

Reg # 4581-370

PM-21 TERESA 137



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

MAR 24 1994

Gary R. Sandberg  
ELF ATOCHEM NORTH AMERICA INC  
AGRICHEMICALS DIV.  
2000 MARKET ST. - 21ST FLOOR  
PHILADELPHIA, PA 19103

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 08/31/93 in Response to PR Notice 93-7  
EPA Reg. No. 4581-370  
PENNCOZEB 75DF FUNGICIDE

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.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

Page 2

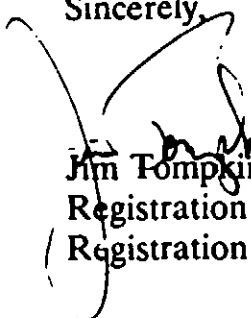
Submit the final printed labeling via the U.S. Postal Service to:

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

atochem



PROPOSED LABEL

ACCEPTED  
with COMMENTS  
to EPA Letter Dated

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MAR 24 1981  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

4581-370

# PENNCOZEB® DF



## 75% Dry Flowable Fungicide

### For Turf and Ornamentals

A Coordination Product of Manganese and Zinc  
and Ethylenebisdithiocarbamate

#### ACTIVE INGREDIENT:

A coordination product of zinc ion and manganese

ethylenebisdithiocarbamate ..... 75.0%

Manganese + + ..... 15.0%

Zinc + + ..... 1.9%

Ethylenebisdithiocarbamate ion ..... 58.1%

(C<sub>4</sub>H<sub>6</sub>N<sub>2</sub>S<sub>4</sub>)

INERT INGREDIENTS: ..... 25%

TOTAL: ..... 100%

**BEST AVAILABLE COPY**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

#### STATEMENT OF PRACTICAL TREATMENT

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).

**IF SWALLOWED**, call a physician or Poison Control Center. Drink 1  
or 2 glasses of water and induce vomiting by touching back of throat  
with finger. Do not induce vomiting or give anything by mouth to an  
unconscious person.

**IF ON SKIN**, wash with plenty of soap and water. Get medical attention.

**IF IN EYES**, flush eyes with plenty of water. Call a physician if irritation  
persists.

See Inside Panel for Additional Precautionary Statement.

EPA Registration No. 4581-370 EPA Establishment No. 33910-HL-01

**NET CONTENTS 3 LBS./1.36 Kg**

Sold by:

**ELF ATOCHEM NORTH AMERICA, INC.—AGCHEM DIVISION**  
Philadelphia, PA

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)**

**CAUTION**

Causes moderate eye injury. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin, or clothing.

**Personal Protective Equipment**

**APPLICATORS AND OTHER HANDLERS MUST WEAR:**

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear when mixing or loading
- 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.

**ENGINEERING CONTROL STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection 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.

Human flaggers must be in enclosed cabs.

The enclosed cabs must be used in a manner that meets the requirements listed in the Worker Protection 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.

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 product 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.

**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 Territory, 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 concerning exceptions pertaining to the situations listed on this label about personal protective equipment (PPE), restricted-entry interval, 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 24 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
- Waterproof gloves
- Shoes plus socks

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**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in 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.

**GOLF COURSE AND HOMEGARDEN USE:**  
Do not enter or allow entry  
into treated areas until sprays  
have dried unless wearing the  
personal protective equipment  
listed on this label.

#### GENERAL INFORMATION

PENNCOZEB DF TURF AND ORNAMENTALS FUNGICIDE is a dry flowable containing a coordination product of zinc ion and manganese ethylenebisdithiocarbamate, and is recommended for use as a spray for the control of many important plant diseases. (When used according to directions, it provides very high fungicidal activity and can be safely used on both turf grasses and certain ornamentals. PENNCOZEB DF provides control of most common turf grass diseases and it is also effective in controlling major fungus diseases of certain ornamentals).

Diseases of turf grass and ornamentals can attack suddenly and unexpectedly causing severe damage and may even result in total loss of large areas of valuable turf grass and ornamental plants. The use of a regular protective spray program will minimize the risk of disease damage and can generally be accomplished with lower rates and less frequent fungicide applications. Once diseases have become established, higher rates of fungicide and more frequent applications are required to bring them under control. Follow a regular protective program for maximum product performance.

#### CHEMICAL HAZARDS

Do not allow to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of the product as a fungicide and create vapors which may be flammable. Keep container closed when not in use.

#### INSTRUCTIONS FOR APPLICATION

To mix, slowly sift PENNCOZEB DF TURF AND ORNAMENTALS FUNGICIDE into spray tank while it is being filled and the agitator is running. Add insecticide and nutritional sprays last. PENNCOZEB DF TURF AND ORNAMENTALS FUNGICIDE is compatible with most commonly used pesticides. Read and observe the precautionary statements and other information appearing on product labels used in mixtures.

FOR AIR APPLICATION use at rate indicated in sufficient water for thorough coverage or a minimum of 2 gallons per acre.

Use a Spreader/Sticker at rate of 4 fl. oz. per 100 gallons spray if needed. Add product slowly to water in the spray tank with agitation or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is required to keep the product in suspension.

When dosage ranges are given, use the higher rate and shorter intervals under severe disease pressure.

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# DO NOT USE ANY OF THESE CROPS FOR FOOD OR FEED PURPOSES

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CROP	DISEASES	RATE OF PENNCOZEB DF PER APPLICATION OZ./1000 SQ. FT.	REMARKS
<b>TURF COMMERCIAL USE ONLY NOT FOR HOMEGARDEN USE</b>			Refer to General Use Instructions except when more specific directions are given for individual crops or diseases.
<b>GENERAL USE INSTRUCTIONS</b> —To be used on golf courses, sod farms and for professional applications to industrial, municipal and residential lawns. Do not use on pasture or range grasses. Do not feed clippings to livestock. Do not use if grass is grown for seed.			Start applications when grass greens up in the spring or when disease first appears and repeat at 7 to 14 day intervals or until disease threat is past. When conditions are especially favorable for disease development, apply maximum fungicide use rate on a 7 day spray schedule.  Apply in sufficient water for adequate coverage.  Do not graze treated areas. Do not feed clippings to livestock.
	Copper Spot Red Thread Fusarium Blight ( <i>F. Roseum</i> ) Slime Molds	4-8	
	Helminthosporium Melting Out Rhizoctonia Brown Patch Rust	4	Apply on a 7 day schedule for Rhizoctonia.
	Pythium Blight	8	Apply at 5 day intervals or more frequently if conditions are especially favorable for disease development.
	Dollar Spot	6-8	A cadmium fungicide may be added to supplement Dollar Spot control under severe disease conditions.
	Algae	6	
	Fusarium Snow Mold	6-8	Apply at 2 week intervals during winter.

CROP	DISEASES	REMARKS
<b>ORNAMENTALS COMMERCIAL AND HOMEGARDEN USE</b>		Refer to General Use Instructions except when more specific directions are given for individual crops or diseases.
<b>GENERAL USE INSTRUCTIONS</b>		Apply the equivalent of 1½ lbs. PENNCOZEB DF TURF AND ORNAMENTALS FUNGICIDE per 100 gallons of water (1½ level tablespoons per gallon) in full coverage spray. To improve performance, add 2 to 4 oz. spreader-sticker per 100 gallons of spray.  Begin spraying when plants are well leafed out or at first sign of disease and apply at 7 to 10 day intervals throughout the season, or follow State Extension Service recommendations for disease control on the following ornamental plants:
Azaleas	Petal Blight	Spray 2 to 3 times a week while flowers are opening. Direct spray into flowers and spray ground under bushes thoroughly.
Camelias	Petal Blight	Refer to azaleas.
Carnation	Leaf Spot	
Chrysanthemum	Botrytis Petal Spot	Apply at 1 to 2 lbs. per 100 gallons or 1½ level tablespoons per gallon in full coverage spray. Apply twice weekly during the blooming season.
Crabapple (ornamental)	Scab Cedar-Apple Rust	
Dahlia	Botrytis Blight	
Dogwood, Flowering	Anthrachnose	Apply when buds begin to open, when bracts have fallen, 4 weeks later, and again in late summer after flower buds for next season are formed.
Gladiolus	Curvularia Leaf Spot Botrytis Blossom Blight	On flower spikes, use at ¾ lb. per 100 gallons. Make weekly applications starting before diseases appear and increase to 2 or 3 applications per week during periods of heavy disease and during rainy weather.
Holly	Purple Spot	
Honeysuckle	Herpobasidium Blight	
Iris	Leaf Spot	
Lily	Botrytis Blight	
Pachysandra	Volutella Blight	Use a drenching spray of 2 lbs. per 50 gallons of water per 5,000 sq. ft. of bed area. Start application at first sign of disease and make at least 5 applications at 10 to 14 day intervals.
Pansy	Anthrachnose	
Peony	Phytophthora Blight Botrytis Blight	Apply in early spring and early fall, drenching soil around plants as well as the foliage. Promptly destroy all infected plant parts.
Rhododendron	Petal Blight	Refer to azalea.
Roses	Black Spot	
Snapdragon	Rust	
Tulip	Botrytis Blight (fire)	
Zinnia	Leaf Blight	

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## CHEMIGATION

### NOT FOR THIS USE IN CALIFORNIA

### GENERAL INSTRUCTIONS

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

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

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.

Do not connect chemigation system to any public water system. Public water system means a system for the provision of public 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.

### SYSTEM REQUIREMENTS

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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.

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.

### INSTRUCTIONS FOR SPRINKLER (OVERHEAD) IRRIGATION:

Observe the requirements in the System Requirements section above.

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

Apply PENNCOZEB DF only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well pivot injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

PENNCOZEB DF may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

Check local restrictions and requirements regarding sprinkler irrigation applications as they may vary from state to state.

### SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Prepare a suspension of PENNCOZEB DF in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation.

Slowly add the required amount of PENNCOZEB DF and then the remaining volume of water.

### APPLICATION INSTRUCTIONS:

Set sprinkler system to deliver 0.1 to 1.25 inches of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of PENNCOZEB DF into the irrigation water line so as to deliver the desired rate per acre. The suspension of PENNCOZEB DF should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

NOTE: When treatment with PENNCOZEB DF has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

## STORAGE AND DISPOSAL

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

**STORAGE INSTRUCTIONS:** Store in the original container in a dry area. If allowed to become wet the product will deteriorate and represent a fire hazard. Keep away from sources of ignition (e.g., sparks and open flame). Close bag when not in use. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling sweep up spillage and dispose of in accordance with the Pesticide Disposal Instructions listed below.

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

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

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### WARRANTY AND DISCLAIMER

Elf Atochem North America warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the risks referred to therein. ELF ATOCHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL ELF ATOCHEM OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, BUSINESS REPUTATION, OR CUSTOMERS, LABOR COST, OR OTHER EXPENSES INCURRED IN PLANTING OR HARVESTING.

Elf Atochem and seller offer this product and the buyer and user accept it subject to the foregoing conditions of sale and warranty which may be varied only by agreement in writing signed by a duly authorized representative of Elf Atochem.

Made in Holland

Printed in U.S.A.

5-N319S-01 J2 (10/92)

(8/93)