

62719-310

07/30/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUL 30 2003

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Mr. John J. Jachetta
DowAgro Sciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Dear Mr. Jachetta:

Subject: Diuron 80 DF IVM (Restore Aerial Application and Other Changes)
EPA Registration No. 62719-310
Application Dated June 6, 2003

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable provided you make the following changes before you release the product for shipment.

1. On page 1 and 4 delete the following phrases from your Precautionary Statements, Hazards to Humans and Domestic Animals: "May Irritate Nose, Throat, and skin. Avoid breathing dust or spray mist."
2. On pages 1 and 4, at the beginning of the list of Personal Protective Equipment (PPE) within the Precautionary Statements, add the statements "Some of the materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart." In addition, revise the requirement for "waterproof gloves" to a requirement for "chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinylchloride."
3. On page 7 under Swath Adjustment change the last word in the first sentence from "downward" to "downwind".

Submit three (3) copies of final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling supercedes all previously accepted ones. A stamped copy of labeling is enclosed for your records.

A review of your CSF indicates that one of your sources of technical have been transferred to another company. Check your source of technical and submit a revised CSF listing the correct source of technical.

Sincerely,

James A. Tompkins for
James A. Tompkins
Product Manger 25
Herbicide Branch
Registration Division (7505C)

(Base Label):

(Logo) **Dow AgroSciences**

Diuron 80DF IVM

For nonselective weed control in noncropland areas.

Active Ingredient:

Diuron: 3-(3,4-dichlorophenyl)- 1,1-dimethylurea)	80.0%
Inert Ingredients	20.0%
Total	100.0%

**ACCEPTED
with COMMENTS
In EPA Letter Dated
JUL 30 2003**

**Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
62719-310**

Keep Out of Reach of Children

CAUTION PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Moderate Eye Irritation • Harmful If Swallowed Or Absorbed Through The Skin • May Irritate Nose, Throat And Skin

Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Contact a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated.

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 home plantings of trees, shrubs or herbaceous plants, nor on lawns, walks, driveways tennis courts or similar areas. Prevent drift of dry powder or spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds. Thoroughly clean all traces of Diuron 80DF IVM 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).

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-310

EPA Est. _____

Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Herbicide

Net Weight __ lb

(Datapack cover):

(Logo) **Dow AgroSciences**

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Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

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

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washed or moved into contact with their roots. Do not use on home plantings of trees, shrubs or herbaceous plants, nor on lawns, walks, driveways tennis courts or similar areas. Prevent drift of dry powder or spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds. Thoroughly clean all traces of Diuron 80DF IVM 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 for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Non-Agricultural Use Requirements

The requirements of this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Entry Restrictions for Non-WPS Uses: For applications to non-cropland, do not enter or allow worker entry into treated areas until sprays have dried, unless applicator and other handler PPE is worn.

Storage and Disposal

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

Storage Instructions: Storage should be under lock and key and secure from access by unauthorized persons and unknowledgeable persons. Storage should be in a cool, dry area away from any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pallets high. Move bags carefully so as not to tear or puncture. Do not move bags or containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Do not allow bags to become wet or store in a damp, humid area. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original containers only. If the contents are leaking or material is spilled follow these steps:

1. Collect and place in suitable containers for disposal.
2. Wash area with soap and water to remove remaining pesticide.
3. Follow washing with clean water rinse.
4. Do not allow run-off to enter sewer or contaminate water supplies.
5. Dispose of waste as indicated below.

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

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Diuron 80DF IVM is to be mixed in water and applied as a spray for nonselective weed control on noncropland areas. It is non-corrosive to equipment, nonflammable and non-volatile.

Diuron 80DF IVM may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time; the degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall and other conditions. Soils high in clay or organic matter require higher dosages than soils low in clay or organic matter to obtain equivalent herbicide performance.

Moisture is required to activate the chemical; best results occur if rainfall occurs within 2 weeks of application.

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

Do not aerially apply this product in the state of Florida.

Ground Application

Equipment - Spray Volumes and Pressures: Use a boom power sprayer properly calibrated to a constant speed and rate of delivery. Openings in screens should be equal to or larger than 50 mesh. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate the spray mixture by mechanical or hydraulic means. If a bypass or return line is used, it should terminate at bottom of tank to minimize foaming. Use spray nozzles designed for use with herbicides and operated at the manufacturer's recommended pressure.

For **pre-emergence** application, use 20 or more gallons of spray volume per acre.

For **post-emergence** application, use sufficient volume (minimum 25 gallons per acre) to ensure thorough coverage of weed foliage;

Aerial Application

Aerially apply in a spray volume of 5 - 20 gallons per acre.

Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and grower are responsible for considering all of these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**.

Aerial Drift Reduction Advisory

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produced larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind: Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature And Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low-level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

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NON-CROP WEED CONTROL

Diuron 80DF IVM 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 texture, rainfall and other conditions.

Diuron 80DF IVM may be used as a pre-emergence treatment at anytime 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. Increased contact activity on established weeds may be obtained by the addition of a non-ionic surfactant. Apply as a drenching spray to actively growing weeds during warm weather when daily temperatures will exceed 70°F.

Except for small areas, use a fixed-boom power sprayer properly calibrated to insure a constant rate of application. Mix proper amount of Diuron 80DF IVM into volume of water necessary to obtain uniform coverage; if a non-ionic surfactant is used, dilute with 10 parts of water and add as last ingredient to nearly full tank. Material must be kept in suspension at all times. 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. Openings in screens should be equal to or larger than 50 mesh.

General Weed Control: To control most weeds for an extended period of time on non-cropland such as utility, highway, pipeline and railroad right-of-ways, petroleum tank farms, lumberyards, storage areas, industrial plant sites and around farm buildings, apply 5 - 15 pounds per acre to control most annual 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 80DF may not provide satisfactory control of deep-rooted perennial weeds.

General Weed Control - 5 to 15 lb per acre:

ageratum	knawel	ragweed
chickweed	kochia	sesbania
cocklebur	lambsquarter	shepherdspurse
corn speedwell	marigold	sicklepod
corn spurry	Mexican clover	smartweed, annual
dayflower	morningglory, annual	sowthistle, annual
dogfennel	pennycress	spanishneedles
fiddleneck (amsinckia)	pigweed	tansymustard
flora's paintbrush	pineappleweed	velvetleaf (buttonweed)
gromwell	pokeweed	wild buckwheat
groundcherry, annual	prickly lettuce	wild lettuce
hawksbeard	prickly sida (teaweed)	wild mustard
horsenettle	purslane	wild radish
horseweed	rabbit tobacco	

Grasses - 5 to 8 lb per acre:

barnyardgrass (watergrass)	rattail fescue
bluegrass, annual	red sprangletop
crabgrass	ricegrass
foxtail	ryegrass, annual
kyllinga	sandbur
lovegrass, annual	seedling johnsongrass
orchardgrass	velvetgrass
peppergrass	vernalgrass, sweet, annual
quackgrass	

Grasses - 8 to 15 lb per acre:

guineagrass
 maidencane
 pangolagrass

Irrigation and Drainage Ditches: Apply 5 - 15 lb per acre to control most annual weeds. Apply only when water is not in the ditch. For irrigation ditches, apply during the non-crop season, and when ditch is not in use. To minimize movement of Diuron 80DF IVM 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 totaled at least 4 inches, fill ditch with water and allow it to stand for 72 hours; drain off and waste remaining water before using ditch. Do not treat any ditch into which roots of trees or other desirable plants may extend as injury may result.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences **MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

EPA-Accepted: / /