

U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF PESTICIDE PROGRAMS 120 Pennsylvania Ave., N.W. Washington, DC 20460-0001

NOTICE OF PESTICIDE

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number 707-272

Date of Issuance MAR 3 0 2001

Term of Issuance Conditional

Name of Pesticide Product Zoxium 80W Agricultural Fungicide

Name and Address of Registrant (include ZIP Code):

Rohm and Haas Company 100 Independence Mall West Philadelphia, PA 19106-2399 Attn: Jan Ollinger

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or approval of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3 (c) (7) (A) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label changes:
 - a.. Revise the EPA Registration Number to read, "EPA Reg. No. 707-272."

Signature of Approving Official:

15/cg-p

Cynthia Giles-Parker, PM 22

Date:

MAR 30 2001

EPA Form 8570-6

- 3. As a condition of registration you will be required to submit additional information and/or data to fill the following data gaps and or deficiencies:
 - a. Nature of the Residue Grapes: Provide the corresponding TLC scans for the initial grape extracts to verify that no changes of the metabolic profile occurred after storage under frozen conditions. The submission of these data must be made by December 2001.
 - b. Residue Analytical Method Plant Commodities: Since Diazomethane is a known carcinogen, you must determine the use of other common derivatizing and/or esterification reagents for this method. The submission of these data must be made by December 2001.
 - The proposed enforcement methods have been forwarded to ACB/BEAD for petition method validation. This validation has not been completed as of this time. Revision of the methods as per ACB/BEAD comments are a condition of registration of zoxamide for use on grapes and potatoes. Any corrections and revisions must be made prior to harvest of the proposed use or no later than December 2001.
 - c. Storage Stability Data: Additional supporting storage stability data are required for the grape processing study. The submission of these data must be made by December 2001.
 - d. Toxicology: You must submit a pulmonary sensitization study. A protocol for this study must be submitted to the Agency for review by December 2001. Once the Agency has approved your protocol, the study must be submitted to the Agency within 1 year from the approval date of the protocol.
 - e. Occupational Exposure: As part of the Stewardship Plan you are required to submit to the Agency, a plan for monitoring and recording any incidents related to inhalation or dermal sensitization by December 2001. Once the plan has been approved by the Agency you will be required to submit bi-annual reports (June and December) each year after the registration of all products that contain zoxamide.
 - f. Product Chemistry: You must submit full scale production data including 5 batch analysis on your products by December 2001.

You must submit 1 year storage stability data for the end use product by December 2002.

- g. Efficacy: You must submit resistance monitoring data for potatoes by December 2001.
- h. Environmental Fate/Ecological Toxicity: You must provide information on the proximity of Federally listed freshwater fish and estuarine/marine invertebrates to the proposed use on grapes.

Submit production information (pounds or gallons produced) for this product for the fiscal year in which the use on grapes and potatoes is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1, and ends September 30. The product information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information is to be submitted to:

Registration Support Branch Registration Division (7505C) Environmental Protection Agency Washington, D.C. 20460

A stamped copy of the label is enclosed for your records. Submit two (2) copies of the final printed labels before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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ZOXIUM[™] 80W

Agricultural Fungicide



ACTIVE INGREDIENT

ZOXAMIDE

3,5-Dichloro-N-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-4-methylbenzamide......80%

TOTAL 100%

EPA REG. NO. 707-272

EPA EST NO. 707-FR-01

NOTICE: Before using this product, read the entire Precautocary Statements, Conditions of Sale and Warranty, Directions for Use. Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 ON SKIN	Take off contaminated clothing.				
OR CLOTHING	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
	This product is a dermal sensitizer. If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma				
	symptoms or rhinitis occur following the use of this product, report the incident to: the Rohm and Haas				
	Company hot line number listed below.				
IF INHALED	Move person to fresh air.				
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.				
	Call a poison control center or doctor for further 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 vomitting unless told to do so by a poison control center or doctor.				
	Do not give anything by mouth to a unconscious person.				
HOT LINE NUMBER					
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.					

You may also contact 215-592-3000 day or night, for emergency treatment information.

ACCEPTED with COMMENTS In EPA Letter Dated:

MAR 30 2001

Under the Federal Insecticide, Fungicide, and Redenticide Act, as amended, for the pesticide registered under EPA Reg. No.

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PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse. This product is a dermal sensitizer.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on the EPA chemical resistance category selection chart

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof of material
- Shoes plus socks

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Chemical-resistant apron when cleaning equipment, mixing or loading
- Dust/Mist filtering respirator (MSHA/NIOSH approved number prefix TC-21G), or a NIOSH approved respirator with any N,R,P or HE filter.

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.

During aerial application, human flaggers must be in enclosed cabs.

When handlers use enclosed cabs or aircraft in a manner that meet the requirements listed in the Worker Protection Standards(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:

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Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

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

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or disposing of wastes.

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.

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 instructions and exceptions pertaining to the statements on this label about personal 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 enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 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 over long-sleeved shirt and long pants

Chemical-resistant gloves made of any waterproof material

Socks and chemical resistant footwear

For Grapes:

Notify workers that the area has been treated with a pesticide that is a dermal sensitizer by warning them orally and by posting warning signs at the entrances to the treated areas. The signs must be posted for 24 hours before the scheduled application and remain in place for 4 days after the end of the application and must state that the area has been treated with a dermal sensitizer. In addition, the following text must appear on the signs.: "If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma symptoms or rhinitis occurs following the use of this product, report the incident to Rohm and Haas Company at (215)-592-3000."

For Potatoes:

Notify workers that the area has been treated with a pesticide that is a dermal sensitizer by warning them orally. If an allergic skin reaction (rash, redness, swelling, itchiness) or asthma symptoms or rhinitis occurs following the use of this product, report the incident to Rohm and Haas Company at (215)-592-3000.

STORAGE AND DISPOSAL

STORAGE: Keep away from fire and sparks. Store in a cool, dry, well-ventilated area

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 in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep or shovel into containers for disposal or reworking. Keep dusting to a minimum. Flush contaminated area with a large amount of water to a chemical or sanitary sewer containing a settling pit. Refer to Precautionary Statements.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

GENERAL USE INFORMATION

ZOXIUM 80W is a fungicide effective against plant diseases incited by Phycomycetes and specifically mentioned on this label. Optimum disease control is achieved when the fungicide is applied in a regularly scheduled preventative spray program. The addition of an agricultural surfactant will improve fungicide performance by providing a more uniform spray deposit, increased foliar redistribution, and improved fungicide retention during periods of wet weather.

USE RATE DETERMINATION

Carefully read, understand, and follow label use rates and restrictions.

Under low disease conditions, minimum label rates per application can be used while maximum label rates and the minimum interval may be used for severe or threatening disease conditions.

For proper application, determine the number of acres to be treated, the recommended label use rate and the gallonage to be applied per acre. Prepare only the amount of spray solution required to treat the measured acreage. Careful calibration of spray equipment is recommended prior to use.

When applied by hand sprayers, 1 pound ZOXIUM 80W fungicide per 100 gallons per acre is equivalent to 1 level tablespoon per gallon spray solution.

MIXING

Slowly place into spray tank as it is being filled or thoroughly premix in a nurse tank for concentrate or aircraft sprayers. Add other co-applied fungicides, insecticides, growth regulators, micronutrients, and spray adjuvants after ZOXIUM 80W fungicide has been placed into suspension.

COMPATIBILITY

ZOXIUM 80W fungicide is compatible with most commonly used agricultural fungicides, insecticides and growth regulators. When preparing tank mixes, user should consult spray compatibility charts or State Cooperative Extension Service Specialists prior to actual use. When using Zoxium 80W fungicide in a tank mixture, observe all directions for use, precautions and limitations, which appear on the tank mix partner label.

SPRAY ADJUVANTS

The addition of agricultural surfactants to ZOXIUM 80W fungicide sprays will improve initial spray deposits, fungicide redistribution and weatherability. The following spray adjuvants have been especially formulated to optimize the performance of foliar-applied agricultural chemicals:

LATRON B-1956 -A water-dispersible, resin-based nonionic surfactant that resists re-wetting and removal by rain. Effective with dilute sprays applied by ground equipment.

LATRON CS-7® -A spreader-binder designed specifically for use in concentrate and low volume sprays applied by aircraft or ground equipment.

Place ZOXIUM 80W fungicide into suspension prior to adding an adjuvant to the spray mixture. Read and carefully observe the precautionary statements and all other information appearing on both product labels prior to spray preparation.

APPLICATION

GROUND-Thorough coverage foliar sprays generally result in optimum disease control. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles (generally hollow cone), disc (generally D-5 to D-7), nozzle spacing, and tractor speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

AERIAL-A uniform initial spray deposit over the crop canopy generally results in optimum disease control. Each aircraft should be pre-checked for droplet size, uniformity of spray pattern, swath width, and spray volume. During aerial application, human flaggers are prohibited unless in totally enclosed vehicles.

Nozzle selection- Hollow cone brass nozzles with a D-series orifice disc and core(whirlplate) are recommended. Nozzles should point straight down or slightly backward.

Swath width- For most field and vegetable crops, swaths just beyond the wingspan of 36 to 40 feet for light aircraft and up to 45 feet for heavier aircraft are suggested. Optimum swath for helicopters is usually 5 to 10 feet beyond normal boom length.

Spray volume- Aerial applications are to be made in a minimum of two (2) gallons of water per acre.

On potatoes, 2 to 3 gallons of spray per acre are generally optimum; vineyards can be handled with spray volumes of 5 gallons per acre. Some tall or dense vines, requiring greater penetration to the lower leaf surface will require higher spray volumes.

DO NOT USE LESS THAN 5 GALLONS PER ACRE IN CALIFORNIA.

Altitude- For most crops, the spray boom should be positioned in 5 to 10 feet above the crop canopy.

Flagging- Swaths should be marked at the end of the field with permanent flags or by a flagman in a totally enclosed vehicle. Swaths should be measured accurately with a chain or other device except when rows can be accurately counted.

CHEMIGATION USE DIRECTIONS

Sprinkler Irrigation

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ZOXIUM 80W fungicide must be applied on a regular protectant fungicide schedule, not an irrigation schedule. If irrigation cycles are less frequent than recommended ZOXIUM 80W fungicide application intervals, ground or aerial applications must supplement chemigation applications to achieve adequate disease control.

Apply ZOXIUM 80W fungicide only through sprinkler irrigation systems including center-pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, or hand move irrigation systems. Do not apply product through any other type of irrigation system.

Lack of fungicidal effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water

If you have questions about calibration, you should contact State Extension Service specialist, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water system are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Before applying ZOXIUM 80W fungicide through sprinkler irrigation equipment, the chemigation system must meet the following specifications:

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

Systems not connected to a public water supply must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located in the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid

back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

• The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Center-pivot, Lateral Move, End Tow, and Traveler Irrigation Equipment: (use only with electric or oil hydraulic drive systems which provide a uniform water distribution)

Determine size of area to be treated.

Determine the time required to apply no more than 1/4 inch water (6,750 gallons water per acre) over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run system at 80 to 95% of manufacturer's rated capacity.

Using only water, determine the injection pump output when operated at normal line pressure.

Determine the amount of ZOXIUM 80W fungicide required to treat area.

Add the required amount of ZOXIUM 80W fungicide and sufficient water to meet the injection time requirements of the solution tank.

Maintain constant solution tank agitation during the injection period.

Stop injection equipment after treatment is completed. Continue to operate the system until ZOXIUM 80W fungicide solution has cleared the sprinkler head.

Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

Determine acreage covered by sprinkler.

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Fill injector solution tank with water and adjust flow rate to use contents over a 10 to 30 minute interval.

Determine the amount of ZOXIUM 80W fungicide required to treat area.

Add the required amount of ZOXIUM 80W fungicide into the same quantity of water used to calibrate the injection equipment.

Maintain constant solution tank agitation during the injection period.

Operate system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during calibration.

Inject ZOXIUM 80W fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.

Stop injection equipment after treatment is completed. Continue to operate the system until ZOXIUM 80W fungicide solution has cleared the last sprinkler head.

RESTRICTIONS

Users should carefully read, understand, and follow all use restrictions prior to using ZOXIUM 80W fungicide.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted at intervals defined below, following the final application of ZOXIUM 80W fungicide at the recommended rates for a registered use.

CROP	RE-CROPPING INTERVAL	
Crops for which ZOXIUM 80W use is registered	No restrictions	
Leafy vegetables and tuber vegetables	30 days	
All other crops	140 days	

USE DIRECTIONS:

Crop	Diseases Controlled	Rate of ZOXIUM 80W Per Application Ounces/Acre	•Remarks (Also Refer to Directions for Use)	Restrictions
Potatoes	Late Blight Early Blight	Low disease pressure: 2.5 oz. ZOXIUM 80W (0.13 lb. active) plus 21.3 oz. DITHANE® DF Rainshield Fungicide (1.0 lb active)	Begin applications at the first sign of disease or when late blight is reported in the area. Under low disease conditions and environmental conditions unfavorable for disease development, a 7- to 10-day application schedule may be used.	Do not make more than 6 applications or apply more than 1.2 lbs. ZOXIUM 80W (1.0 lbs. active) and 10.7 lbs. DITHANE 75DF (8 lbs. active) per acre per crop.
		High disease pressure: 3.3 oz. ZOXIUM 80W (0.17 lb. active) plus 28.6 oz. DITHANE DF Rainshield Fungicide (1.33.lb. active)	Use a 5- to 7-day schedule when late blight is present and environmental conditions favor continued disease development. Tank mix with other registered fungicides for the control of diseases other than those specifically mentioned on this label. IMPORTANT: ZOXIUM 80W must be tank-mixed with DITHANE DF Rainshield fungicide for late blight control.	Do not apply within 3 days of harvest in Connecticut, Delaware. Florida, Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island, Vermont and Wisconsin and within 14 days of harvest elsewhere.
Grapes	Downy Mildew	2.5 to 4 (0.125 to 0.2 lbs. active)	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1-1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7- to 10-day intervals up to within 14 days of harvest.	Do not make more than 3 sequential applications of ZOXIUM 80W before alternating with a fungicide that has a different mode of action. Do not make more than 8 applications or apply more
. 4			Tank mix with other registered fungicides or no more than three applications of 1.75 to 2.25 lbs. of DITHANE DF Fungicide for the control of diseases other than those specifically mentioned on this label.	than 2.0 lbs. (1.6 lbs. active) per acre per crop. — Do not apply within 14 days of harvest.

ZOXIUM, DITHANE, LATRON, B-1956 AND CS-7 are trademarks of the Rohm and Haas Company.

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