

# MP WEED KILLER

**WESTERN OREGON:** Treat only adjacent to citrus groves, use 1 lb. Diuron 80WP per acre in the fall or spring. Do not apply to citrus trees or other plants in the grove.

**ND GOOSEBERRIES:** Apply only to established plants. Do not apply to plants whose fruit is being harvested. Spray only ground at base of plants.

**berries, Boysenberries, Dewberries, Elderberries, Huckleberries, Marionberries, Raspberries, Rubus spp., Salmonberries, Strawberry, Tamarillo, Tree Raspberries, Wineberries:** Apply 2 lbs. per acre in late spring or early summer. In late spring controls sum-3 lbs. per acre in January or February annuals in some areas but the preferred.

**WESTERN OREGON - Blueberries:** See schedule as recommended in California.

**Blueberries:** Make a band application before germination and after, apply 2 lbs. per acre in the spring.

**Raspberries:** Make a single application before germination and after, apply 2 lbs. per acre in the spring.

**Control of summer annuals, make treatment at a rate of 2 to 4 lbs. per acre in the spring.**

**Control of winter annuals, apply in October, November or December.**

**Established in the grove for at least one year:** Avoid contact of foliage and fruit on as indicated for specific areas, except time of the year where sprinkler activate the herbicide. Established control procedures. Do not apply to citrus or in areas where the roots of may extend as injury may result.

**ND CALIFORNIA (except Imperial County and Grapefruit):** Make a single broadcast spray shortly after (non-tillage program) in late fall or early spring. Apply 2 lbs. per acre in March or April. Subsequent annuals usually give adequate weed control. **each, Broward and Dade Counties):** Tangerines: Apply 4 lbs. per acre following later. As an alternative, make a broadcast spray. On non-bearing trees, treat in March or April. On bearing citrus, apply any time

**adjacent to citrus groves, use 1 lb. Diuron 80WP per acre in the fall or spring. Do not apply to citrus trees or other plants in the grove.**

**Apply a single treatment of 2 to 4 lbs. per acre for control of Johnsongrass after application in the spring; eliminated by cultivation prior to**

## (FIELD)

**per acre in combination with non-solvent solution is not used, apply 1 lb. of a surfactant per 40 gals. spray mixture. Do not apply to corn if the corn is not taller than 3 inches. DO NOT apply to any crop within one d grain sorghum may be planted the**

**S. LOUISIANA, MISSISSIPPI AND TREATMENT:** 2 1/2 to 1 lb. per acre as the higher dosage on heavier soils (light sand, loamy sand or gravelly) or at least 1 1/2 inches deep; do not retreat corn or cotton within 4 months following broadcast treatment

## TREATMENT

**ALABAMA ONLY:** - Apply 1 to 2 1/2 lbs. after furrows for pre-planting irrigation just prior to planting or after the seed beds are dragged off in preparation

**of the seed bed and plant in untreated soil after planting when irrigation is not used. Do not apply to citrus trees or other plants in the grove.**

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## 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 in one operation. For best results, soil should be well prepared and as free as possible from trash and clods. Shallow incorporation (no deeper than 1 1/2 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.

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 the root zone of germinating weeds; best results are obtained when this occurs within 2 weeks after application. If moisture is insufficient to activate Diuron 80WP or if soil becomes crusted before crop emerges, a shallow rotary hoeing (no deeper than 1 1/2 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 80WP. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as disking; do not resist 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 80WP during the same crop year as injury to the crop may result.

**POST-EMERGENCE - EARLY SEASON:** Apply in combination with surfactant as a directed spray when 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.

**AMOUNT PER ACRE OF CROPLAND WHEN APPLIED TO 14" BAND ON 42" ROWS (IN 10 TO 15 GALS. WATER)**

| Weed Problem | Diuron 80WP         | Active Diuron |
|--------------|---------------------|---------------|
| Annual Weeds | 0.18 lb. (2.8 ozs.) | 0.14 lb.      |
| Flowers      | 0.09 lb. (1.4 ozs.) | 0.07 lb.      |

**LATE SEASON (LAY-BY) -** Use 1 to 1 1/2 lbs. Diuron 80WP (1 to 2 lbs. in Arizona and California) in 25 to 40 gals. water per acre as a directed spray (see Soil Limitations). Apply when cotton is at least 12 inches high (at least 20 inches for Pima 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, directing 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 pt. Surfactant for each 25 gals. spray; apply as a directed spray to cover weed foliage beneath cotton plants and between rows. **NOTE:** Treatment of 1/2 to 1 lb. Diuron 80WP per acre plus surfactant followed by the same treatment later, if needed, may be used as an alternate to the preceding recommendation.

In irrigated cotton, best pre-emergence weed control is obtained if the surface of the ground does not receive application; thoroughly wet root zone of germinating weeds.

## SUBSEQUENT CROPS

**Band pre- or post-emergence:** Any crop 4 months after last application.

**Band pre- plus post-emergence or Broadcast pre-emergence (and Pre-plant):** Cotton, soybeans, corn or grain sorghums (not forage sorghums) the next spring. Do not replant treated acres 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 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.

**NOTE:** During a single crop season, do not exceed the following amount of Diuron per acre as injury to subsequent crops may result: 0.8 lbs. on loamy sand; 1.2 lbs. on sandy loam; 1.6 lbs. on clay loams; and 2.2 lbs. on clay.

**GLADIOLUS-EAST OF ROCKY MOUNTAINS:** Apply 1 to 2 lbs. per acre as pre-emergence and/or directed post-emergence treatments. If used for both do not exceed 1 lb. of Diuron per acre per application, or a total of 2 lbs. per season. On cornel plantings, apply 1 lb. per acre pre- or post-emergence, but not more than one. Do not use on cornel plantings in Florida; do not spray over top of gladiolus foliage nor allow 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 2 to 3 lbs. per acre; on soils high in clay or organic matter, use 3 to 6 lbs. 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, ryegrass and orchard grass as a band treatment to ridged soil (2 to 4 inches high) under the trellis at the rate of 8 to 12 lbs. per acre. Band width should not exceed 30 inches. Make one application in the spring of the year and do not apply the 8 to 12 lbs. 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 grapes may result.

**WEST OF THE ROCKY MOUNTAINS:** Apply in December, January or February. For initial treatment, make a single application of 3 to 4 lbs. per acre, subsequent annual applications of 2 lbs. will usually give adequate weed control. As an alternative to the above schedule, apply 2 lbs. of Diuron 80WP 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.

**COLORADO, KANSAS, NEW MEXICO AND OKLAHOMA:** On switchgrass, side oats grama and sand bluestem, apply 2 to 3 lbs. 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 3 lbs. per acre; spread chaff or straw with a harrow or chopper before application.

**WESTERN OREGON:** On alfa fescue, Highland bentgrass, Astoria bentgrass, orchardgrass, Kentucky bluegrass (Merion bluegrass), apply 2 to 4 lbs. per acre between October 1 and November 15. In fields where ash residues have accumulated from burning straw, use 3 to 4 lbs. per acre; spread unburned chaff or straw with a harrow or chopper before application. If perennial ryegrass (Holcus lanatus) is a problem, use 4 lbs. per acre. For best results, apply as soon as possible after fall rains start. Established weeds (beyond 2 to 4 leaf stage) should be removed prior to treatment.

Well established vigorous stands of spring planted alfa fescue, orchardgrass 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 80WP at 2 lbs. per acre.

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

**PINEAPPLE - HAWAII:** Apply 4 to 8 lbs. per acre as a broadcast spray immediately after planting and prior to weed emergence. Use 4 lbs. 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 2 lbs. per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 2 lbs. per acre. Do not apply more than 3 broadcast sprays (maximum 12 lbs. per acre) prior to differentiation nor more than 16 lbs. total per acre per plant crop. Treated areas may be planted to pineapple or sugar cane 1 year after last application.

**PLUMOSUS FERN - FLORIDA:** Treat only established stands at least 1 year old. Apply 3 lbs. 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.

**SORGHUM (GRAIN) - SOUTHWESTERN STATES:** Apply 1 to 1 1/2 lb. per acre as a directed post-emergence broadcast or band treatment after sorghum is 15 inches tall to control weeds 2 to 4 inches in height. **DO NOT SPRAY OVER TOP OF SORGHUM.** Add 1 pt. of a Surfactant per 25 gals. spray. Apply at spray pressures of 20 to 25 psi to minimize drift.

Use the lower rate on Broadleaved weeds up to 2 inches tall. Use the higher rate on grasses up to 2 inches and broadleaved 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 1/2 lb. of Diuron 80WP 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 treatments 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 80WP should be determined prior to adoption as 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 2 to 4 lbs. 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 2 to 4 lbs. per acre may be made as needed by directed spray inter row. Do not apply more than 3 treatments nor more than 8 lbs. total per acre between planting (or ratooning) and harvest.

**HAWAII - PUERTO RICO:** Apply 4 to 8 lbs. 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 2 to 4 lbs. 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 the spray mixture at the rate of 1 to 2 qts. per 100 gals. and apply as a directed spray. **DO NOT SPRAY OVER TOP OF CANE.** Do not apply more than 3 treatments nor more than 10 lbs. (Puerto Rico) or 12 lbs. (Hawaii) total per acre between planting (or ratooning) and harvest. Treated areas may be planted to sugar cane or pineapple one year after last application.

**LOUISIANA:** Use on plant cane seeded on fallowed ground. Make a single application of 3 to 3 1/2 lbs. per acre at either of the following times: **FALL TREATMENT** (August through October) - Treat a 2 ft. 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 ft. band over the row before weeds or cane emerge.

**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, application should not be made until the dust 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 knobs), as injury to the crop may result; 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.

Do not apply post-emergence treatments where winter climatic conditions have caused heaving of wheat plants or after wheat has 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 1/2 to 2 lbs. 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.

**WASHINGTON, OREGON AND IDAHO:** **EAST OR CASCADE RANGE:** Make a single application at the rate of 1 to 1 1/2 lbs. 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.

**NOTE:** If fall-planted wheat fails to grow due to winter kill or adverse growing conditions after fall treatment with Diuron, 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 disking and plowing to a depth of 4 to 6 inches prior to planting. Do not retreat field with a second application of Diuron 80WP during the same crop year or injury to crop may result.

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

BEST DOCUMENT AVAILABLE

321 Dahlia Street • Commerce City, Colorado 80022



# DIURON

### ACTIVE INGREDIENT

Diuron 80WP (3,4-Dichlorophenyl)-1,1-Dimethylurea

### INERT INGREDIENTS

Total Inert Ingredients

80  
20  
100

EPA REG. NO. 4715-230

NET WEIGHT 50 POUNDS

ACCEPTED  
12-10-74  
250

## CAUTION:

### KEEP OUT OF THE REACH OF CHILDREN

UNDER THE FEDERAL INSECTICIDE ACT AND REGULATIONS THEREOF, THIS PRODUCT IS SUBJECT TO THE FEDERAL COMMISSION ON PESTICIDES AND HERBICIDES

**AVOID CONTACT WITH EYES, SKIN OR CLOTHING. AVOID INHALATION OF MIST. MAY BE HARMFUL IF SWALLOWED. DO NOT RE-USE EMPTY CONTAINER. DESTROY EMPTY CONTAINER BY PERFORATING OR CRUSHING AND BURYING IN A SAFE PLACE.**

**IMPORTANT:** Injury to or loss of desirable trees or other plants may result from failure to observe the following. Do not apply, except as recommended for crop use, or drain or flush equipment, nor 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 dry powder or spray to desirable plants. Do not contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Thoroughly clean all traces of Diuron 80WP from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately.)

**NON CROP WEED CONTROL**  
Around Farm Buildings, Storage Areas,  
Industrial Plant Sites, Petroleum Tank Farms,  
Utility Highway Pipeline, Lumber Yards,  
Irrigation and Drainage Ditches

### GENERAL INFORMATION

Diuron 80WP weed killer is a wettable powder to be mixed in water and applied as a spray for control of weeds. It is non-corrosive to equipment, non-flammable and non-volatile.

Diuron 80WP may be applied to the soil prior to emergence of weeds to control susceptible weed seedlings for an extended period depending on dosage rate used.

Results vary with soil type. Heavy soils (high in organic matter) require higher dosage rates than lighter soils (low in organic matter) to obtain equivalent herbicidal performance. Best results occur if rainfall (or irrigation) occurs within two weeks of application.

Diuron 80WP also may be used to control emerged seedling annual weeds by including a surfactant in the spray mixture. Best results are obtained on succulent weeds growing under high humidity and temperatures of 70° F. or higher.

Since the effect of Diuron 80WP varies with soils, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas; this is especially important where the operator is not completely familiar with requirements for precise application, since over dosage can result in injury to crops.

### USE PRECAUTIONS

Injury to or loss of desirable trees or other plants may result from failure to observe the following:

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 dry powder or spray to desirable plants. Do not contaminate domestic water. Keep from contact with fertilizer, insecticides, fungicides and seeds. Thoroughly clean all traces of Diuron 80WP from application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately.)

### DIRECTIONS

Before spraying, calibrate equipment to determine quantity of water necessary to uniformly cover area to be treated. Weigh proper amount of Diuron 80WP and mix into necessary volume of water. 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 a 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. When a range of dosage rates is listed, use the lower rates on lighter soils (sandy loams, loams, and soil low in organic matter), and the higher rates on heavier soils (clay loams, clays, and soils high in organic matter).

Industrial plant sites, and around farm buildings. Apply 5 to 20 lb. Diuron 80WP per acre for control of most annual weeds. Use 20 to 60 lb. per acre for perennial weeds. Additional treatment may be required where a longer period of control is desired or when hard to kill, controlled perennial weeds such as johnsongrass are present. In low fall areas, Diuron 80WP may not provide satisfactory control of controlled perennial weeds.

For weed control on such areas, use one-half cupful of Diuron 80WP per 100 sq. ft. for a dosage of approximately 50 lbs. per acre.

**IRRIGATION AND DRAINAGE DITCHES:** Apply 5 to 20 lbs. per acre to control most annual weeds, use 20 to 60 lbs. per acre to control annual and perennial weeds. For irrigation ditches and during the crop season, and when ditch is not in use. To minimize movement of Diuron 80WP with irrigation water (to avoid possible crop injury), it is essential that the herbicide be fixed in the soil by moisture. Apply before expected seasonal rainfall (if possible when soil in the ditch is moist). Following treatment, if rainfall has not totalled at least 4 inches, fill ditch with water and allow the water to stand for 72 hours; drain off the water before using ditch. Do not treat any ditch in which roots of trees or other desirable plants may extend as injury results.

### SELECTIVE USE IN CROPS

**WEEDS CONTROLLED:** Diuron 80WP as a pre-emergence treatment selectively controls germinating seedling weeds in certain crops. Rates of 1/2 to 1 lb. per acre control some annuals including crabgrass, barnyardgrass, pigweed, purslane, lambsquarters and ragweed. At 1 1/2 lbs. per acre, seedling weeds such as bluegrass (Poa annua), annual ryegrass, vernalgrass, foxtail, rattail fescue, red sprangletop, velvetgrass, chickweed, corn spurry, dog fennel, Amisnckia (fiddleneck), groundsel, groundsel, knawel, shepherds-purse, tansymustard, wild lettuce, wild mustard, annual groundcherry and annual morningglory are controlled. In a 1/2 to 1 lb. per acre control weeds such as annual lovegrass, annual ryegrass, sandbar, ricegrass, orchardgrass, seedling johnsongrass, annual smartweed, annual sowthistle, buttonweed, corn speedwell, horseweed, knotweed, Mexican clover, hawkbeard, peppergrass, pineappleweed, pokeweed, rabbit tobacco, ageratum, Spanishneedles and wild radish.

Partial control of quackgrass and nutsedge usually occurs with 4 lb. per acre; partial control of maidencane, pangolagrass and quineagrass usually occurs with treatments of 8 to 10 lbs. per acre.

Results vary with soil types (the lower rates are effective on the light soils and higher rates on heavier soils) and environmental conditions. Sufficient moisture in the form of rainfall 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 chemical or other means. For best results, the soil 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 as efficiency may be reduced.

Diuron 80WP plus a surfactant is an effective treatment of emerged seedling weeds for use as a directed post emergence spray in certain crops. Rates as low as 1/2 lb. Diuron 80WP per acre plus a surfactant control seedling pigweed. Rates of 1 lb. per acre control seedling weeds such as crabgrass, goosegrass, barnyardgrass (watergrass), crowfoot, chickweed, purslane and annual morningglory. Best results are obtained under conditions of high humidity and temperatures over 70° F.

**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, plumose fern, sorghum, sugar corn and winter wheat where organic matter is less than 1% (3) on blueberries, birdfoot trefoil, canberries, gladiolus and gooseberries where organic matter is less than 2%.

Unless otherwise directed, do not re-plant treated areas for any crop within two years after last application as injury to subsequent crops may result.

### CROPS

**ALL RATES ARE EXPRESSED AS BROADCAST RATES:** where broadcast applicators are specified, use proportionately less. For example, 1/3 of the broadcast rate when treating 14" band where row spacing is 42". 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 areas of California (north of the Tehachapi Mountains) where alfalfa becomes semi-dormant. Use 1/2 to 3 lbs. per acre (except east of the Palachian Mountains use 1/2 to 2 lbs.) Apply anytime after alfalfa is dormant in the Fall but before crop begins growth in the Spring. For control of volunteer alfalfa seedlings in the Far West, use 4 lbs. per acre (Soil Limitations.)

Treat only stands established for one year or more. Do not apply seedling alfalfa nor to alfalfa grass mixtures, do not apply to established alfalfa with unusually shallow root penetration (such as shallow root panic, or 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.

**EASTERN COLORADO AND KANSAS:** For control of tansymustard, apply 1 lb. shortly after emergence of mustard in the Fall or winter, 2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present use 2 to 3 lbs. 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 1 year. Apply 4 lbs. per acre to area under individual tree or as a band in the tree row, 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 2 lbs. as postharvest treatment followed by 2 lbs. in Spring.





# DIURON 80WP WEED KILLER

Industrial plant sites, and around farm buildings. Apply 5 to 20 lbs. of Diuron 80WP per acre to control annual weeds. Use 20 to 60 lbs. per acre for perennial weeds; additional treatment may be required there. For annual weeds, control is desired or when hard to kill, deep, coated areas. Weeds that are perennial are present. In lawns and all areas, use 80WP may be pre-emptive control of annual weeds. Do not apply to perennial weeds.

For weed control in shrubs, apply 10 to 20 lbs. of Diuron 80WP per 100 sq. ft. for a dosage of approximately 50 lbs. per acre.

**IRRIGATION AND DRAINAGE DITCHES** - Apply 5 to 20 lbs. per acre to control annual weeds, use 20 to 60 lbs. per acre to control biennial and perennial weeds. For irrigation ditches, and during the non-top season, and when ditch is not in use. To minimize movement of Diuron 80WP in irrigation water (to avoid possible crop injury), it is essential that the herbicide 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 totalled at least 4 inches, 1 ditch with water and allow the water to stand for 72 hours, then drain off the water before using ditch. Do not treat any ditch into which roots of trees or other desirable plants may extend as injury may result.

## SELECTIVE USE IN CROPS

**WEEDS CONTROLLED:** Diuron 80WP as a pre-emergence treatment selectively controls germinating seedling weeds in certain crops. Rates of 1 to 1 lb. per acre control some annuals including crabgrass, barnyardgrass, pigweed, purslane, lambsquarters and ragweed. At 1 to 2 lbs. per acre, seedling weeds such as bluegrass (*Poa annua*), annual sweet cerealgrass, foxtail, rattail, foxtail, red sprangletop, velvetgrass, chickweed, corn spurry, dog fennel, Amaranth (fiddleneck), groundsel, ground-ell, knotweed, shepherdspurse, tansymustard, wild lettuce, wild mustard, annual groundcherry and annual morningglory are controlled. In addition, 2 to 6 lbs. per acre control weeds such as annual lovegrass, annual yeargrass, sandbar, ricegrass, orchardgrass, seedling Johnsongrass, annual smartweed, annual sowthistle, buttonweed, corn speedwell, horseweed, cockle, Kyllburg, Mexican clover, hawkbeard, peppergrass, pineapple weed, pokeweed, rabbit tobacco, ragwort, Spanish needles and wild radish.

Annual control of quackgrass and horsetail usually occurs with 4 lbs. per acre, partial control of mandarin, pangolgrass and quincegrass usually occurs with treatments of 4 to 10 lbs. 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 rainfall 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, the soil 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 as efficiency may be reduced.

Diuron 80WP plus a surfactant is an effective treatment of emerged seedling weeds for use as a directed post-emergence spray in certain crops. Rate as low as 1 lb. Diuron 80WP per acre plus a surfactant control seedling pigweed. Rates of 1 lb. per acre control seedling weeds such as crabgrass, goosegrass, barnyardgrass (watergrass), crowfoot, pigweed, purslane and annual morningglory. Best results are obtained under conditions of high humidity and temperatures over 70 F.

**SOIL LIMITATIONS:** Crop injury may result from failure to follow 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, plumusis fern, sorghum, sugar cane and winter wheat where organic matter is less than 1% (3) on blueberries, birdfoot trefoil, caneberrries, glaucous and gooseberries where organic matter is less than 2%.

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

## CROPS

**RATE RATES ARE EXPRESSED AS BROADCAST RATES:** where band applicators are specified, use proportionately less. For example, use 1/3 of the broadcast rate when treating 14" band where row spacing is 42". 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 in the of the Tehachan Mountains where alfalfa becomes semi-dormant. Use 1 to 3 lbs. per acre (except east of the Appalachian Mountains use 1 to 2 lbs.) Apply anytime after alfalfa is dormant in the Fall but before crop begins growth in the Spring. For control of volunteer alfalfa seedlings in the Far West, use 4 lbs. per acre (see Soil Limitations).

Treat only stands established for one year or more. Do not apply to seedling alfalfa or alfalfa grass mixtures. Do not apply to established alfalfa 2 1/2 to 3 years old which will penetrate as deep as shallow sand pits, or as at depth as 18 inches or more.

**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.

**EASTERN COLORADO AND KANSAS:** For control of tansymustard, apply 1 lb. shortly after emergence of mustard in the Fall or winter and 2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present, use 2 to 3 lbs. 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 1 year. Apply 4 lbs. per acre to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat

**BIRDFOOT TREFOIL (Lotus) - WESTERN OREGON** - Treat only established stands at least 1 year old. Apply a single treatment of 2 lbs. per acre when trefoil is dormant (October to December 15; see Soil Limitations). Do not apply to seedling trefoil as injury may result. Do not repeat treated areas for 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. Spray only ground at base of bushes, avoid spraying foliage as injury may result.

**CALIFORNIA** - Raspberries, Blackberries, Huckleberries, Dewberries, and Loganberries: For control of winter annual weeds, apply 2 lbs. 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 3 lbs. 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.

**WESTERN WASHINGTON AND WESTERN OREGON** - Blueberries, Caneberries, and Gooseberries: Same schedule as recommended in California.

**INDIANA, MICHIGAN AND OHIO** - Blueberries: Make a band application of 2 to 4 lbs. per acre in late Spring but before germination and growth of annual weeds. As an alternative, apply 2 lbs. per acre in the Fall and repeat at the same rate in the Spring.

**INDIANA, MICHIGAN AND OHIO** - Raspberries: Make a single application as a band treatment at a rate of 3 lbs. per acre in the Spring before germination and growth of annual weeds.

**MASSACHUSETTS** - Blueberries: For control of summer annuals, make a single application as a band treatment at a rate of 2 lbs. per acre in late Spring, but before germination and growth of weeds.

**NEW JERSEY** - Blueberries: For control of winter annual weeds, apply 2 lbs. per acre as a band treatment in October, November or December.

**CITRUS:** Use only under trees established in the grove for at least one 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 the roots of other valuable plants or trees may extend as injury may result.

**ARIZONA (except Yuma area) AND CALIFORNIA (except Imperial and Coachella Valleys)** - Oranges, Lemons and Grapefruits: Make a single application of 3 to 4 lbs. per acre as a broadcast spray shortly after grove has been laid up in final form (non tillage program) in late Fall or early winter. As an alternative, apply 2 lbs. per acre in October or November, and repeat at the same rate in March or April. Subsequent annual applications of 2 to 3 lbs. will usually give adequate weed control.

**FLORIDA (except Martin, Palm Beach, Broward and Dade Counties)** - Oranges, Grapefruit, Tangerines and Lemons: Apply 4 lbs. per acre followed by the same rate 4 to 6 months later. As an alternative, make a single application of 4 to 8 lbs. per acre. On non-bearing trees, treat when winter banks are pulled down. On bearing citrus, apply any time when seasonal rains are expected.

For control of paragrass, quincegrass, mandarin, prairie-walnut, sea myrtle and loosestrife in ditch adjacent to citrus groves, use 1 lb. Diuron per 1000 sq. ft. (40 lbs. per acre) using sufficient spray volume (at least 4 gals. per 1000 sq. ft.) to provide thorough and uniform coverage of the ditch. Apply in the spring before weed growth to control hard to kill species such as quincegrass. In hedged groves do not treat water furrows between the beds as injury to the trees may result.

**TEXAS:** Oranges and Grapefruit: Apply a single treatment of 2 to 4 lbs. per acre for annual weeds. Use 1 to 6 lbs. 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 lb. per acre in combination with non-pressure nitrogen solution. If nitrogen solution is not used, apply 1 lb. Diuron per acre and add 1/2 pts. of a surfactant per 40 gals. spray mixture. Apply as a single directed post-emergence spray when the corn is at least 20 inches high and weeds are not taller than 4 inches. DO NOT APPLY OVER TOP OF CORN. Do not repeat to any crop within one year except that cotton, corn and grain sorghum may be planted the spring following treatment.

**PRE-EMERGENCE - ARKANSAS, LOUISIANA, MISSISSIPPI AND TENNESSEE** - Make a single treatment of 2 to 4 lbs. per acre as a broadcast or band treatment using the higher dosage on heavier soils (loam, clay loam). Do not use on light (sand, loamy sand or gravelly) soils as injury may result, plant can 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

**PRE-PLANT ARIZONA AND CALIFORNIA ONLY:** Apply 1 to 2 lbs. 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 for planting.

Prior to planting, drag off the top of the seed bed and plant in untreated soil. Treated soil is returned to the bed after planting when irrigation furrows are reformed. If more than 2 following out operations are performed prior to lay-by, weed control in the furrow bottoms may be lost. A lay-by application also may be made but the combined total per season must not exceed 1.2 lbs. Diuron 80WP per acre on clay

## BAND TREATMENT

The proportionately less, for example, for 14" band on 42" rows, use 1/3 of broadcast rate.

Apply immediately after cotton is planted whenever possible. Planting and spraying should be combined in one operation. For best results, soil should be well prepared and as free as possible from trash and clods. Shallow incorporation (no deeper than 1 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.

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 the root zone of germinating weeds; best results are obtained when this occurs within 2 weeks after application. If moisture is insufficient to activate Diuron 80WP or if soil becomes crusted before crop emerges, a shallow rotary hoeing (no deeper than 1 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 80WP. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as disking; do not resist 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 80WP during the same crop year as injury to the crop may result.

**POST-EMERGENCE: EARLY SEASON:** Apply in combination with surfactant as a directed spray when 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 WHEN APPLIED TO 14" BAND ON 42" ROWS (IN 10 TO 15 GALS. WATER)

| Weed Problem | Diuron 80WP         | Active Diuron |
|--------------|---------------------|---------------|
| Annual Weeds | 0.18 lb. (2.8 ozs.) | 0.14 lb.      |
| Pigweed      | 0.09 lb. (1.4 ozs.) | 0.07 lb.      |

**LATE SEASON (LAY-BY)** - Use 1 to 1 1/2 lbs. Diuron 80WP (1 to 2 lbs. in Arizona and California) in 25 to 40 gals. water per acre as a directed spray (see Soil Limitations). Apply when cotton is at least 12 inches high (at least 20 inches for Pima 5-2). 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, directing 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 pt. surfactant for each 25 gals. spray; apply as a directed spray to cover weed foliage beneath cotton plants and between rows. NOTE: Treatment of 1 to 1 1/2 lbs. Diuron 80WP per acre plus surfactant followed by the same treatment later, if needed, may be 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

Band pre-plant pre-emergence - Any crop 4 months after last application.

Band pre-plant post-emergence - Cotton, soybeans, corn or grain sorghum (pre-plant sprays for paragrass and quincegrass) 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.

Pre-plant - Cotton, corn, grain sorghum or soybeans.

Broadcast post-emergence (lay-by) - Cotton, corn, grain sorghum (not for grain sorghum) or grass sorghum (not for wheat) spring. Do not replant treated areas to any other crop within one year after last 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: 0.8 lbs. on loamy sand; 1.2 lbs. on sandy loam; 1.6 lbs. on clay loams; and 2.2 lbs. on clay.

**GLADIOLUS EAST OF ROCKY MOUNTAINS:** Apply 1 to 2 lbs. per acre as pre-emergence and/or directed post-emergence treatments, if used for both do not exceed 1 lb. of Diuron per acre per application, or a total of 2 lbs. per season. On summer plantings, apply 1 lb. per acre pre- or post-emergence, but not more than once. Do not use on cornel plantings in Florida; do not spray over top of gladiolus foliage nor allow 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 2 to 4 lbs. per acre on soil low in clay or organic matter, use 3 to 6 lbs. Apply in the spring just prior to germination and

to fields where ash residues have accumulated from burning straw, use 3 lbs. per acre spread (chaff) in straw with a harrow or chopper before application.

**WESTERN OREGON** - In a field where top and bottom grass, just a band grass, or hardgrass, knotweed, sprays, Oregon bluegrass, apply 2 to 4 lbs. per acre between 20 to 25 inches and 1 1/2 to 2 1/2 inches. In fields where ash residues have accumulated from burning straw, use 2 to 4 lbs. per acre, spread (chaff) in straw with a harrow or chopper before application. If perennial weeds are a problem, use 4 lbs. per acre. If best results are possible after fall rains start, established weeds that are at least stage should be removed prior to treatment.

Well established and resistant to Spring planted alfalfa, timothy, orchard grass and Kentucky bluegrass may be treated the following fall provided the crop is planted before winter and treatment is not applied before October 15; use 10 to 15 lbs. per acre.

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

**PINEAPPLE - HAWAII** - Apply 4 to 8 lbs. per acre as a broadcast spray immediately after planting and prior to weed emergence. Use 4 lbs. per acre after harvesting plant crop (first harvest crop). For plant crop only, a second and third broadcast or interspace application may be made prior to differentiation at the rate of 2 lbs. per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 2 lbs. per acre. Do not apply more than 3 broadcast sprays (maximum 12 lbs. per acre) prior to differentiation, nor more than 10 lbs. total per acre per plant crop. Treated areas may be planted to pineapple or sugar cane 1 year after last application.

**PLUMOSIS FERN - FLORIDA** - Treat only established stands at least 1 year old. Apply 3 lbs. 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.

**SORGHUM (GRAIN) - SOUTHWESTERN STATES:** Apply 1 to 1 1/2 lbs. per acre as a directed post-emergence broadcast or band treatment after sorghum is 15 inches tall to control weeds 2 to 4 inches in height. DO NOT SPRAY OVER TOP OF SORGHUM. Add 1 pt. of a surfactant per 25 gals. spray. Apply at spray pressures of 20 to 25 psi to minimize drift.

Use the lower rate on Broadleaved weeds up to 2 inches tall. Use the higher rate on grasses up to 2 inches and broadleaved 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 1 lb. of Diuron 80WP 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 treatments 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 80WP should be determined prior to adoption as 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 in galls soils, apply 2 to 4 lbs. per acre as a broadcast or band spray prior to weed emergence after planting or after harvest of a plant crop (first harvest crop). A second and third application of 2 lbs. per acre may be made as needed by directed spray after harvest but not apply more than 3 treatments nor more than 6 lbs. total per acre between planting and harvest.

**HAWAII AND PUERTO RICO:** Apply 4 to 8 lbs. per acre as a broadcast or band spray prior to weed emergence after planting or after harvest of a plant crop (first harvest crop). A second and third application of 2 to 4 lbs. per acre may be made as needed by directed spray after harvest but not apply more than 3 treatments nor more than 6 lbs. total per acre between planting and harvest.

**LOUISIANA:** Apply 2 to 4 lbs. per acre as a broadcast or band spray prior to weed emergence after planting or after harvest of a plant crop (first harvest crop). A second and third application of 2 to 4 lbs. per acre may be made as needed by directed spray after harvest but not apply more than 3 treatments nor more than 6 lbs. total per acre between planting and harvest.

**WHEAT (WINTER)** - Weed seed must be well prepared before pre-emergence application. Soil preparation may result if application is made on ground which is hard, well compacted, resulting in exposed, unprepared, pre-plant seed. Pre-emergence seed bed preparation and planting are delayed during unfavorable 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 (lay knolls) as injury to the crop may result; 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. Do not apply post-emergence treatments where winter climatic conditions have caused heaving of wheat plants or after wheat has reached the root stage as injury to the crop may result.

**KANSAS, OKLAHOMA AND TEXAS** - Make a single post-emergence application at the rate of 1 1/2 to 2 lbs. 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.

**WASHINGTON, OREGON AND IDAHO**

...off the water before using ditch. Do not treat any ditch into which roots of trees or other desirable plants may extend as injury may result.

### SELECTIVE USE IN CROPS

**WEEDS CONTROLLED:** Diuron 80WP as a pre-emergence treatment actively controls germinating seedling weeds in certain crops. Rates of 1 to 1 1/2 lbs. per acre control some annuals including crabgrass, barnyardgrass, pigweed, purslane, lambsquarters and ragweed. At 1 1/2 to 2 lbs. per acre, seedling weeds such as bluegrass (Poa annual), annual sweet galgrass, fox tail, rattail, fescue, red sprangletop, velvetgrass, chickweed, corn spurry, dog fennel, Ammioglossa (fiddle-neck), groundwell, ground knawel, shepherdspurse, tansymustard, wild lettuce, wild mustard, annual groundcherry and annual morningglory are controlled. In addition, 2 to 4 lbs. per acre control weeds such as annual lovegrass, annual grass, sandbar, ricegrass, orchardgrass, seedling Johnsongrass, annual artweed, annual sowthistle, butterweed, corn speedwell, horseweed, thia, killifish, Mexican clover, hawkbeard, peppergrass, pineapple oil, pokeweed, rabbit tobacco, amaranth, Spanishneedles and wild radish.

...of a grasshopper and horsefly usually occurs with 4 lbs. per acre. In areas where sand pine, manzanita and sagebrush are the dominant vegetation, treatment of 5 to 6 lbs. per acre is usually sufficient on heavier soils. The lower rates are effective on the lighter soils and high rates on heavier soils and environmental conditions.

...efficient measure in the form of rainfall or irrigation is necessary after treatment to carry the chemical into the root zone of germinating weeds. Any other kind of weeds should first be eliminated by manual or other means. For best results, the soil 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 as efficiency may be reduced.

Diuron 80WP plus a surfactant is an effective treatment of emerged annual weeds for use as a directed post-emergence spray in certain crops. Rates as low as 1 lb. Diuron 80WP per acre plus a surfactant control seedling pigweed. Rates of 1 lb. per acre control seedling weeds such as crabgrass, goosegrass, barnyardgrass (watergrass), crowfoot, pigweed, purslane and annual morningglory. Best results are obtained under conditions of high humidity and temperatures over 70° F.

### SOIL LIMITATIONS:

Crop injury may result from failure to observe the following: (1) unless otherwise directed, do not use (1) on light (sand, loamy sand or gravelly) soils; (2) on alfalfa, apples, barley, citrus, cotton (pre-plant or lay-by), grapes, olives, pears, plumusius fern, sorghum, sugar cane and winter wheat where organic matter is less than 1%; (3) on blueberries, birdsfoot trefoil, canberries, gladiolus and gooseberries where organic matter is less than 2%.

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

### CROPS

**RATES ARE EXPRESSED AS BROADCAST RATES:** where band applicators are specified, use proportionately less. For example, use 3/4 of the broadcast rate when treating 14" band where row spacing is 42". 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 Tehachapi Mountains where alfalfa becomes semi-dormant. Use 1 1/2 to 3 lbs. per acre (except east of the Appalachian Mountains use 1 1/2 to 2 lbs.). Apply anytime after alfalfa is dormant in the Fall but before crop begins growth in the Spring. For control of volunteer alfalfa seedlings in the Far West, use 4 lbs. per acre (see Soil Limitations).

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

**ALFALFA NORTHWEST:** Apply in the Fall after alfalfa becomes dormant but no later than mid-December.

**ARIZONA, CALIFORNIA, AND NEVADA:** Application may be made to dormant alfalfa as late as January.

**EASTERN COLORADO AND KANSAS:** For control of tansymustard, apply 1 lb. shortly after emergence of mustard in the Fall or winter and 1 1/2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present, use 2 to 3 lbs. 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 1 year. Apply 4 lbs. per acre to area under individual trees as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations) in areas of the Spring (March through May). Do not treat fruit varieties.

**BAR WEST:** Treatment may be made in winter (December through February) or in spring (March through May) with a pre-treatment followed by 2 lbs. in the Spring.

**PARAGRASS:** Use in areas where a heavy seedbed of paragrass has been established in the Spring. Apply as a band in the row, avoid contact of foliage or fruit (see Soil Limitations) in areas of the Spring (March through May). Do not treat fruit varieties.

**BARLEY (WINTER):** WESTERN OREGON AND WESTERN WASHINGTON: Apply as a band treatment at a rate of 3 to 4 lbs. per acre as soon as possible after planting but before emergence of barley. Do not apply to odd lots of unplanted ground where seed is exposed or to properly planted, treated area should be replanted. A single rotational crop within 1 year after last application as injury to the subsequent crop may result.

...ary will control both winter and summer annuals in some areas but the separate Fall and Spring schedule is preferred.

**WESTERN WASHINGTON AND WESTERN OREGON - Blueberries, Canberries, and Gooseberries:** Same schedule as recommended in California.

**INDIANA, MICHIGAN AND OHIO - Blueberries:** Make a band application of 2 to 4 lbs. per acre in late Spring but before germination and growth of annual weeds. As an alternative, apply 2 lbs. per acre in the Fall and repeat at the same rate in the Spring.

**INDIANA, MICHIGAN AND OHIO - Raspberries:** Make a single application as a band treatment at a rate of 3 lbs. per acre in the Spring before germination and growth of annual weeds.

**MASSACHUSETTS - Blueberries:** For control of summer annuals, make a single application as a band treatment at a rate of 2 lbs. per acre in late Spring, but before germination and growth of weeds.

**NEW JERSEY - Blueberries:** For control of winter annual weeds, apply 2 lbs. per acre as a band treatment in October, November, or December.

**CITRUS:** Use only under trees established in the grove for at least one year. Apply as a directed spray avoiding contact of foliage and fruit with spray or drift. Some applications are indicated for specific areas, except application may be made by 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 some plantings of citrus in areas where the roots of other valuable plants or trees may extend as injury may result.

**ARIZONA (except Yuma area) AND CALIFORNIA (except Imperial and Coachella Valleys) - Citrus:** Lemons and grapefruits. Make a single application of 3 to 4 lbs. per acre as a broadcast spray shortly after grove has been laid up in final form (non-irrigation program) in late Fall or early winter. As an alternative, apply 2 lbs. per acre in October or November, and repeat at the same rate in March or April. Subsequent annual applications of 2 to 3 lbs. will usually give adequate weed control.

**FLORIDA (except Martin, Palm Beach, Broward and Dade Counties) - Oranges, Grapefruit, Tangelos and Tangerines:** Apply 4 lbs. per acre followed by the same rate 4 to 6 months later. As an alternative, make a single application of 4 to 8 lbs. per acre. On non-bearing trees, treat when winter banks are pulled down. On bearing citrus, apply any time when seasonal rains are expected.

For control of paragrass, quackgrass, mardiancane, primrose willow, sea myrtle and loosestrife in ditches adjacent to citrus groves, use 1 lb. Diuron per 1000 sq. ft. (40 lbs. per acre) using sufficient spray volume (at least 4 gals. per 1000 sq. ft.) to provide thorough and uniform coverage of the ditch. Apply in the Spring before weed growth to control hard to kill species such as quackgrass. In bedded groves do not treat water furrows between the beds as injury to the trees may result.

**TEXAS - Granges and Grapefruit:** Apply a single treatment of 2 to 4 lbs. per acre for annual weeds. Use 4 to 6 lbs. 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 lb. per acre in combination with non-pressure nitrogen solution. If nitrogen solution is not used, apply 1 lb. Diuron per acre and add 1/2 pts. of a surfactant per 40 gals. spray mixture. Apply as a single directed post-emergence spray when the corn is at least 20 inches high and weeds are not taller than 3 inches. DO NOT APPLY OVER TOP OF CORN. Do not replant to any crop within one year except that cotton, corn and grain sorghum may be planted the Spring following treatment.

**PRE-EMERGENCE - ARKANSAS, LOUISIANA, MISSISSIPPI AND TENNESSEE:** Make a single treatment of 2 1/2 to 1 lb. per acre as a broadcast or band treatment using the higher dosage on heavier soils (loam, clay loam). 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

**PRE-PLANT: ARIZONA AND CALIFORNIA ONLY:** Apply 1 to 2 lbs. 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 for planting.

Prior to planting, drag off the top of the seed bed and plant in untreated soil. Treated soil is returned to the bed after planting when irrigation furrows are reformed. If more than 2 furrowing-out operations are performed prior to lay-by, weed control in the furrow bottoms may be lost. A lay-by application also may be made but the combined total per season must not exceed 1.2 lbs. Diuron 80WP 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<br>Lbs. Diuron in<br>25 to 40 gals.<br>Water per Acre | Lbs. Diuron<br>Applied<br>Per Acre |
|---|---|------------------------------------|
| Loamy sand  | 0.6   | 0.5                                |
| Sandy loam, loam, silt loam<br>and silt                       | 1.0   | 0.8                                |
| Sandy clay loam, clay loam,<br>silty clay loam, and sand clay | 1.25  | 1.0                                |
| Silty clay and clay   | 2.0   | 1.6                                |

Do not use on sand as crop injury may result.

...rotary hoeing (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 80WP. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as discing; do not resist 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 80WP during the same crop year as injury to the crop may result.

**POST-EMERGENCE: EARLY SEASON:** Apply in combination with surfactant as a directed spray when 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 WHEN APPLIED TO 14" BAND ON 42" ROWS (IN 10 TO 15 GALS. WATER)

| Weed Problem | Diuron 80WP         | Active Diuron |
|--------------|---------------------|---------------|
| Annual Weeds | 0.18 lb. (2.8 ozs.) | 0.14 lb.      |
| Pigweed      | 0.07 lb. (1.4 ozs.) | 0.07 lb.      |

**LATE SEASON (LAY BY):** Use 1 to 1 1/2 lbs. Diuron 80WP (1 to 2 lbs. in Arizona and California) in 25 to 40 gals. water per acre as a directed spray (see Soil Limitations). Apply when cotton is at least 12 inches high (at least 20 inches for Pima 52). 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, directing spray to cover the soil beneath cotton plants and between rows. Alternatively, for control of emerged annual weeds (4 inches across in height) at lay-by time, add 1 pt. surfactant for each 25 gals. spray; apply as a directed spray to cover weed foliage beneath cotton plants and between rows. NOTE: Treatment of cotton with Diuron 80WP per acre plus surfactant followed by the same treatment later, if needed, may be 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

Band pre- or post-emergence: Any crop 4 months after last application.

Band pre- plus post-emergence or Broadcast pre-emergence (and pre-plant): Cotton, soybeans, corn or grain sorghums (not sorgos or forage 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 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.

**NOTE:** During a single crop season, do not exceed the following amount of Diuron per acre as injury to subsequent crops may result: 0.8 lbs. on loamy sand; 1.2 lbs. on sandy loam; 1.6 lbs. on clay loams; and 2.2 lbs. on clay.

**GLADIOLUS-EAST OF ROCKY MOUNTAINS:** Apply 1 to 2 lbs. per acre as pre-emergence and/or directed post-emergence treatments, if used for both do not exceed 1 lb. of Diuron per acre per application, or a total of 2 lbs. per season. On cornel plantings, apply 1 lb. per acre pre- or post-emergence, but not more than once. Do not use on cornel plantings in Florida; do not spray over top of gladiolus foliage nor allow 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 2 to 3 lbs. per acre; on soils high in clay or organic matter, use 3 to 6 lbs. 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, ryegrass and orchard grass as a band treatment to ridged soil (2 to 4 inches high) under the trellis at the rate of 8 to 12 lbs. per acre. Band width should not exceed 30 inches. Make one application in the Spring of the year and do not apply the 8 to 12 lbs. 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 grapes may result.

**WEST OF THE ROCKY MOUNTAINS:** Apply in December, January or February. For initial treatment, make a single application of 3 to 4 lbs. per acre, subsequent annual applications of 2 lbs. will usually give adequate weed control. As an alternative to the above schedule, apply 2 lbs. of Diuron 80WP 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.

**COLORADO, KANSAS, NEW MEXICO AND OKLAHOMA:** On winter grass, side oats grama and sand bluestem, apply 2 to 3 lbs. 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.

...for at least 1 year. Do not apply in areas where roots of other valuable plants or trees may extend as injury may result. Apply 2 lbs. per acre after the grove is laid up in final form in late October or November. A second application of 2 lbs. per acre should be made in March or April. Remove weed growth prior to treatment. Avoid contact of foliage with spray or drift.

**PINEAPPLE - HAWAII:** Apply 4 to 8 lbs. per acre as a broadcast spray immediately after planting and prior to weed emergence. Use 4 lbs. 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 2 lbs. per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 2 lbs. per acre. Do not apply more than 3 broadcast sprays (maximum 12 lbs. per acre) prior to differentiation nor more than 16 lbs. total per acre per plant crop. Treated areas may be planted to pineapple or sugar cane 1 year after last application.

**PLUMOSUS FERN - FLORIDA:** Treat only established stands at least 1 year old. Apply 3 lbs. 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.

**SORGHUM (GRAIN) - SOUTHWESTERN STATES:** Apply 2 to 4 lbs. per acre as a directed post-emergence broadcast or band treatment. Treat sorghum 15 inches tall to control weeds 2 to 4 inches in height. DO NOT SPRAY OVER TOP OF SORGHUM. Add 1 pt. of a surfactant per 25 gals. spray. Apply at spray pressures of 20 to 25 psi to minimize drift.

Use the lower rate on broadleaved weeds up to 2 inches tall, use the higher rate on grasses up to 2 inches and broadleaved 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 1 lb. of Diuron 80WP 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 treatments 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 80WP should be determined prior to adoption as field practice. Do not treat sugar cane growing on thinly covered subsols 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 2 to 4 lbs. 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 2 lbs. per acre may be made as needed by directed spray inter row. Do not apply more than 3 treatments nor more than 6 lbs. total per acre between planting (or ratooning) and harvest.

**HAWAII AND PUERTO RICO:** Apply 4 to 8 lbs. 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 2 to 4 lbs. 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 the spray mixture at the rate of 1 to 2 qts. per 100 gals. and apply as a directed spray. DO NOT SPRAY OVER TOP OF CANE.

Do not apply more than 3 treatments nor more than 10 lbs. (Puerto Rico) or 12 lbs. (Hawaii) total per acre between planting (or ratooning) and harvest. Treated areas may be planted to sugar cane or pineapple one year after last application.

**LOUISIANA:** Use on plant cane seeded on fallowed ground. Make a single application of 3 to 3 1/2 lbs. per acre at either of the following times: FALL TREATMENT (August through October) - Treat a 2 ft. 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 ft. band over the row before weeds or cane emerge.

**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 knobs), as injury to the crop may result; 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.

Do not apply post-emergence treatments where winter climatic conditions have caused heaving of wheat plants or after wheat has 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 1/2 to 2 lbs. 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.

**WASHINGTON, OREGON AND IDAHO: EAST OR CASCADE RANGE:** Make a single application at the rate of 1 to 1 1/2 lbs. 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 4 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 in the Spring is usually given good results, provided weed growth is not too advanced. Application after that May 1 may give poor results.

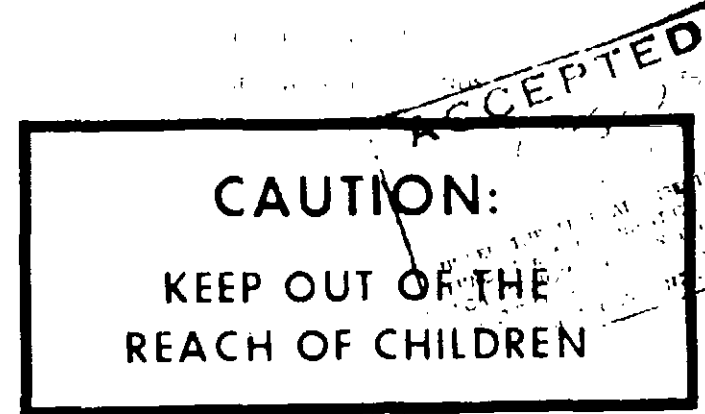
**NOTE:** If fall planted wheat has not started to winter, or if a severe growing condition after fall treatment in the Spring, or if fields were not before November 1 may be replanted to Spring wheat. Spring wheat should not be planted before April 1 and only after deep discing to a plowing to a depth of 4 to 6 inches prior to planting. Do not retreat field with a second application of Diuron 80WP during the same crop year or injury to crop may result.

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



# BEST 4 DIURON 80W

ACTIVE INGREDIENT  
INERT INGREDIENTS



AVOID CONTACT WITH EYES, SKIN OR CLOTHING. AVOID INHALATION OF MIST. MAY BE HARMFUL IF SWALLOWED. DO NOT RE-USE EMPTY CONTAINER. DESTROY EMPTY CONTAINER BY PERFORMING OR CRUSHING AND BURYING IN A SAFE PLACE.

**IMPORTANT:** Injury to desirable plants may result from failure to observe the following: Do not apply to desirable trees or other plants, or in areas where desirable trees or other plants are located. Do not apply to desirable trees or other plants in areas where desirable trees or other plants are located. Do not apply to desirable trees or other plants in areas where desirable trees or other plants are located.

**NON-CROP WEED CONTROL**  
Around Farm Buildings, Storage Areas, Industrial Plant Sites, Petroleum Tank Farms, Utility Highway Pipeline, Lumber Yards, Irrigation and Drainage Ditches

**GENERAL INFORMATION**  
Diuron 80WP is a selective herbicide for the control of annual and perennial weeds in many crops. It is effective against a wide range of weeds, including grasses, broadleaves, and sedges. It is available in a water-soluble formulation for use in various agricultural settings.

**USE PRECAUTIONS**  
Injury to or loss of desirable trees or other plants may result from failure to observe the following: Do not apply to desirable trees or other plants, or in areas where desirable trees or other plants are located. Do not apply to desirable trees or other plants in areas where desirable trees or other plants are located.

**DIRECTIONS**  
Before spraying, calibrate equipment to determine the amount of Diuron 80WP and mix into necessary volume of water. Materials must be kept in suspension at all times by continuous agitation. For small areas, use fixed boom power sprayers properly calibrated to insure a constant rate of application.

**NON-CROP WEED CONTROL**  
Diuron 80WP is an effective herbicide for the control of many annual and perennial grasses and herbaceous weeds in non-crop areas where they are unwanted. It is effective against a wide range of weeds, including grasses, broadleaves, and sedges.

**GENERAL WEED CONTROL**  
Diuron 80WP is an effective herbicide for the control of many annual and perennial grasses and herbaceous weeds in many crops. It is effective against a wide range of weeds, including grasses, broadleaves, and sedges.

**IRRIGATION AND DRAINAGE DITCHES**  
Diuron 80WP is effective against many weeds in irrigation and drainage ditches. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**SELECTIVE USE IN CROPS**  
**WEEDS CONTROLLED:** Diuron 80WP is a pre-emergent herbicide that controls many weeds in various crops. It is effective against a wide range of weeds, including grasses, broadleaves, and sedges.

**INDIANA, MICHIGAN AND OHIO**  
Diuron 80WP is effective against many weeds in Indiana, Michigan, and Ohio. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**FLORIDA**  
Diuron 80WP is effective against many weeds in Florida. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**TEXAS**  
Diuron 80WP is effective against many weeds in Texas. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**ARIZONA, CALIFORNIA, AND NEVADA**  
Diuron 80WP is effective against many weeds in Arizona, California, and Nevada. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**EASTERN COLORADO AND KANSAS**  
Diuron 80WP is effective against many weeds in Eastern Colorado and Kansas. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**OTHER AREAS**  
Diuron 80WP is effective against many weeds in other areas. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**BARLEY (Winter)**  
Diuron 80WP is effective against many weeds in barley. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**BIRDSFOOT TREFOIL (Lotus)**  
Diuron 80WP is effective against birdsfoot trefoil. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**BLUEBERRIES, CANEBERRIES**  
Diuron 80WP is effective against blueberries and canberries. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**CALIFORNIA Raspberries, Blueberries**  
Diuron 80WP is effective against raspberries and blueberries in California. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**WESTERN WASHINGTON AND Oregon**  
Diuron 80WP is effective against many weeds in Western Washington and Oregon. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**INDIANA, MICHIGAN AND OHIO**  
Diuron 80WP is effective against many weeds in Indiana, Michigan, and Ohio. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**MASSACHUSETTS Blueberries**  
Diuron 80WP is effective against blueberries in Massachusetts. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**NEW JERSEY Blueberries**  
Diuron 80WP is effective against blueberries in New Jersey. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**CONNECTICUT Blueberries**  
Diuron 80WP is effective against blueberries in Connecticut. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

**CONNECTICUT Blueberries**  
Diuron 80WP is effective against blueberries in Connecticut. It is applied as a directed spray to the water in the ditch, where it is carried to the weeds by the water flow.

BEST DOCUMENT AVAILABLE  
COLORADO INTERNATIONAL CORPORATION • 5





# DIURON 80WP

ACTIVE INGREDIENT Diuron [3-(3,4-Dichlorophenyl)-1,1-Dimethylurea] 80%  
 INERT INGREDIENTS Total Ingredients 20%  
 100%

EPA REG. NO. 4715-230

NET WEIGHT 50 POUNDS

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

ACCEPTED 4715-230  
 12-16-74

UNDER THE FEDERAL INSECTICIDE ACT  
 FOR THE IDENTIFICATION OF ACTIVE INGREDIENTS  
 FOR THE PURPOSES OF THE FEDERAL INSECTICIDE ACT

AVOID CONTACT WITH EYES, SKIN OR CLOTHING. AVOID INHALATION OF MIST. MAY BE HARMFUL IF SWALLOWED. DO NOT RE-USE EMPTY CONTAINER. DESTROY EMPTY CONTAINER BY PERFORATING OR CRUSHING AND BURYING IN A SAFE PLACE.

**IMPORTANT:** Injury to or loss of desirable trees or other plants may result from failure to observe the following: 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 dry powder or spray to desirable plants. Do not contaminate domestic waters. Keep from contact with fertilizers, insecticides, fungicides, and seeds. Thoroughly clean all traces of Diuron 80WP from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

**NON-CROP WEED CONTROL**  
 Around Farm Buildings, Storage Areas,  
 Industrial Plant Sites, Petroleum Tank Farms,  
 Utility Highway Pipeline, Lumber Yards,  
 Irrigation and Drainage Ditches

### GENERAL INFORMATION

Applied as a spray for control of weeds. It is a non-flammable, non-volatile, non-toxic herbicide. Diuron 80WP may be applied to the soil prior to emergence of weeds to control susceptible weed seedlings for an extended period depending on dosage rate used. Results vary with soil type. Heavy soils (high in organic matter) require higher dosage rates than lighter soils (low in organic matter) to obtain equivalent herbicidal performance. Best results occur if rainfall (or irrigation) occurs within two weeks of application. Diuron 80WP also may be used to control emerged seedling annual weeds by including a surfactant in the spray mixture. Best results are obtained on succulent weeds growing under high humidity and temperatures of 70° F. or higher. Since the effect of Diuron 80WP varies with soils, uniformity of application and environmental conditions, it is suggested that growers limit their first use to small areas; this is especially important where the operator is not completely familiar with requirements for precise application, since over dosage can result in injury to crops.

### USE PRECAUTIONS

Injury to or loss of desirable trees or other plants may result from failure to observe the following:  
 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 dry powder or spray to desirable plants. Do not contaminate domestic water. Keep from contact with fertilizer, insecticides, fungicides and seeds. Thoroughly clean all traces of Diuron 80WP from application equipment immediately after use. Flush tank, pump, hoses and boom with several changes of water after removing nozzle tips and screens (clean these parts separately.)

### DIRECTIONS

Before spraying, calibrate equipment to determine quantity of water necessary to uniformly cover area to be treated. Weigh proper amount of Diuron 80WP and mix into necessary volume of water. 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 a 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. When a range of dosage rates is listed, use the lower rates on lighter soils (sandy loams, loams, and soil low in organic matter), and the higher rates on heavier soils (clay loams, clays, and soils high in organic matter).

### NON-CROP WEED CONTROL

Diuron 80WP is an effective 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, rainfall and other conditions. Diuron 80WP may be used as a pre-emergence 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 application is made to the soil shortly before weed growth begins. If dense growth is present, remove tops and spray the ground. Increase contact activity on established weeds may be obtained by the addition of a surfactant at the rate of 1/2 to 1 qt. per 100 gals. of spray mixture. Apply as a desiccant spray to actively growing weeds during warm weather when daily temperature will exceed 70° F.

**GENERAL WEED CONTROL** For control of weeds, for a pre-emergence period of 1 to 2 weeks, on non-cropland areas, apply Diuron 80WP at the following rates:

industrial plant sites, and around farm buildings - apply 5 to 20 lbs. of Diuron 80WP per acre to control most annual weeds. Use 20 to 60 lbs. per acre for perennial weeds; additional 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. In low rainfall areas, Diuron 80WP may not provide satisfactory control of deep-rooted perennial weeds.

For weed control on small areas, use one-half cupful of Diuron 80WP per 100 sq. ft. for a dosage of approximately 50 lbs. per acre.

**IRRIGATION AND DRAINAGE DITCHES:** Apply 5 to 20 lbs. per acre to control most annual weeds; use 20 to 60 lbs. per acre to control both annual and perennial weeds. For irrigation ditches and during the non-crop season, and when ditch is not in use. To minimize movement of Diuron 80WP with irrigation water (to avoid possible crop injury), it is essential that the herbicide 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 totalled at least 4 inches, flush ditch with water and allow the water to stand for 72 hours; then flush off the water before using ditch. Do not treat any ditch into which roots of trees or other desirable plants may extend as injury may result.

### SELECTIVE USE IN CROPS

**WEEDS CONTROLLED:** Diuron 80WP as a pre-emergence treatment selectively controls germinating seedling weeds in certain crops. Rates of 1/2 to 1 lb. per acre control some annuals including crabgrass, barnyardgrass, pigweed, purslane, lambquarters and ragweed. At 1 1/2 to 2 lbs. per acre, seedling weeds such as quackgrass (Poa annua), annual sweet vernalgrass, foxtail, rattail fescue, red sprangletop, velvetgrass, chickweed, corn spurry, dog fennel, Amaranthus (Amaranthaceae), groundsel, groundsel, knotweed, shepherd's purse, tansymustard, wild lettuce, wild mustard, annual groundcherry and annual morning glory are controlled. In addition, 2 to 6 lbs. per acre control weeds such as annual lovegrass, annual ryegrass, sandbar, ricegrass, orchardgrass, seedling Johnsongrass, annual smartweed, annual sowthistle, burdockweed, corn speedwell, horseweed, Kochia, Kyllinga, Mexican clover, hawkbeard, peppergrass, pineapple-weed, pricklyweed, rabbit tobacco, agropyron, Spanish needles and wild radish.

Partial control of quackgrass and horsecherry usually occurs with 4 lbs. per acre; partial control of maidencane, pangolagrass and guineagrass usually occurs with treatments of 8 to 10 lbs. 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 rainfall 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, the soil 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 as efficiency may be reduced. Diuron 80WP plus a surfactant is an effective treatment of emerged seedling weeds for use as a directed post-emergence spray in certain crops. Rates as low as 1/2 lb. Diuron 80WP per acre plus a surfactant control seedling pigweed. Rates of 1 lb. per acre control seedling weeds such as crabgrass, goosegrass, barnyardgrass (watergrass), crowfoot, pigweed, purslane and annual morning glory. Best results are obtained under conditions of high humidity and temperatures over 70° F.

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, plumose fern, sorghum, sugar cane and winter wheat where organic matter is less than 1% (3) on blueberries, birdsfoot trefoil, caneberrries, ginseng and gorseberries where organic matter is less than 2%. Unless otherwise directed, do not replant treated areas to any crops within 120 days after last application as injury to subsequent crops may result.

### CROPS

**ALL RATES ARE EXPRESSED AS BROADCAST RATES:** where band applicators are specified, use proportionately less. For example, use 1/3 of the broadcast rate when treating 14" band width where row spacing is 42". 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 Tehachapi Mountains) where alfalfa becomes semi-dormant. Use 1 1/2 to 3 lbs. per acre (except east of the Appalachian Mountains use 1 1/2 to 2 lbs.). Apply anytime after alfalfa is dormant in the Fall but before crop begins growth in the Spring. For control of volunteer alfalfa seedlings in the Far West, use 4 lbs. 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 established 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.

**EASTERN COLORADO AND KANSAS:** For control of tansymustard, apply 1 lb. shortly after emergence of mustard in the Fall or winter and 2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present, use 2 to 3 lbs. 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 in the 1st year. Apply 4 lbs. per acre to area under individual trees or as a band in the tree row, 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 2 lbs. as post-harvest treatment followed by 2 lbs. in the Spring.

**ASPARAGUS:** Do not apply to newly seeded asparagus nor to young plants with exposed roots as 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 1 to 2 lbs. 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 cutting). 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 3 lbs. per acre per application. In Washington (irrigated crop), apply only a single treatment of 4 lbs. per acre in late November or December.

**BARLEY (winter) - WESTERN OREGON AND WESTERN WASHINGTON:** Apply 2 lbs. per acre to control weeds in the fall or winter, apply after planting but before emergence of barley. Do not apply to dry land or irrigated land where weeds are controlled by other means. Do not apply to alfalfa or other crops. Do not apply to alfalfa or other crops where organic matter is less than 1%.

**BIRDSFOOT TREFOIL (Lotus)** Established stands at least 1 year old per acre when trefoil is dormant (see Limitations). Do not apply to seed not replant treated areas to any crop injury may result.

**BLUEBERRIES, CANEBERRIES,** to fields which have been established to berries interplanted with fruit trees, roots are exposed as injury may result, avoid spraying foliage as in

**CALIFORNIA - Raspberries, Black and Loganberries:** For control of weeds, apply as a band application at base of plants. A second treatment at the end of the year will control both winter and summer annuals. A single application of any will control both winter and summer annuals. A single application of any will control both winter and summer annuals. A single application of any will control both winter and summer annuals. A single application of any will control both winter and summer annuals.

**WESTERN WASHINGTON AND CANEBERRIES, and Gorseberries:** See California.

**INDIANA, MICHIGAN AND OHIO:** Use 2 to 4 lbs. per acre in late growth of annual weeds. As an alternative, apply in the Fall and repeat at the same rate in the Spring.

**INDIANA, MICHIGAN AND OHIO:** Use 2 to 4 lbs. per acre in late growth of annual weeds. As an alternative, apply in the Fall and repeat at the same rate in the Spring.

**MASSACHUSETTS - Blueberries:** For control of weeds, apply as a band application at base of plants. A second treatment at the end of the year will control both winter and summer annuals. A single application of any will control both winter and summer annuals. A single application of any will control both winter and summer annuals.

**NEW JERSEY - Blueberries:** For control of weeds, apply as a band application at base of plants. A second treatment at the end of the year will control both winter and summer annuals. A single application of any will control both winter and summer annuals. A single application of any will control both winter and summer annuals.

**CITRUS:** Use only under trees established in the orchard in the 1st year. Apply as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

**ARIZONA (except Yuma area) A and Coachella Valleys - Oranges:** Apply 3 to 4 lbs. per acre in the Fall or winter and 2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present, use 2 to 3 lbs. in February or March.

**FLORIDA (except Martin, Palm Breeze, and Sebring):** Apply 4 lbs. per acre in the Fall or winter and 2 lbs. if weeds are 2 to 4 inches tall. If other annual weeds are present, use 2 to 3 lbs. in February or March.

**POST-EMERGENCE:** Apply 1/2 lb. per acre as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

**PRE-EMERGENCE - ARKANSAS, MISSISSIPPI, TENNESSEE, MISSISSIPPI, TENNESSEE:** Make a single broadcast or band treatment with Diuron 80WP (loam, clay loam). Do not use on soils as injury may result; plant crop in treated areas to crops other than cotton following band treatment and 60 days after spring following treatment.

**PRE-EMERGENCE (EXCEPT ARIZONA, CALIFORNIA, NEVADA, ARIZONA, CALIFORNIA, NEVADA):** Apply 1/2 lb. per acre as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

**PRE-PLANT: ARIZONA AND CALIFORNIA:** Apply 1/2 lb. per acre as a broadcast application before or after planting. Do not apply to soils as injury may result; plant crop in treated areas to crops other than cotton following band treatment and 60 days after spring following treatment.

**PRE-EMERGENCE (EXCEPT ARIZONA, CALIFORNIA, NEVADA, ARIZONA, CALIFORNIA, NEVADA):** Apply 1/2 lb. per acre as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

**PRE-EMERGENCE (EXCEPT ARIZONA, CALIFORNIA, NEVADA, ARIZONA, CALIFORNIA, NEVADA):** Apply 1/2 lb. per acre as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

**BROADCAST:** Apply 1/2 lb. per acre as a directed spray to area under individual trees or as a band in the tree row, avoid contact of foliage or fruit (see Soil Limitations). Apply in the Spring (March through May). Do not treat dwarf varieties.

| Soil Type  |
|--|
| Loamy Sand   |
| Sandy loam, loam, silt loam and silt                       |
| Sandy clay loam, clay loam, silty clay loam, and sand clay |
| Silt, silty loam and clay                                  |

BEST TREATMENT AVAILABLE 87