

19713-12

09-30-2009

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Luz G. Chan
Registration Manager
Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38113-0327

SEP 30 2009

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4 and 98-10

1. Changes to directions for use
3. Other minor changes

Dear Ms. Chan:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 2007-4 and 98-10 dated July 14, 2009 for:

EPA Registration 19713-12

Drexel Defol

The Registration Division (RD) has conducted a review of this request for applicability under PR Notices 2007-4 and 98-10 and finds that the label changes requested falls within the scope of PR Notices 2007-4 and 98-10. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-5551.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs



United States
Environmental Protection Agency
 Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 19713-12	2. EPA Product Manager JIM TOMPKINS	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) DREXEL DEFOL	PM# 25/Herbicide Branch	
5. Name and Address of Applicant (Include ZIP Code) Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

Amendment - Explain below. Final printed labels in response to Agency letter dated 6/15/2009

Resubmission in response to Agency letter dated _____ "Me Too" Application. **NOTIFICATION**

Notification - Explain below. Other - Explain below. **SEP 30 2009**

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of final label (12SP-0609*) and per PR Notices 98-10 and 2007-4. Details are in the cover letter accompanying this submission.

Thank you.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes" Unit Packaging wgt. No. per container		<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Package wgt.	No. per container	1	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 1, 2.5, 5, 10, 15, 30, 55 GAL; Bulk, Tote		5. Location of Label Directions <input type="checkbox"/> ON THE LABEL	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph Paper glued Stenciled <input type="checkbox"/> Other _____					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name LUZ G CHAN	Title REGISTRATION MANAGER	Telephone No. (Include Area Code) (901) 774-4370
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>Luza Chan</i> 2009.07.08 15:28:59 -05'00'	3. Title REGISTRATION MANAGER	
4. Typed Name LUZ G CHAN	5. Date July 8, 2009	



Drexel Chemical Company

July 8, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Rm S-4900, One Potomac Yard
2777 S Crystal Drive
Arlington, VA 22202

Re: Submission of Final Label per EPA Stamped Accepted label dated June 15, 2009 and Updates per PR Notices 2007-4 and 98-10 DREXEL DEFOL (EPA Reg. No. 19713-12)

Herewith:

1. Completed EPA Form 8570-1
2. One (1) copy of the label (12SP-0609*) revised according to the June 15, 2009 EPA comments and the following label updates:
 - i) "Shake Well Before Using" was deleted as it is not necessary for this product. This product is a true solution.
 - ii) The directions for use for ornamental gourds (GA Only), SLN No. GA-890007, accepted by EPA on June 15, 2009 was added into the label.
 - iii) The storage and disposal statements were revised according to the statements from Appendices B and C of PR Notice 2007-4.
 - iv) The ownership of trademark statement was updated.

I highlighted the changes for easy reference.

3. Certification statements

If you have questions/clarification regarding this submission, I can be reached at (901) 774-4370 or e-mail Lchan@drexchem.com.

Thank you.

Respectfully yours,
FOR DREXEL CHEMICAL COMPANY


Luz Chan
Registration Manager

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NOTIFICATION

SEP 30 2009

Drexel®

Defol®

Defoliant/Desiccant with Fire Retardant

ACTIVE INGREDIENT:

Sodium chlorate 28.0%

OTHER INGREDIENTS: 72.0%

TOTAL: 100.0%

This product contains 3 pounds of Sodium chlorate per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See FIRST AID Below

EPA Reg. No. 19713-12

EPA Est. No. 19713-XX-XXX

Net Content: _____

FIRST AID

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 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:

- Call 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 do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious or convulsing person.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 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. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material such as polyethylene or polyvinyl chloride. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators, and other handlers must wear: Long-sleeved shirt and long pants, shoes, and socks.

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

(Continued)

PRECAUTIONARY STATEMENTS (Cont'd.)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

See engineering controls for additional requirements.

Enclosed Cockpits/Cabs: Applicators must use an enclosed cockpit or enclosed cab that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(6)].

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 when cleaning equipment or disposing of equipment washwater or rinsate.

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. 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.

AGRICULTURAL USE REQUIREMENTS

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

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

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, shoes and socks, and chemical-resistant gloves made of any waterproof material.

Manufactured By:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

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. This product 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.

When using this product under dry land conditions, injury may occur to rotational crops.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed

Do not apply at wind speeds greater than 15 mph.

Droplet Size

Apply as a medium or coarser spray (ASAE Standard 572).

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height.

Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of sodium chlorate. Where states have more stringent regulations, they must be observed.

Equipment

All application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional Requirements for Aerial Applications

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional Requirement for Groundboom Application

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

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 ⁵/₇ 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.

DESICCATION

When the objective is to reduce crop moisture 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 Morningglory 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

Crop	Rate per Acre	Water
Chili peppers	1 to 2.5 gals.	Air: 5 to 15 gals. Ground: 20 to 40 gals.
SPECIFIC DIRECTIONS: Apply 10 days before harvest. To be used on Peppers for processing only. Consult a processor before applying.		
Corn	2 gals.	Air: 5 to 7 gals.
SPECIFIC DIRECTIONS: As a harvest aid to desiccate trashy weeds in early maturing Corn, apply at least 14 days before anticipated harvest date. Use the low (5 gal.) dilution rates when weeds are small and the crop canopy is fairly open. Desiccation of Morningglory and other vines may be erratic. DO NOT graze treated fields or feed fodder, forage or residual grain within 14 days of application.		
Cotton	1 to 2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: Apply 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. DO NOT apply more than 2 gallons of this product per acre per application. A maximum of one application per year is permitted, except in California, where a maximum of two applications per year is permitted.		
Dry beans	2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: Make application 7 to 10 days before anticipated harvest, longer if temperatures are cool. Thorough coverage is essential. DO NOT graze treated fields or feed treated fodder or forage to livestock.		
Flax	2 gals.	Air: 5 gals. (minimum) Ground: 10 gals. (minimum)
SPECIFIC DIRECTIONS: As a harvest aid to desiccate trashy weeds and to reduce moisture in the mature crop, apply in sufficient water to give thorough coverage 7 to 10 days before anticipated harvest date. Activity of the spray will be enhanced by the addition of a good, nonionic surfactant at the rate of 1 qt. per 100 gals. of spray. DO NOT graze treated fields or feed treated Flax foliage and fodder for 14 days after application.		
Grain sorghum	1.5 to 2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: To reduce the moisture content of the grain while the crop is standing, apply in sufficient water to give thorough coverage 7 to 10 days before harvest. 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.		

(Continued)

Crop	Rate per Acre	Water
Guar beans	2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: Make application 7 to 10 days before anticipated harvest date. DO NOT graze treated fields or feed treated fodder or forage to livestock.		
Ornamental gourds (GA only)	2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: Apply 7 to 10 days before anticipated harvest. DO NOT graze treated fields or feed treated fodder or forage.		
Potatoes	2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: To defoliate plants and facilitate harvest, apply in sufficient water to provide thorough coverage. Apply 10 days before harvest. DO NOT apply under conditions of extreme heat during the middle of the day. DO NOT graze treated fields or feed treated fodder or forage to livestock.		
Rice	1.25 to 2 gals.	Air: 5 or more gals.
SPECIFIC DIRECTIONS: Use to facilitate harvest and reduce moisture in the fully mature seed heads and to desiccate immature Red rice in mature White rice. Use the lower rate when crop conditions and weather are right to enhance rapid drying. Apply 7 to 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	2 gals.	Air: 5 to 10 gals. Ground: 20 to 30 gals.
SPECIFIC DIRECTIONS: Make application 7 or more days before normal harvest when Safflower heads are fully mature. DO NOT graze treated fields or feed treated forage.		
Southern peas	2 gals.	Air: 5 to 10 gals. Ground: 10 to 20 gals.
SPECIFIC DIRECTIONS: Thorough coverage is essential. Make application 7 to 10 days before anticipated harvest, longer if temperatures are cool. DO NOT graze treated fields or feed treated fodder or forage to livestock.		
Soybeans	2 gals.	Air: 5 gals. (minimum) Ground: 20 gals. (minimum)
SPECIFIC DIRECTIONS: As a Soybean harvest aid to dry weeds in early maturing Soybeans and to facilitate the harvest, make application 7 to 10 days before anticipated harvest date when Beans are mature and ready for harvest. DO NOT graze treated fields or feed treated Soybean foliage.		
Sunflowers	2 gals.	Air: 5 to 10 gals. Ground: 20 to 30 gals.
SPECIFIC DIRECTIONS: To facilitate harvest and reduce moisture in fully mature seed heads, apply in sufficient water to give good coverage. When applying by ground, apply with a high clearance sprayer. Make application 7 or more days before normal harvest when Sunflower heads are fully mature. 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 and disposal.

PESTICIDE STORAGE: 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 containers 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 sawdust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with soap and water 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 runoff to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below:

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable Container (rigid material; less than 5 gallons):

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons or greater):

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS 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 directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable law, in no case shall the Manufacturer 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 the Seller and is accepted as such by the Buyer.

DEFOL, SURF-AC and PEPTOIL are either registered trademarks or trademarks of Drexel Chemical Company.