



GROUP M3 FUNGICIDE



# PENNCOZEB<sup>®</sup> 75DF

FUNGICIDE

### For Agricultural and Seed Treatment Uses

**ACTIVE INGREDIENT:**

Mancozeb: A coordination product of zinc ion and manganese ethylene bisdithiocarbamate .....	75.0%
Manganese++ .....	15.0%
Zinc++ .....	1.9%
Ethylenebisdithiocarbamate ion (C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> ) .....	58.1%

**OTHER INGREDIENTS:** ..... 25.0%

**TOTAL:** ..... 100.0%

EPA Reg. No. 70506-185

## KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

### FIRST AID

<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably by mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call the Rocky Mountain Poison Control Center at 1-866-673-6671.

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.**



NET WEIGHT: \_\_\_\_\_ POUNDS



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

### CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are natural rubber and polyethylene.

#### Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear when mixing or loading
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material (except pilots in enclosed cockpits).

Aerial applications of PENNCOZEB 75DF on broccoli, cabbage, lettuce (leaf and head), and peppers requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.

For potato seedpiece treatment: When opening this bag or loading/pouring the treated seed, wear long-sleeved shirt, long pants, shoes, socks, chemical-resistant gloves, and a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.

In addition, mixers/loaders supporting aerial applications to walnuts must wear: a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.

See engineering controls for additional requirements.

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

### ENGINEERING CONTROLS STATEMENTS

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.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (6)].

Human flagging is prohibited. Flagging to support aerial application is limited to the use of Global Positioning System (GPS) or mechanical flaggers.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 pesticide is toxic to aquatic organisms. 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 cleaning equipment or disposing of equipment washwater or rinsate.

### 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.

### 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 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
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks

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

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements 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.

Do not enter or allow others to enter the treated area until sprays have dried.

### PRODUCT INFORMATION FOR AGRICULTURAL USES

PENNCOZEB 75DF is a dry flowable fungicide containing a coordination product of zinc ion and manganese ethylenebisdithiocarbamate, and is for use as a spray for the control of many important plant diseases.

### INSTRUCTIONS FOR APPLICATION FOR AGRICULTURAL USES

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

FOR AERIAL APPLICATION use at the rate indicated in sufficient water for thorough coverage, a minimum of 2 gallons per acre for field crops and 10 gallons per acre for orchard crops.

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 pre-mix 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, but do not exceed the maximum rate or apply more frequently than the minimum interval given in the directions for that crop.

## **MAXIMUM SEASONAL POUNDAGE WHEN USED IN CONJUNCTION WITH ONE OR MORE OTHER EBDC PRODUCTS**

### **FOLIAR APPLICATIONS**

#### **Where EBDC Products Used Allow The Same Maximum Pounding of Active Ingredient Per Acre Per Season**

If more than one product containing an EBDC active ingredient (maneb, mancozeb, or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

#### **Where EBDC Products Used Allow Different Maximum Pounding of Active Ingredient Per Acre Per Season**

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

### **SEED TREATMENT**

In addition to the maximum number of foliar applications permitted by the formula stated above, a single application for seed treatment may be made on crops which have registered seed treatment uses.

### **SPRAY DRIFT MANAGEMENT**

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

Do not apply at wind speeds greater than 15 mph.

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.

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

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

#### **Additional requirements for aerial application:**

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

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.

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 requirements for ground boom application:**

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

## **CHEMIGATION**

### **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 non-uniform 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 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.

### **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.

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

Apply PENNCOZEB 75DF 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 75DF 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 75DF 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 75DF and then the remaining volume of water.

## APPLICATION INSTRUCTIONS

Set sprinkler system to deliver 0.1-1.25 inches of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of PENNCOZEB 75DF into the irrigation water line so as to deliver the desired rate per acre. The suspension of PENNCOZEB 75DF 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 75DF has been completed, do not irrigate the treated area for 24-48 hours to prevent washing the chemical off the crop.

CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	DIRECTIONS
Almonds	Blossom Blight ( <i>Monilinia</i> spp.) Shothole ( <i>Stigmia</i> spp.)	6.4 (4.8 lbs a.i.)	Begin application at dormant to popcorn stage, full bloom or petal fall. Reapply every 7-10 days if bloom is staggered and weather is rainy. Do not use less than 10 gallons of spray volume per acre if aerially applied. Do not apply more than 19.2 lbs. product (14.4 lbs. active ingredient) per acre per use season. Do not make last application later than 5 weeks after petal fall. Do not graze livestock in treated area. Minimum retreatment interval is 7 days. Do not apply this product with a U-boom device.
Asparagus	Cercospora Leaf Spot Rust	2.0	Begin applications when rust first appears and repeat at 10 day intervals as needed. Use only on ferns after spears have been harvested. Do not apply more than 8.5 lbs. product (6.4 lbs. active ingredient) per acre per season. Do not apply within 180 days of harvest. (In California and Arizona, the PHI is 120 days).
Bananas, Plantains	Sigatoka	2.0-3.0	Apply when leaves first appear and repeat as needed on a 14-21 day intervals. Do not apply more than 32 lbs. product (24 lbs. active ingredient) per acre per season. May be applied up to the day of harvest.
Broccoli	Alternaria Leaf Spot Downy Mildew	1.6-2.1	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7-10 day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply more than 12.8 lbs. product (9.6 lbs. mancozeb) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device. Aerial applications of PENNCOZEB 75DF on broccoli requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.
Cabbage	Alternaria Leaf Spot Downy Mildew	1.6-2.1	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7-10 day intervals, if needed. Use higher specified rates when conditions favor disease. Do not apply more than 12.8 lbs. product (9.6 lbs. mancozeb) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device. Aerial applications of PENNCOZEB 75DF on cabbage requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.

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CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	DIRECTIONS
Corn, Field Corn, and Corn Grown for Seed	Common Rust Gray Leaf Spot Helminthosporium Leaf Blight	1.0-1.5	Start application at the onset of disease and repeat as needed. Do not apply more than 16 lbs. product (12 lbs. active ingredient) per season. Do not apply within 40 days of harvest.
Corn, sweet corn used for fresh and processing, popcorn, and sweet corn used for seed production, including hybrid seed	Common Rust Gray Leaf Spot Helminthosporium Leaf Blight	1.0-1.5	<b>East of the Mississippi</b> (including Arkansas and Louisiana) Apply in sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4-7 day intervals. Do not apply within 7 days of harvest. Do not feed treated forage (plant stalk and leaves) to livestock. Do not apply more than 24 lbs. product (18 lbs. active ingredient) per acre per crop.
		1.0-1.5	<b>West of the Mississippi</b> (except Arkansas and Louisiana) Apply in sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4-7 day intervals. Do not apply within 7 days of harvest. Do not feed treated forage (plant stalk and leaves) to livestock. Do not apply more than 8 lbs. product (6 lbs. active ingredient) per acre per crop.
Cranberries	Fruit Rot	3.0-6.0	Begin applications at early bloom and repeat at 7-10 day intervals. Do not apply within 30 days of harvest. Do not apply more than 19.2 lbs. product (14.4 lbs. active ingredient) per acre per season.
Cucurbits: Chayote, Chinese waxgourd, Citronmelon, Cucumber, Gherkin, Gourd, edible, <i>Momordica</i> spp., Muskmelon, Pumpkin, Squash (Summer and Winter), Watermelon	Alternaria Leaf Spot Anthracnose Cercospora Leaf Spot Downy Mildew Gummy Stem Blight Pythium Fruit Rot Scab	2.0-3.0	Start application when the plants are in the two-leaf stage and repeat at 7-10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Do not apply more than 25.6 lbs. product (19.2 lbs. active ingredient) per acre per crop. Do not apply within 5 days of harvest. Some cantaloupe varieties (i.e., Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to PENNCOZEB 75DF fungicide. Consult State and Cooperative Extension Service Specialist prior to use.
Fennel	Early Blight Late Blight	1.5-2.0	Apply when disease threatens. Make applications as needed on a 7-10 day interval. Do not use more than 17 lbs. product (12.8 lbs. active ingredient) per season. Do not apply within 14 days of harvest.
Ginseng	Alternaria Blight	2.0	Start applications when disease first threatens and repeat every 7-10 days as needed. In Wisconsin, apply with ground equipment and a minimum of 80 gallons of water per acre. Do not apply more than 24 lbs. product (18 lbs. active ingredient). Do not apply within 30 days of harvest.
Grapes	Black Rot Bunch Rot Downy Mildew Phomopsis (Deadarm)	1.5-4.0	<b>East of the Rocky Mountains</b> Apply when shoots are 1/2 to 1 1/2 inches long. Continue at 7-10 day intervals. Do not apply within 66 days of harvest. Do not apply more than 25.6 lbs. product (19.2 lbs. active ingredient) per acre per season.
		1.5-2.5	<b>West of the Rocky Mountains</b> Apply when shoots are 1/2 to 1 1/2 inches long. Continue at 7-10 day intervals. Do not apply within 66 days of harvest. Do not apply more than 8 lbs. product (6 lbs. active ingredient). For late season control of black rot, deadarm, and downy mildew, the use of other approved fungicides is suggested. <b>California:</b> Do not apply after bloom.

continued

CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	DIRECTIONS
Lettuce (Head, Leaf)	Anthracnose Downy Mildew	1.6-2.1	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7-10 day intervals, if needed. Use higher specified rates when conditions favor disease. Remove residues from head lettuce by stripping and trimming. In California, do not apply more than 8.5 lbs. product (6.4 lbs. mancozeb) per acre per crop and do not apply within 14 days of harvest. In states other than California, do not apply more than 12.8 lbs. product (9.6 lbs. mancozeb) per acre per crop and do not apply within 10 days of harvest. For all states: minimum retreatment interval is 7 days. Do not apply this product with a U-boom device. Aerial applications of PENNCOZEB 75DF on lettuce requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.
Melons cantaloupes, casabas, crenshaws, honeydews	Alternaria Leaf Spot Anthracnose Cercospora Leaf Spot Downy Mildew Gummy Stem Blight	2.0-3.0	Apply as soon as plants begin to run or when disease threatens. Spray on a 7-10 day interval as necessary using higher rate and/or shorter intervals under severe disease pressure. Do not apply more than 25.6 lbs. product (19.2 lbs. active ingredient) per acre per season. Do not apply within 5 days of harvest. Some cantaloupe varieties (i.e., Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to PENNCOZEB 75DF fungicide. Consult State and Cooperative Extension Service Specialist prior to use.
Onions (Dry Bulb) garlic and shallots	Botrytis Leaf Blight Downy Mildew Neck Rot Purple Blotch Rust	2.0-3.0	Begin applications when diseases are first reported in the area. Repeat at 7 day intervals throughout the season. Do not apply within 7 days of harvest; do not apply to exposed bulbs. Do not apply more than 32 lbs. product (24 lbs. active ingredient) per acre per crop. Do not allow spray or drift to contact bulbs after lifting from soil.
Onions (Furrow Drench)	Damping Off Seed Rots Seedling Blights Smut	3.0	Apply as a furrow drench at time of planting onion seeds. Use 75-125 gallons of water per acre. Do not use more than 3.2 lbs. product (2.4 lbs. active ingredient) per 29,000 linear feet of row (18 inch spacing). <b>Do not use in California.</b>
Papayas	Anthracnose Black Spot Cercospora Phytophthora Fruit Rot	1.5-2.0	Apply first when disease pressure threatens and continue on a 14-21 day intervals. Do not apply more than 37.3 lbs. product (28 lbs. active ingredient) per acre per season. Do not make more than 14 applications per year. Applications can be made up to the day of harvest.
Peanuts	Cercospora Leaf Spot Rust	1.0-2.0	Begin applications when disease first appears and repeat at 7-14 day intervals, using shorter interval under severe disease pressure. Do not feed treated vines to livestock. Do not use more than 17 lbs. product (12.8 lbs. active ingredient) per acre per season. Do not apply within 14 days of harvest.
Peanuts (tank-mix with Topsin M)	Ascochyta Web Blotch Cercospora Leaf Spot Limb Rot Rust	1.5 lbs. PENNCOZEB 75DF plus 0.35 lb. a.i. TOPSIN® M	Begin applications when disease first appears and repeat at 7-14 day intervals, using shorter interval during humid weather. Do not feed treated vines to livestock. Do not use more than 17 lbs. PENNCOZEB 75DF (12.8 lbs. active ingredient) per acre per season. Do not apply within 14 days of harvest.

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CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	DIRECTIONS
Pepper	Anthracnose Bacterial Spot <i>(Xanthomonas axonopodis</i> pv. <i>vesicatoria)</i> Cercospora Leaf Spot (Frogeye Spot) Phytophthora Blight Ripe Rot	1.6-2.1	<p><b>West of the Mississippi</b></p> <p>Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7-10 day intervals, if needed. Use higher specified rates when conditions favor disease.</p> <p>Do not apply more than 12.8 lbs. product (9.6 lbs. mancozeb) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.</p> <p>Aerial applications of PENNCOZEB 75DF on pepper requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.</p>
		1.6-3.2	<p><b>East of the Mississippi</b></p> <p>Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7-10 day intervals, if needed. Use higher specified rates when conditions favor disease.</p> <p>Do not apply more than 19.2 lbs. product (14.4 lbs. mancozeb) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.</p> <p>Aerial applications of PENNCOZEB 75DF on pepper requires that occupational handlers performing mixing/loading operations observe the additional mitigation measures of wearing a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.</p>
Pome Fruits Apples, Crabapples, Pears, Quince	Fabraea Leaf Spot Flyspeck Rusts (including Cedar Apple) Scab Sooty Blotch	6.4	PRE BLOOM/BLOOM USE: Begin applications at 1/4 to 1/2 inch green tip and continue on a 7-10 day application schedule through bloom. Do not apply more than 25.6 lbs. product (19.2 lbs. active ingredient) per acre per year.
		3.2	EXTENDED APPLICATION OR TANK MIX: For implementation of IPM programs, applications based on tree row volume or for use as a resistance management tool: begin applications at 1/4 to 1/2 inch green tip and continue applications on a 7-10 day schedule through the second cover spray. Do not apply more than 22.4 lbs. product (16.8 lbs. active ingredient) per acre per year. It is recommended that this product be used in an Integrated Pest Management Program. Apply in a minimum of 50 gallons of water per acre. Do not graze livestock in treated areas. Do not apply within 77 days of harvest.
		Use either the "Pre-Bloom/Bloom Use" or "Extended Application" schedules. <b>DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES.</b>	
Potatoes	Early Blight Late Blight	0.5-2.0	Begin applications when plants are 4-6 inches high by applying 0.5-1.1 lbs. product (0.4-0.8 lb. active ingredient) per acre. As the vines increase in size, apply 1.6-2.1 lbs. product (1.2-1.6 lbs. active ingredient) per acre at 5-10 day intervals or 0.8-1.1 lbs. product (0.6-0.8 lb. active ingredient) per acre at 3-5 day intervals. Do not apply more than 15 lbs. product (11.2 lbs. active ingredient) per acre per crop. Do not apply within 14 days of harvest (except in Connecticut, Delaware, Florida, Maine, Massachusetts, Michigan, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Wisconsin when a 3 day PHI is allowed). It is recommended that this product be used within an Integrated Pest Management Program. Vine kill should occur 14 days before harvest.

continued

<b>CROPS</b>	<b>DISEASES</b>	<b>RATE LBS. PRODUCT/ACRE</b>	<b>DIRECTIONS</b>
Potato Seed-Piece Treatment	Fusarium Seed Piece Decay Seedborne Common Scab		Dip whole or cut seed pieces in mixture of 1 1/4 lbs. of product per 50 gallons of water, drain and plant immediately. If seed pieces are to be held before planting, spread out to dry in a cool place. Do not use treated seed pieces for food or feed purposes.  <b>APPLICATION RESTRICTIONS</b> Seeds/seed-pieces that have been treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed/seed-piece package or bag: <ul style="list-style-type: none"> <li>• When opening this bag or loading/pouring the treated seed, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.</li> <li>• Treated Seed/Seed-Pieces - Do Not Use for Food, Feed, or Oil Purpose.</li> <li>• After the seeds/seed-pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil media subsurface.</li> </ul>
Squash (Summer) edible gourds	Anthracoise Downy Mildew	2.0-3.0	Start applications when plants are in the two-leaf stage. Spray on a 7-10 day intervals as needed using higher specified rate and/or shorter intervals under severe disease pressure. Do not apply more than 25.6 lbs. product (19.2 lbs. active ingredient) per acre per season. Do not apply within 5 days of harvest.
Sugar Beets	Cercospora Leaf Spot Rust	1.5-2.0	Begin applications when disease first threatens and repeat at 7-10 day intervals. Do not apply more than 15 lbs. product (11.2 lbs. active ingredient) per acre per season. Do not apply within 14 days of harvest.
Tomatoes	Anthracoise Early Blight Gray Leaf Mold Gray Leaf Spot Late Blight Septoria Leaf Spot	0.75-3.0	<b>East of the Mississippi</b> Begin applications when seedlings emerge or transplants are set. Repeat applications of 0.75-1.5 lbs. product (0.6-1.2 lbs. active ingredient) per acre at 3-7 day intervals, or 1.5-3.0 lbs. product (1.2-2.4 lbs. active ingredient) per acre at 7-10 day intervals throughout the season. Do not apply within 5 days of harvest. Do not apply more than 22.4 lbs. product (16.8 lbs. active ingredient) per acre per crop.
		0.75-2.0	<b>West of the Mississippi</b> Begin applications when seedlings emerge or transplants are set. Repeat applications of 0.75-1.0 lb. product (0.6-0.8 lb. active ingredient) per acre at 3-7 day intervals, or 1.5-2.0 lbs. product (1.2-1.6 lbs. active ingredient) per acre at 7-10 day intervals throughout the season. Do not apply more than 6.4 lbs. active ingredient (8.5 lbs. product) per acre per season. Do not apply within 5 days of harvest.
	Bacterial Speck and Spot		Use a full rate of a fixed copper fungicide in a tank mix combination with a half to full rate of PENNCOZEB 75DF. Follow application intervals specified on the copper fungicide label.
Tropical Fruit, Large Canistel, Mamey Sapote, Mango, Sapodilla, Star Apple (caimito), White Sapote	Anthracoise Black Spot (Cercospora) Phytophthora Fruit Rot	2.0-2.5	Start applications at flowering and continue at 14-21 day intervals. Direct spray to crown and blossom area. Use 20-100 gallons water per acre. Do not apply more than 37.3 lbs. product (28 lbs. active ingredient) per acre per growing season. Applications may be made up to the day of harvest.
Tropical Fruit, Small Atemoya, Cherimoya, Custard Apple, Sugar Apple, Sweetsop	Anthracoise	2.0-2.5	Begin applications at flowering and continue at approximately 7 day intervals. Applications made with aerial equipment must be made in a minimum of 5 gallons per acre. Do not apply more than 35 lbs. product (26.25 lbs. active ingredient) per acre per growing cycle. Applications may be made up to the day of harvest.

*continued*



CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	DIRECTIONS
Walnut	Walnut Blight ( <i>Xanthomonas campestris</i> pv. <i>Juglandis</i> )	2.4 lbs. per acre (1.8 lbs. a.i.)	Apply by ground in a minimum of 100 gallons water per acre, or by air in a minimum of 10 gallons water per acre. Do not apply through any irrigation system. Begin applications at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage, or as needed if frequent rainfall occurs. The minimum reapplication interval is 7-10 days. Do not make more than 10 applications per season. Do not apply more than 24 lbs. product (18 lbs. active ingredient) per acre per use season. For aerial applications only: Mixer/loaders must wear a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A. <b>Restrictions:</b> This product must be tank mixed with a fixed copper product (such as Cuprofix Ultra 40 Disperss, EPA Registration Number 70506-201) which is registered for use on walnuts. <b>Pre-harvest Interval:</b> Do not apply within 75 days before harvest.
Wheat, Barley, Oats, Rye, Triticale	Helminthosporium Leaf Spot Leaf Rust Scab (Head Blight)* Septoria Glume Blotch Septoria Leaf Spot Tan Spot *In California - scab control on wheat only.	1.0-2.0	Start application at onset of disease or when plants are in tillering to jointing stage and repeat at 7-10 day intervals. Do not make more than 3 applications in one season. Do not apply more than 6.4 lbs. product (4.8 lbs. active ingredient) per acre per crop. Pre-Harvest Interval (PHI) is at Feekes Growth Stage 10.5 (typically 35-45 days), but no less than 26 days (46 days pre-harvest interval in California.) Do not graze livestock in treated areas prior to harvest.

## MISCELLANEOUS

CROPS	DISEASES	RATE LBS. PRODUCT/ACRE	COMMENTS
Asparagus Crown (Planting Stock)	Crown Rot	1 lb. per 100 gallons	Place loosely packed crowns into a burlap bag and soak, with gentle agitation, in the fungicide solution for 5 minutes. Remove bag, drain well, and plant crowns as soon as possible. A tank large enough to hold a single burlap bag will treat 2 bags of crowns. Clean dipping suspension should then be prepared in a clean tank. Dirty crowns should be pre-washed to remove excess soil. <b>Do not use in California.</b>
Caprifig	Assorted molds Endosepsis (Fusarium)	1 lb. per 25 gallons	Prepare mamme figs by making a shallow cut through the eye and then hand dividing to avoid wasp injury. Submerge mamme figs in the fungicide suspension for a minimum of 15 minutes. The fungicide suspension should be stirred frequently to prevent settling out. Fresh dipping solution should be used after treating 4 or 5 batches of figs. After treatment, figs should be drained prior to placement in trees. <b>Do not use in California.</b>
Christmas Trees (Conifer)	Lophodermium Needle Cast Pine Gall Rust Scirrhia Brown Spot	2-4 lbs. per acre	Begin application in spring or early summer before infection occurs. Repeat after heavy rains and at two week intervals as long as needed.
Douglas Fir	Swiss Needle Cast		

## SEED TREATMENT – NOT FOR THIS USE IN CALIFORNIA

Seeds to be treated should be cleaned and well cured prior to treatment. PENNCOZEB 75DF may be applied to dry seed with conventional slurry or mist seed treating equipment or as a planter-box application. For best results, the seed must be completely and uniformly covered with fungicide. For seed treatment, a dye must be added to PENNCOZEB 75DF which will impart an unnatural color to the seed.

### APPLICATION RESTRICTIONS

Seeds/seed-pieces that have been treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed/seed-piece package or bag:

- When opening this bag or loading/pouring the treated seed, wear long-sleeved shirt, long pants, shoes, socks, chemical-resistant gloves, and a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84A.
- Treated Seed/Seed-Pieces – Do Not Use for Food, Feed, or Oil Purpose.
- After the seeds/seed-pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil media subsurface.

CROPS	DISEASES CONTROLLED	RATE OF PENNCOZEB 75DF PER APPLICATION		REMARKS
		OZ./BU.	OZ./100 LBS.	
Barley	Covered Smut Damping-off False Loose Smut Seed Rots Seedling Blights	1.4-2.1	2.9-4.5	For planter box treatment only.
Corn (field)	Damping-off Seed Rots Seedling Blights	1.6-3.2	2.9-5.8	
Cotton (acid delinted) (reginned)	Damping-off Seedling Blights		3.2	
	Damping-off Seedling Blights		6.4	
Flax	Damping-off Seed Rots Seedling Blights	2.1-4.3	3.8-7.6	
Oats	Damping-off Seed Rots Seedling Blights Smuts	1.4-2.1	4.3-6.7	For planter box treatment only.
Peanuts (shelled)	Damping-off Seed Rots Seedling Blights	2.1-4.3	8.5-17.1	
Rice	Damping-off Seed Rots Seedling Blights		2.1-4.3	Apply before, during and after soaking in water.
Rye	Bunt Damping-off Seed Rots Seedling Blights	1.4-2.1	2.5-3.8	For planter box treatment only.
Safflower	Seedborne Rust ( <i>Puccinia Carthami</i> )		2.1	
Sorghum	Covered Kernel Smut Damping-off Seed Rots Seedling Blights	1.6-2.7	2.9-4.8	
Tomatoes	Damping-off Seed Rots Seedling Blights		8.5	

*continued*

**SEED TREATMENT – NOT FOR THIS USE IN CALIFORNIA *continued***

CROPS	DISEASES CONTROLLED	RATE OF PENNCOZEB 75DF PER APPLICATION		REMARKS
		OZ./BU.	OZ./100 LBS.	
Wheat	Bunt Damping-off Seed Rots Seedling Blights	1.4-2.1	2.3-3.5	For planter box treatment only.

**PRODUCT INFORMATION FOR TURF USE**

PENNCOZEB 75DF is a dry flowable containing a coordination product of zinc ion and manganese ethylenebisdithiocarbamate and is labeled 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 turfgrasses.

PENNCOZEB 75DF is a broad-spectrum protectant fungicide which provides control of most common turfgrass diseases.

Diseases of turfgrass can attack suddenly and unexpectedly causing severe damage and may even result in total loss of large areas of valuable turfgrass. 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.

**INSTRUCTIONS FOR APPLICATION FOR TURF USE**

To mix: Slowly add PENNCOZEB 75DF into half-filled spray tank while the agitator is running to form a well-mixed suspension. If tank-mixing with other materials, add soluble materials (those that form a true solution) first. Then add emulsifiable concentrates (those that form an emulsion in water) in that order after the PENNCOZEB 75DF. Wettable powder products may be mixed at the same time as PENNCOZEB 75DF. PENNCOZEB 75DF is compatible with most commonly used pesticides. Read and observe the most restrictive 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 label-recommended rates for the desired use as needed. Add product slowly to water in the spray tank with agitation or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Follow similar mixing order instructions as stated above for best results. Continuous agitation is required to keep the product in suspension.

**TURF – COMMERCIAL SOD FARMS – NOT FOR RESIDENTIAL USE  
NOT FOR USE IN CALIFORNIA**

Start applications when grass greens-up in the spring or when disease first appears, and repeat at a minimum of a 10 day intervals. When conditions are especially favorable for disease development, apply maximum fungicide use rate on a 10 day spray schedule. Apply in sufficient water to provide adequate coverage.

TURF TOLERANCE – Treated turfgrass should be maintained in a vigorous growing condition. Turfgrass under stress will not respond to fungicide treatments as well as well-maintained turfgrass. Turfgrass tolerance to this product has been found to be acceptable, however, this product and tank mixtures with other products have not been tested on all varieties of every turfgrass species or under all possible growing conditions. If user is unfamiliar with the performance of PENNCOZEB 75DF or tank mixtures, under user growing conditions, treat a limited area of turfgrass prior to initiating large-scale applications.

Harvesting of treated turf is prohibited until 120 hours (5 days) following application. There is a maximum of four applications allowed per year and a maximum application rate of 17.4 lbs. a.i./A (23.2 lbs. product) per application.

CROP	DISEASES CONTROLLED	RATE PER APPLICATION OZ./1,000 SQ. FT.	REMARKS	RESTRICTIONS
Assorted Grasses	Helminthosporium melting out	4		Do not graze treated areas. Do not use on grasses intended for grazing, such as range or pasture grasses. Do not feed clippings to livestock. Do not use on grasses grown for seed.
	Rust (leaf, stem, stripe)	4		
	Copper Spot Fusarium Blight Red Thread Slime Mold	4-8		
	Algae	6		
	Dollar Spot	6-8		
	Rhizoctonia Brown Patch	4		
	Pythium Blight	8		
	Fusarium Snow Mold	6-8	Apply at 2-6 week intervals during winter.	

## STORAGE AND DISPOSAL

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

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

## IMPORTANT INFORMATION READ BEFORE USING PRODUCT

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

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