle usually occurs with 3 quarts, 4 fl. ounces per acre; partial control of maidencane, pangola-grass and guineagrass usually occurs with treatments of 1 1/2 gallons, 8 fl. ounces to 2 gallons per acre.

Results vary with soil types (the lower rates are effective on the lighter soils and higher rates on heavier soils) and environmental conditions. Sufficient moisture in the form of rain fall or irrigation is necessary after treatment to carry the chemical into the root zone of germinating weeds. Any well established weeds should first be eliminated by mechanical or other means. For best results, they should be well prepared and as free as possible from trash and clods. Unless otherwise directed, surface of the soil should not be cultivated or disturbed after application of Diuron 4L as efficiency may be reduced.

Diuron 4L plus surfactant is an effective treatment of emerged seedling weeds for use as a directed post-emergence spray in certain crops. Rates as low as 6 1/2 fl. ounces Diuron 4L per acre plus surfactant to control seedling pigweed. Rates of 13 fl. ounces per acre to control seedling weeds such as crabgrass, goosegrass, barnyardgrass (water grass), crowfoot, pigweed, purslane and annual morning-glory. Best results are obtained under conditions of high humidity and temperatures over 70°F.

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SOIL LIMITATIONS: Crop injury may result from failure to observe the following: Unless otherwise directed, do not use (1) on light sand, loamy sand or gravelly soils, (2) on alfalfa, apples, barley, citrus, cotton (pre-plant and lay-by), grapes, olives, pears, plumosus fern, sorghum, sugar cane, walnuts and winter wheat where organic matter is less than 1%, (3) on blueberries, birds-foot trefoil, caneberries, gladiolus, gooseberries, macadamia nuts and peppermint where organic matter is less than 2%.

Unless otherwise directed, do not replant areas to any crops within two years after last application as injury to subsequent crops may result.

CROPS

All rates are expressed as broadcast rates; where band applications are specified use proportionately less. For example, use 1/3 of the broadcast rate where treating a 14 inch band where row spacing is 42 inches. Unless otherwise directed, surface of soil should not be cultivated or disturbed after application as crop injury may result.

ALFALFA: Use in areas where alfalfa becomes winter dormant and in areas of California (North of the Tenachapi Mountains) where alfalfa becomes semi-dormant. Use 1 1/2 to 2 1/2 quarts per acre (except east of the Appalachian Mountains use 1 to 1 1/2 quarts). Apply any-time after alfalfa is dormant in the fall but before crops begin growth in the spring. For the control of volunteer alfalfa seedlings in the far west, use 6 1/2 pints per acre (see Soil Limitations).

Treat only stands established for one year or more. Do not apply to seedling alfalfa nor to alfalfa grass mixtures; do not apply to alfalfa with unusually shallow root penetration (such as shallow hard pans, in alkali spots) as crop injury may result.

PACIFIC NORTHWEST:

Apply in the fall after alfalfa becomes dormant but no later than mid-December.

ARIZONA, CALIFORNIA AND NEVADA:

Application may be made on dormant alfalfa as late as January.

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EASTERN COLORADO AND KANSAS:

For control of tansymustard, apply 1 1/2 pints shortly after emergence of mustard in the fall or winter and 1 1/2 quarts if weeds are 2 to 4 inches tall. If other annual weeds are present, use 1 1/2 to 2 1/2 quarts in February or March.

OTHER AREAS:

Where alfalfa becomes winter dormant, apply in March or early April before spring growth begins.

APPLES AND PEARS: Use only under trees established in the orchard for at least one year. Apply 3 quarts per acre to area under individual trees or as a band in the tree rows; avoid contact of foliage or fruit (see soil limitations). Apply in the spring (March through May). Do not treat dwarf varieties.

FAR WEST:

Treatment may be made in winter (December through February) or apply 1 1/2 quarts as a post harvest treatment followed by 1 1/2 quarts in the spring.

ASPARAGUS: Do not apply to newly seeded asparagus nor to young plants during the first growing season after setting nor on plants with exposed roots, severe injury may result. Apply as a band or broadcast treatment. On light sandy soils and other soils low in clay or organic matter, apply 3/4 to 1 1/2 quarts per acre. On soils high in clay or organic matter, use 1 1/2 to 3 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 1/2 quarts per acre per application. In Washington (irrigated crop), apply only a single treatment of 3 quarts per acre in late November or December.

BANANAS: New Plantings: To control annual weeds, apply 1 to 2 1/2 quarts per acre after planting but before plants emerge. Do not apply to loose soil directly over the planting material.

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Established Plantings: For control of annuals and for top-kill of perennials such as birdseed grass, guineagrass and Bermudagrass, apply 2 1/2 to 5 quarts per acre plus surfactant per 25 gallons of spray mixture as a directed spray; avoid contact of banana 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, but do not apply more often than 6 week intervals nor more than a total of 9 quarts of Diuron per acre (of ground actually sprayed) in a 12 month period.

NOTE: Do not replant treated areas to any crop within 2 years after last application as injury to subsequent crops may result, except that sugar cane or pineapple may be planted one year after last application.

BARLEY (Winter): Western Oregon and Western Washington: Apply a single treatment of 1 1/8 to 1 1/2 quarts per acre as soon as possible after planting but before emergence of barley (see Soil Limitations). Do not apply to cloddy or compacted ground where seed is exposed or improperly planted. Treated area should not be replanted to any rotational crop within 1 year after last application as injury to the subsequent crop may result.

BIRDSFOOT TREFOIL (Lotus): Western Oregon: Treat only established stands at least 1 year old. Apply a single treatment of 1 1/2 quarts per acre when trefoil is dormant (October 15 to December 15, see Soil Limitations). Do not apply to seedling trefoil as injury may result. Do not replant treated areas to any crop within 1 year after application as crop injury may result.

BLUEBERRIES, CANEBERRIES AND GOOSEBERRIES: Apply only to 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; see Soil Limitations. Spray only ground at base of bushes; avoid spraying foliage as injury may result.

RASPBERRIES, BLACKBERRIES, BOYSENBERRIES, DEWBERRIES AND LOGANBERRIES: California: For control of winter annual weeds, apply 1 1/2 quarts per acre as a band application at base of canes or bushes in October or November. A second treatment at the same rate in late spring controls summer annuals. A single application of 2 1/2 quarts per acre in January or February will control both winter and summer annuals in some areas, but the separate fall and spring schedule is preferred.

BLUEBERRIES, CANEBERRIES AND GOOSEBERRIES: Western Washington and Western Oregon: Same schedule as recommended in California.

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BLUEBERRIES: Indiana, Michigan and Ohio: Make a band application of 1 1/2 to 3 quarts per acre in late spring but before germination and growth of annual weeds. As an alternative, apply 1 1/2 quarts per acre in the fall and repeat at the same rate in the spring.

RASPBERRIES: Indiana, Michigan and Ohio: Make a single application as a band treatment at a rate of 2 1/2 quarts per acre in the spring before germination and growth of annual weeds.

BLUEBERRIES: Massachusetts: For control of summer annuals, make a single application as a band treatment at rate of 1 1/2 quarts per acre in late spring, but before germination and growth of weeds.

BLUEBERRIES: New Jersey: For control of winter annual weeds, apply 1 1/2 quarts per acre as a band treatment in October, November or December.

CITRUS

Use only under trees established in the grove for at least 1 year. Apply as a directed spray avoiding contact of foliage and fruit with spray or drift. Time application as indicated for specific areas, except application may be initiated 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. Do not apply under citrus trees that have been subjected to freezing within 6 months; do not apply in home plantings of citrus or in areas where roots of other valuable plants or trees may extend as injury may result; see Soil Limitations.

ARIZONA (except Uma Area) and CALIFORNIA (except Imperial and Coachella Valleys) - Oranges, Lemons and Grapefruit: Make a single application of 2 1/2 to 3 quarts per acre as a broadcast spray after the grove has been laidup in final form (non-tillage program) in late fall or early winter. As an alternative, apply 1 1/2 quarts per acre in October or November and repeat at the same rate in March or April. Subsequent annual applications of 1 1/2 to 2 1/2 quarts will usually give adequate weed control.

FLORIDA (except Martin, Palm Beach, Broward and Dade Counties) - Oranges, Grapefruit, Tangelos and Tangerines: Apply 3 quarts per acre followed by the same rate 4 to 6 months later. As an alternative, make a single application of 3 to 6 quarts per acre. On non-bearing trees, treat when winter banks are pulled down. On bearing citrus, apply any time when seasonal rains are expected.

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For control of paragrass, guineagrass, maidencane, primrose willow, seamyrtle and loosetrife in ditches adjacent to citrus groves use 3/4 quart Diuron 4L per 1000 sq. ft. (32 lbs. per acre) using sufficient spray volume (at least 4 gallons per 1000 sq. ft.) to provide thorough and uniform coverage of the ditch. Apply in the spring before weed growth starts or after removal of vegetation. Repeat treatment on spot basis to control hard-to-kill species such as guineagrass. In bedded groves, do not treat water furrows between beds as injury to the trees may result.

TEXAS - Oranges and Grapefruit: Apply a single treatment of 1 1/2 to 3 quarts per acre for annual weeds. Use 3 to 4 1/2 quarts per acre for control of Johnsongrass seedlings. Best results accompany application in the spring; well established weeds should be eliminated by cultivation prior to treatment.

CORN (Field)

Post-emergence - Apply 1 1/2 pints per acre in combination with non-pressurized nitrogen solution. If nitrogen solution is not used, apply 3/4 quart Diuron 4L per acre and add 1 1/2 pints surfactant per 40 gallons spray mixture. Apply as a single directed post-emergence spray when corn is at least 20 inches high and weeds are no taller than 3 inches. DO NOT APPLY OVER TOP OF CORN. Do not replant to any crop within 1 year except cotton, corn and grain sorghum may be planted the spring following treatment.

Pre-emergence - Arkansas, Louisiana, Mississippi and Tennessee: Make a single treatment of 17 fl. ounces to 3/4 quart per acre as a broadcast or band treatment using higher dosage or heavier soils (Corn, Clayloam). Do not use on light (sand, loamy sand or gravelly) soils as injury may result; plant corn at least 1 1/2 inches deep; do not replant treated areas to crops other than corn or cotton within 4 months following band treatment and 6 months following broadcast treatment as crop injury may result.

COTTON

Preplant - Arizona and California Only: Apply 3/4 to 2 quarts per acre as a broadcast spray after furrows for pre-planting irrigation have been formed; apply either just prior to planting or after the pre-planting irrigation but before seed beds are dragged off in preparation of planting (see Soil Limitations).

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Prior to planting drag-off the top of the seed bed and plant untreated soil. Treated soil is returned to the bed after planting where irrigation furrows are reformed. If more than 2 furrowing - out operations are performed prior to lay-by, weed control in the follow bottoms may be lost. A lay-by application also may be made but the combined total per season rate must not exceed 3/4 quart Diuron 4L per acre on sandy loam, nor 1 1/2 quarts Diuron 4L per acre on clay.

Pre-emergence (except Arizona and California): Make a single application as a broadcast or a band spray after planting but before cotton emerges. Use at the following rates:

BROADCAST TREATMENT

Soil Type	Spray Mixture Diuron 4L in 25 to 40 gal. per acre	Lbs. Diuron per acre
Loamy sand	1 pt.	0.5
Sandy loam, loam, silt loam and silt	1 1/2 pts.	0.8
Sandy clay loam, clay loam, silty clay loam and clay	1 qt.	1.0
Silty clay and clay	1 1/2 qts.	1.6

*Do not use on sand as crop injury may result. For heavy clay soils (high in organic matter) use Monuron Weed Killer. Do not treat cotton in deep furrows as crop injury may result.

BAND TREATMENT

Use proportionately less; for example, for 14 inch band on 42 inch row, use 1/3 of broadcast rate. Apply immediately after cotton is planted; wherever possible, planting and spraying should be combined into one operation. For best results, soil should be well prepared and as far as possible from trash and clods. Shallow incorporation (no deeper than 1/4 inch) with a rotary hoe or similar equipment following planting usually improves results particularly during dry weather. A wide press wheel following planting should be used to provide a level seed bed for subsequent early season post-emergence treatments.

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Treatment usually provides weed control for a period of 3 to 8 weeks. Sufficient moisture (usually 1 to 2 inches) in the form of rainfall or irrigation is necessary after treatment to carry the chemical into root zone of germinating weeds; best results are obtained when this occurs within 2 weeks after application. If moisture is insufficient to activate Diuron 4L or if soil becomes crusted before crop emerges, a shallow rotary hoe ring (no deeper than 1/4 inch) should be made before weeds become well established.

If initial seeding fails to produce a stand, cotton may be replanted in soil treated with Diuron 4L. 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 pre-emergence application of Diuron 4L during the same crop year as injury to crop may result.

Post-emergence: Early Season - apply in combination with a surfactant as a directed spray where cotton is at least 6 inches tall and when weeds do not exceed 2 inches in height; a second application may be made if needed. Control of weeds under drought stress or over 2 inches in height is usually impractical.

Apply as a band treatment only, directing spray to cover weed foliage. DO NOT SPRAY OVER TOP OF COTTON. Use pressure of 20 to 25 Psi and adjust nozzles to minimize contact of cotton leaves with spray or drift, or crop injury may result.

Band Treatment

Amount per acre of cropland as applied to 14 inch bank on 42 inch row (10 to 15 gal. water).*

Weed Problem	Diuron 4L	Active Ingredients
Annual Weeds	4.5 fl. oz.	0.14 lb. (0.4 lb)**
Pigweed	2.25 fl. oz.	0.07 lb. (0.2 lb)**

*Include surfactant at 1 pint per 25 gallons of spray; dilute with 10 parts water and add to nearly full tank.

**Equivalent broadcast rates in parentheses.

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Late Season (Lay-by) - Use 3/4 to 1 1/4 quarts Diuron 4L (3/4 to 1 1/2 quarts in Arizona and California) in 25 to 40 gallons water per acre as a directed spray (see Soil Limitations). Apply when cotton is at least 12 inches high (at least 20 inches for Perina S-2). Keep contact of spray or drift on cotton plants to a minimum. DO NOT SPRAY OVER TOP OF COTTON. For control of germinating weed seedlings, apply immediately after last cultivation, direct spray to cover the soil beneath cotton plants and between rows.

Alternatively, for control of emerged annual weeds (4 inches or less in height) at lay-by time, add 1 pint surfactant for each 25 gallons spray; apply as a directed spray to cover weed foliage beneath cotton plants and between rows. NOTE: Treatment of 1 to 1 1/2 pints Diuron 4L per acre plus surfactant followed by the same treatment later, if needed, maybe used as an alternate to the preceding recommendation.

In irrigated cotton, best pre-emergence weed control is obtained if the field is irrigated within 3 to 4 days after application; thoroughly wet the surface of the ground over the row to carry the herbicide into the root zone of germinating weeds.

SUBSEQUENT CROPS:

Diuron 4L	Crops that may follow treated cotton
Band pre plus post-emergence or Broad cast pre-emergence land pre-plant or Broad cast pre-emergence plus band post-emergence.	Cotton, soybeans, corn or grain sorghums (not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within one year after last application as injury to subsequent crops may result.
Broadcast post-emergence (lay-by)	Cotton, corn, grain sorghums (Not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated area to any other crop within one year after lost application as injury to subsequent crops may result.

NOTE: During a single crop season do not exceed the following amount of Diuron per acre as injury to subsequent crops may result: 1/2 quart on loamy sand, 1 quart on sandy loam, 1 1/2 quarts on clay loam, and 2 1/8 quarts on clay.

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GLADIOLUS - East of Rocky Mountains: Apply 3/4 to 1 1/2 quarts per acre as pre-emergence and/or directed post-emergence treatments (see Soil Limitations); if used for both do not exceed 3/4 pints of Diuron 4L per acre per application, or a total of 1 1/2 quarts per season. On corm plantings, apply 3/4 quart per acre pre or post-emergence, but not more than once. Do not use on corm plantings in Florida; do not spray over top of gladiolus foliage nor spray to drift onto foliage as injury may result.

GRAPES: Apply only to established vineyards (at least 3 years old) as a band treatment to grape rows. Do not apply to vines with trunks less than 1 1/2 inches in diameter as injury may result.

NOTE: On soils low in clay or organic matter (less than 2%) severe plant injury may result if unusually heavy rains follow treatment and this risk must be assumed by the user.

EAST OF THE ROCKY MOUNTAINS: On soils low in clay or organic matter (1 to 2%), use 1 1/2 to 2 1/2 quarts per acre; on soils high in clay or organic matter, use 2 1/2 to 4 1/2 quarts (see Soil Limitations). Apply in the spring just prior to germination and growth of annual weeds.

NEW YORK AND PENNSYLVANIA - Control of Perennial Grasses: Apply only to established vineyards (at least 4 years old) for spot control of perennial grasses such as quackgrass, rye grass and orchard grass as a band treatment to ridged soil (2 to 4 inches high) under trellis at the rate of 6 to 9 quarts per acre. Band width should not exceed 30 inches. Make one application in the spring of the year and do not apply the 6 to 9 quarts per acre rate 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 grape vines may result.

WEST OF THE ROCKY MOUNTAINS: Apply in December, January or February. For initial treatment, make a single application of 2 1/2 to 3 quarts per acre; subsequent annual applications of 1 1/2 quarts will usually give adequate weed control. As an alternative to the above schedule, apply 1 1/2 quarts of Diuron 4L per acre in October or November and repeat application at the same rate in March or April.

GRASS SEED CROPS (Perennial); In areas as specified, apply only to established plantings at least 1 year old; see soil limitations.

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COLORADO, KANSAS, NEW MEXICO AND OKLAHOMA: On switchgrass, side oats grama and sand bluestem, apply 1 1/2 to 2 1/2 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 1/2 quarts per acre; spread unburned chaff or straw with a harrow or chopper before application.

WESTERN OREGON: On alta fescue, Highland bentgrass, Astorea bentgrass, orchardgrass, Kentucky bluegrass (Merion bluegrass), apply 1 1/2 to 3 quarts per acre between October and November 15. In fields where ash residues have accumulated from burning straw, use 2 1/2 to 3 quarts per acre; spread unburned Chaff or straw with a harrow or chopper before application. If perennial velvetgrass (Holcus Lamtus) is a problem, use 3 quarts per acre. For best results apply as soon as possible after fall rains start. Established weeds (beyond 2 ro 4 lead stage) should be removed prior to treatment. Well established vigorous stands of spring planted alta fescue, orchard grass and Kentucky bluegrass may be treated the following fall provided the crop is planted before April 1 and treatment is not applied before October 15; use Diuron 4L at 1 1/2 qts. per acre.

HAWAII - Macadamia Nuts: Use only in orchards which have been established for at least one year. Apply as a directed spray avoiding contact of foliage with spray or drift. Apply 1 1/2 to 4 1/2 quarts per acre immediately after harvest, preferably before weeds emerge. If weeds have emerged, add 1 to 2 pints of surfactant per 50 gallons spray to increase contact activity on weeds. Retreat as needed, but do not exceed 7 1/2 quarts per acre per year.

CALIFORNIA - Olives: Use only under trees established in the grove for at least 1 year. Do not apply in area where roots of other valuable plants or trees may extend as injury may result. Apply 1 1/2 quarts per acre after the grove is laid-up in final form in late October or November (see soil limitations). A second application of 1 1/2 quarts should be made in March or April. Remove weed growth prior to treatment. Avoid contact of foliage with spray or drift.

PACIFIC NORTHWEST - Peppermint: Apply 2 1/2 quarts per acre just after the last cultivation in the spring prior to emergence of peppermint. Do not apply to newly planted (less than 1 year) nor to emerged peppermint as injury may result.

HAWAII - Pineapple: Apply 3 to 6 quarts per acre as a broadcast spray immediately after planting and prior to weed emergence. Use 3 quarts per acre after harvesting plant crop (for ratoon crop). For plant crop only a second and third broadcast or interspace application may be made prior to differentiation at the rate of 1 1/2 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 1/2 quarts per acre.

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Diuron 4L Herbicide
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Do not apply more than 3 broadcast sprays (maximum 9 quarts per acre) prior to differentiation nor more than 12 quarts total per acre per plant crop. Treated areas may be planted to pineapple or sugar cane 1 year after last application.

FLORIDA - Plumosus Fern: Treat only established stands at least 1 year old. Apply 2 1/2 quarts per acre following hand weeding and 3 to 5 days after mowing of fern (see soil limitations). Do not cultivate or disturb soil after application as crop injury may result.

SOUTHWESTERN STATES - Sorghum (Grain): Apply 6.4 to 12.8 fl. ounces per acre as directed post-emergence broadcast or band treatment of the sorghum is 15 inches tall to control weeds 2 to 4 inches in height (see soil limitations). DO NOT SPRAY OVER TOP OF SORGHUM. Add 1 pint surfactant per 25 gallons spray. Apply at spray pressures of 20 to 25 Psi to minimize drift.

Use lower rate on broad leaved weeds up to 2 inches tall. Use the higher rate on grasses up to 2 inches and broad leaved weeds up to 4 inches tall. When the lower rate is used, a second application may be made if needed provided that the total herbicide applied in one crop year does not exceed 13 fluid ounces.

Diuron 4L per acre. Treatment of weeds under drought stress is usually ineffective.

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

SUGAR CANE: To prevent possible crop injury on new cane varieties, tolerance to Diuron 4L should be determined prior to adoption as a field practice. Do not treat sugar cane growing on thinly covered sub-soils or rocky areas as crop injury may result; see soil limitations. Temporary chlorosis of the crop may result from application over emerged cane; to minimize chlorosis, use directed post-emergence sprays.

FLORIDA: For high organic soils, apply 1 1/2 to 3 quarts per acre as a broadcast or band spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop). A second and third application of 1 1/2 quarts per acre may be made as needed by directed spray in row. Do not apply more than 3 treatments nor more than 4 1/2 quarts total per acre between planting (or ratooning) and harvest.

HAWAII AND PUERTO RICO: Apply 3 to 6 quarts per acre as a broadcast spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop). A second and third application of 1 1/2 to 3 quarts per acre may be made as a broadcast spray over emerged cane or by directed spray inter-row.

If weeds are emerged, add a surfactant to spray mixture at the rate of 1 to 2 quarts per 100 gallons and apply as a directed spray. DO NOT SPRAY OVER TOP OF CANE.

Do not apply more than 3 treatments nor more than 7 1/2 quarts (Puerto Rico) or 9 quarts (Hawaii) total per acre between planting (or ratooning) and harvest. Treated areas may be replanted to sugar cane or pineapple one year after last application.

LOUISIANA: Use on plant cane seeded on fallowed ground. Make a single application of 2 1/2 to 2 5/8 quarts per acre at either of the following times: Fall treatment (August through October) - Treat a 2 foot band over the row after planting of cane, but before weeds or cane emerge. Spring treatment (January through April) - if shaving and off-barring are practiced, treat a 2 foot band over the row before weeds or cane emerge.

CALIFORNIA - Walnuts (English): Use only in orchards which have been established for at least 1 year. Apply as a directed spray avoiding contact of foliage with spray or drift. As an initial treatment, apply 2 1/2 to 3 3/4 quarts per acre after the orchard has been laid-up in final form (non-tillage program) in late fall or early winter. Subsequently, annual application of 1 1/2 to 2 1/2 quarts should be used. Alternatively, apply 1 1/2 quarts per acre in October or November and repeat in March or April.

WHEAT (Winter): Seed bed must be well prepared before pre-emergence application. Crop injury may result if application is made to ground which is cloddy or compacted, resulting in exposed or improperly planted seed. Whenever seed bed preparation and planting are carried out during abnormally dry weather, resulting in a surface layer of dust over planted seeds, application should not be made until the dust is settled by rainfall or irrigation.

Do not use on thinly covered or exposed sub-soil areas (clay knoles), as injury may result to the crop; see soil limitations. Treated areas should not be replanted to any other crop within 1 year after last application as injury to the subsequent crop may result as well.

Do not apply post-emergence treatments where winter climate conditions have caused heaving of the wheat plants or after the wheat plants have reached the boot stage as injury to the crop may result.

KANSAS, OKLAHOMA AND TEXAS: Make a single post-emergence application at the rate of 1 1/4 to 1 1/2 quarts per acre. Apply 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.

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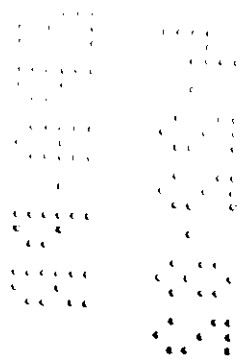
WASHINGTON, OREGON AND IDAHO - East of Cascade Range: Make a single application at the rate of 3/4 to 1 1/4 quarts per acre.

In areas having an average annual rainfall exceeding 16 inches:
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 in the spring. Treatment made prior to April 10 will usually give good results, provided weed growth is less than 4 inches tall. Application later than May 1 may give poor results.

In areas having an average annual rainfall from 10 to 16 inches:
Fall or Winter treatment - After wheat is planted in the fall, apply when sufficient moisture is available to germinate wheat seed. Make application before weeds are 2 inches tall and before the soil freezes. Application later than March 1 may give poor results.

NOTE: If fall-planted wheat fails to grow due to winter kill or adverse growing conditions after fall treatment with Diuron 4L, only fields treated before November 1 may be replanted to spring wheat. Spring wheat should not be planted before April 1 and only after double discing and plowing to a depth of 4 to 6 inches prior to planting. Do not re-treat field with a second application during the same crop year or injury to the crop may result.

WEST OF CASCADE RANGE: Make a single application at the rate of 1 1/8 to 1 1/2 quarts per acre. Apply as soon as possible following planting. If wheat and weeds have emerged, apply before weeds are 3 to 4 inches tall.



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STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

PESTICIDE DISPOSAL:

Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to Federal or approved state procedures under Subtitle C of the Resource Conservation and Recovery Act.

CONTAINER DISPOSAL:

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or disposal of in a sanitary landfill, or by incineration if allowed by state and local authorities.

WARRANTY - CONDITION OF SALE:

DIRECTIONS FOR USE of this product are based on field use and tests believed reliable and should be followed carefully. It is however impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of the Seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result.

ALL SUCH RISKS ARE ASSUMED BY THE BUYER

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. Seller makes no other warranties, express or implied, including FITNESS OR MERCHANTABILITY. In no case shall the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.