

PM 25 19713-12

File 10410



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB - 4 1994

Barbara Brown  
DREXEL CHEMICAL CO.  
P.O. Box 9306  
Memphis, TN 38109

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 09/29/93 in Response to PR Notice 93-7  
EPA Reg. No. 19713-12  
DREXEL DEFOL

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.

**BEST AVAILABLE COPY**



Recycled/Recyclable  
Printed with SoyCanna ink on paper that  
contains at least 50% recycled fiber

20710

Page 2

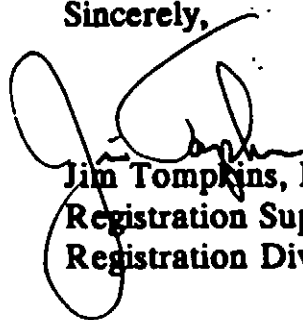
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

30710

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division

Barbara Brown  
DREXEL CHEMICAL CO  
BOX 9306  
MEMPHIS TN 38109

Comment for: EPA Reg Nr. 19713-12  
DREXEL DBFOL

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

. Add the following statement to the "Personal Protective Equipment" section of your label: "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them." The exact location of this statement is shown in Section A on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Remove the statement "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." from its current position within the Agricultural Use Box and place it above the Agricultural Use Box.

Correct the typographical errors circled on your proposed label.

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**DREXEL  
DEFOL**

**Defoliant/Desiccant with Fire Retardant**

**ACTIVE INGREDIENT:**

Sodium Chlorate . . . . .	28.0%
<b>INERT INGREDIENTS:</b> . . . . .	<b>72.0%</b>
<b>TOTAL:</b> . . . . .	<b>.100.0%</b>

Product contains 3.0 pounds of Sodium Chlorate per gallon.

**KEEP OUT REACH OF CHILDREN  
WARNING/AVISO**

**PRECAUCION-AL-USUARIO: Si usted no lee ingles, no use este  
producto-hasta-que-le-etiqueta-haya-sido-explicado-ampiamente.**

**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.)**

EPA REG. NO. 19713-12  
EPA EST. NO. 19713-MS-1  
NET CONTENTS:

**MANUFACTURED BY:  
DREXEL CHEMICAL COMPANY  
P.O. BOX 9306  
MEMPHIS, TN 38109-0306**

02/09/89  
WFS DELETIONS/REVISIONS 9/93

**STATEMENT OF PRACTICAL TREATMENT**  
**IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid Alcohol. Get Medical Attention.  
**IF IN EYES:** Flush with plenty of water. Get Medical Attention.  
**IF ON SKIN:** Wash with plenty of soap and water. Get Medical Attention if irritation persists.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated  
FEB - 4 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
19713-12

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**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING.** Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear goggles or face shield when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing and wash before reuse.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

**PERSONAL PROTECTIVE EQUIPMENT**  
Applicators and other handlers:  
Coveralls over short-sleeved shirt and short pants  
Waterproof gloves  
Chemical-resistant footwear and socks  
Protective eyewear  
Chemical-resistant headgear for overhead exposure  
Chemical-resistant apron when cleaning equipment, mixing, or loading  
  
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.

**USER SAFETY RECOMMENDATIONS**  
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.  
Remove PPE immediately after handling this product. Wash outside of gloves before reuse. Wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses, do not apply to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas.

**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 through any type of irrigation system.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific requirements and exceptions pertaining to the protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

**FARMWORKER-SAFETY**

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. (Indicate specific oral warnings which inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure). When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: **WARNING**—Area treated with Sodium Chlorate on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure refer to the Statement of Practical Treatment on the Defol label.

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#### APPLICATION

DEFOL may be applied by aircraft or ground equipment. It is essential that the foliage be thoroughly covered. The specified dilution rates should be carefully observed. A nonionic surfactant such as Surf AC 820 or an emulsifiable crop oil such as Peptoil may enhance the results. DEFOL should not be mixed with insecticides or other organic materials, unless specifically recommended, because a fire or explosion may result.

Precautions should be taken to avoid having spray or spray drift contact adjacent crops or desirable vegetation, or they may be defoliated. Equipment should be washed before and after use and care should be taken so that product does not dry in tank or on spray nozzles. Wash water should not be allowed to contact desirable vegetation.

#### DEFOLIATION

Ideally, defoliation is favored on clear, calm, sunny days with high temperatures and high humidity. If rain is anticipated within 24 hours, application should be delayed whenever possible. Defoliation may be slowed when daytime temperatures are below about 60 F., and with some crops, especially with vigorous varieties, regrowth can occur.

In order to obtain acceptable defoliation results, the crop must be fully mature. In most cases, the signs of maturity include:

1. A slight discoloration of the foliage is apparent, often with a yellowish or reddish tinge.
2. Vegetative growth has slowed or ceased with little or no secondary growth.
3. A slight downward pull on a leaf gives a clean break from the stalk.

Adequate fertility, ample soil moisture, good insect control and good weed control also favor defoliation. Plants which have been under stress as from drought or insect pressure give less reliable results because tough, wilted or damaged leaves do not permit the proper uptake of the chemical and tend to inhibit the formation of an abscission layer. Typically, under such circumstances, the leaves are desiccated but do not drop, which, in turn, often causes problems with excessive trash during harvesting.

For crops where there is a heavy canopy of foliage, obtaining thorough coverage is sometimes difficult. Whenever practical, the use of ground equipment should be considered. The higher dilution rates should be used and any other available methods employed which will assure that the plants are completely covered all the way to the bottom leaves. If coverage is incomplete, a second application may be necessary in order to defoliate the lower leaves and to prevent secondary growth.

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**DESICCATION**

When the objective is to reduce moisture of the crop or to desiccate weeds prior to harvest, most of the points discussed under defoliation are applicable. Incomplete coverage will give erratic results, especially with vines such as morning glory where the slender stems may be sheltered from the spray by the crop canopy, leaving the vines succulent and tough so they will become entangled in the harvesting machinery. Once again, larger spray volume will encourage more complete coverage and more reliable desiccation.

**CROPS**

**CHILI PEPPERS** - Apply 1 to 2 1/2 gallons per acre in 5-15 gallons of water by air or 20-40 gallons of water by ground equipment, 10 days before harvest. To be used on peppers for processing only. Consult a processor before applying.

**CORN** - As a harvest aid to desiccate trashy weeds in early maturing corn, use 2 gallons Defol in 5-7 gallons of water per acre by air at least 14 days before anticipated harvest date. Use the low (5 gallon) dilution rates when weeds are small and the crop canopy is fairly open. Desiccation of morning-glory and other vines may be erratic.

DO NOT graze treated fields or feed fodder, forage or residual grain within 14 days of application.

**COTTON** - Apply 1 to 1 1/2 gallons per acre in 5-10 gallons of water by air or 10-20 gallons of water by ground equipment no later than 7 days before harvest. The cotton plants should be mature with the youngest bolls expected to make cotton being at least 30 days old. Thorough coverage is essential.

DO NOT graze treated fields or feed gin waste to livestock.

**DRY BEANS**, - Apply at a rate of 2 gallons per acre in 5-10 gallons of water by air or 10-20 gallons by ground equipment. Thorough coverage is essential. Make application 7-10 days before anticipated harvest, longer if temperatures are cool.

DO NOT graze treated fields or feed treated fodder or forage to livestock.

**FLAX** - As a harvest aid to desiccate trashy weeds and to reduce moisture in the mature crop, apply 2 gallons per acre in enough water to give thorough coverage, 7-10 days before anticipated harvest date. For air application, use a minimum of 5 gallons of water and for ground equipment a minimum of 10 gallons of water. Activity of the spray will be enhanced by the addition of good nonionic surfactant at the rate of 1 quart per 100 gallons of spray.

DO NOT graze treated fields or feed treated flax foliage and fodder for 14 days after application.

**GRAIN SORGHUM** - To reduce the moisture content of the grain while the crop is standing apply 1 1/2 to 2 gallons per acre in sufficient water to give thorough coverage, 7-10 days before



harvest. Apply a total of 5-10 gallons of spray per acre by air and 10-20 gallons per acre by ground equipment. Use the lower rates when grain moisture is low and the weather is clear and dry. Use the higher rate when conditions for desiccation are poor.

**GUAR BEANS** - Apply at a rate of 2 gallons per acre in 5-10 gallons of water by air or 10-20 gallons of water by ground equipment. Make application 7-10 days before anticipated harvest date.

**DO NOT** graze treated fields or feed treated fodder or forage to livestock.

**RICE** - To facilitate harvest and reduce moisture in the fully mature seed heads, and to desiccate immature red rice in mature white rice, apply by air 1 1/4 - 2 gallons per acre in 5 or more gallons of water. Use the lower rate when crop conditions and weather are right to enhance rapid drying. Apply 7-10 days before anticipated harvest. To avoid drift do not apply during windy weather. Thorough coverage of the crop is essential to achieve good results.

**DO NOT** graze treated fields or feed treated straw or crop residues within 14 days of application.

**SAFFLOWERS** - To facilitate harvest and reduce moisture in the fully mature seed heads apply 2 gallons in 5-10 gallons of water by air or 20-30 gallons of water by ground equipment, 7 or more days before normal harvest when safflower heads are fully mature. **DO NOT** graze treated field or feed treated forage.

**SOUTHERN PEAS** - Apply at a rate of 2 gallons per acre in 5-10 gallons of water by air or 10-20 gallons by ground equipment. Thorough coverage is essential. Make application 7-10 days before anticipated harvest, longer if temperatures are cool.

**DO NOT** graze treated fields or feed treated fodder or forage to livestock.

**SOYBEANS** - As a soybean harvest aid to dry weeds in early maturing soybeans and to facilitate the harvest, apply 2 gallons per acre. Make application 7-10 days before anticipated harvest date when beans are mature and ready for harvest. For air application use a minimum of 5 gallons of water per acre; for ground equipment apply a minimum of 20 gallons of water per acre. **DO NOT** graze treated fields or feed treated soybean foliage.

**SUNFLOWER** - To facilitate harvest and reduce moisture in the fully mature seed heads apply 2 gallons in sufficient water to give good coverage, 7 or more days before normal harvest when sunflower heads are fully mature. Apply in 5-10 gallons of water per acre by air or in 20-30 gallons of water per acre by ground with a high clearance sprayer. Do not apply later than 7 days before harvest.

**DO NOT** graze treated fields or feed treated forage within 14 days of application.

**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 children. Storage should be in a cool dry area away from any heat or ignition source. Do not stack plastic containers over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Store in original containers only. Unloading storage and work areas must be as clean as possible to prevent contamination if spilled. If concentrate or spray solution is allowed to dry on flammable objects, the chlorate component can act as an oxidizer. If the contents are leaking or material is spilled follow these steps:

1. Contain spill, absorb with a material such as saw dust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with water and soap to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Clothing contaminated with chlorate solution must be removed at once before solution dries. Dried contaminated clothes can be ignited easily. Wash contaminated clothing immediately.
6. Do not allow run off to enter sewer or contaminate water supplies.
7. 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:** Plastic containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary land-fill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**WARRANTY - CONDITION OF SALE**

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall Drexel or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Drexel Chemical Company and is accepted as such by the Buyer.

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