

2013-6160  
2014-05-13

((CONTAINER LABEL))

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| GROUP | M | FUNGICIDE |
|-------|---|-----------|

# PENNCOZEB<sup>®</sup> 75DF

## RAINCOAT<sup>™</sup>

### FUNGICIDE

WETTABLE GRANULES

**AGRICULTURAL  
GUARANTEE:**

MANCOZEB.....75%

REGISTRATION NO. 30241 PEST CONTROL PRODUCTS ACT

**READ THE LABEL BEFORE USING  
CAUTION: EYE IRRITANT**

NET CONTENTS: 2.5 - 25 KG

**UNITED PHOSPHORUS INC. (UPI)  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406  
1-800-438-6071**

**Penncozeb<sup>®</sup> is a registered trademark and Raincoat<sup>™</sup> is a trademark of United Phosphorus, Inc.**

## **PENNCOZEB 75DF RAINCOAT FUNGICIDE**

### **PRECAUTIONS**

#### **KEEP OUT OF REACH OF CHILDREN**

May cause irritation of nose, throat, eyes and skin. Do not breathe spray mist. DO NOT re-enter treated areas within 24 hours. If required, individuals may re-enter treated areas within 24 hours for short-term tasks not involving hand labor if at least 4 hours has passed since application and long pants, long-sleeved shirt, hat and chemical-resistant gloves are worn.

For use in greenhouses, wear a chemical resistant rain suit, chemical resistant gloves, rubber boots, goggles or a face shield and either a respirator with a NIOSH/MSHA/BHSE approved organic vapor-removing cartridge with a pre-filter approved for pesticides, or a NIOSH/MSHA/BHSE approved canister approved for pesticides during mixing, loading, application, clean up and repair activities.

Ventilate prior to re-entry.

For all other registered uses, wear chemical resistant gloves, coveralls and goggles or face shield during mixing, loading, application, clean up and repair activities. In addition, wear an appropriate respirator when mixing and loading this product.

Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before re-use. This product is toxic to fish. Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca).

### **FIRST AID**

**If swallowed:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**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 centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION** - Treat as above for skin contact. If taken internally, administer gastric lavage.

### **STORAGE AND DISPOSAL**

Keep away from fire and sparks. Store in a cool, dry well ventilated place. Do not allow to become wet or overheated in storage; decomposition, impaired activity, or fire may result. Keep container closed when not in use. Pallets of containers should not be stacked more than 3 high. Provide access aisles for each 2 rows. Decomposition produces foul odor; if observed, check for hot containers and remove immediately to open areas for disposal. Do not contaminate food or feed by storage or disposal.

### **DISPOSAL**

1. Completely empty container and add to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the disposal of unused, unwanted product, contact the provincial regulatory agency or the manufacturer. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

### **TRANSPORT EMERGENCY**

USA: **1-800-424-9300** CHEMTREC

Canada: **1-613-996-6666** CANUTEC

(( BOOKLET ))

GROUP M FUNGICIDE

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### **DIRECTIONS FOR USE**

#### **GENERAL INSTRUCTIONS**

Do not premix Penncozeb 75DF Raincoat Fungicide into a smaller tank. Pour Penncozeb 75DF Raincoat Fungicide slowly into a 1/4 filled spray tank while the agitator is running. Fill tank with water. Add other co-applied fungicides, insecticides, growth regulators, micronutrients, and spray adjuvants after Penncozeb 75DF Raincoat Fungicide dispersible granular fungicide has been placed into suspension. Do not let Penncozeb 75DF Raincoat Fungicide settle out in an un-agitated spray tank. Rinse out spray tank, pumps, and nozzles at the end of the day.

When preparing spray solutions for use in a hand sprayer, premix as a slurry in a small container, and then add to sprayer containing  $\frac{1}{3}$  to  $\frac{1}{2}$  the desired final water volume. Penncozeb 75DF Raincoat Fungicide is believed compatible with most of the common pesticides used. Thorough, uniform coverage is essential for good disease control. For low volume airblast sprayers, adjust the mixing rate accordingly.

### **AERIAL APPLICATION**

Apply only by fixed-wing or rotary aircraft equipment, which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

**Use Precautions:** Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides*.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other nontarget areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

**Operator Precautions:** Do not allow the pilot to mix chemicals to be loaded onto the aircraft.

Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilots have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

**Product Specific Precautions:** Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 800-438-6071, or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum spray volume of 40 litres per hectare.

**Resistance-Management Recommendations:**

For resistance management, please note that Penncozeb 75DF Raincoat Fungicide contains a Group M fungicide. Any fungal population may contain individuals naturally resistant to Penncozeb 75DF Raincoat Fungicide and other Group M fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of Penncozeb 75DF Raincoat Fungicide or other Group M fungicides with different groups that control the same pathogens.
- Use tank mixtures with a fungicide from a different group that is effective on the target pathogen when such use is permitted.
- Fungicide use should be based on an integrated disease management program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal populations for resistance development. Notify United Phosphorous Inc. if reduced sensitivity of the pathogen to Penncozeb® 75DF Raincoat™ Fungicide is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information and to report suspected resistance, contact United Phosphorus, Inc. at 1-800-438-6071 or at [www.uplonline.com](http://www.uplonline.com).

## **VEGETABLES**

**POTATOES** - For early and late blight. Begin applications early, applying 1.1 kilograms Penncozeb 75DF Raincoat Fungicide per hectare when plants are 10-15 cm high. Increase to 1.75 kilograms per hectare as plants increase in size, and to 2.25 kilograms per hectare at row closure. Apply every 7-10 days throughout season.

### **Reduced Spray Interval Schedule**

During periods of wet weather favoring late blight and/or vigorous crop growth, spray intervals may be reduced to 5-6 days. Apply 1.1 kilograms per hectare until row closure then increase the rate to 1.75 kilograms per hectare until conditions allow the return to the regular spray schedule.

Thorough, uniform coverage is essential for good disease control. Use 40 litres of water per hectare for aerial applications. Do not apply within 1 day of harvest.

**TOMATOES** – For control of early and late blight, Anthracnose, Stemphyllium blight (gray leaf spot). Use Penncozeb 75DF Raincoat Fungicide at 1.10 to 3.25 kilograms per hectare in sufficient water to provide adequate coverage. Start applications when disease is first reported in the area and repeat every 7 to 10 days or more often under severe disease conditions. Do not apply within 7 days of harvest. **DO NOT APPLY BY AIR.**

**ONIONS** – For control of Botrytis leaf blight (leaf spot or blast). Apply 2.25 to 3.25 kilograms per hectare when disease first appears and repeat every 7 days as needed. Add a suitable wetting agent. Do not use on green bunching onions. Do not use later than 10 days before harvest. **DO NOT APPLY BY AIR.**

**CELERY** – For early and late blight. Begin spraying at 2.25 kilograms per hectare in the plant bed when plants first come through the ground. Make further applications at 3-5 day intervals until plants are set in field. Continue field applications on a regular weekly schedule. Do not apply later than 14 days before harvest. Strip, trim and wash the celery at harvest. **DO NOT APPLY BY AIR.**

**CARROTS** – For leaf spot diseases. Start applications of 2.25 kilograms per hectare when plants are 6 weeks old or when disease threatens. Repeat at 7-10 day intervals. Do not apply later than 7 days before harvest. Do not use treated tops for food or feed. **DO NOT APPLY BY AIR.**

**CANTALOUPE, CUCUMBERS, PUMPKIN, SQUASH, MELONS AND WATERMELONS** – For control of Downy Mildew, Anthracnose, Scab, Gummy Stem Blight and Alternaria Leaf Spot. Use Penncozeb 75DF Raincoat Fungicide at 1.10 to 3.25 kilograms per hectare in sufficient water to provide adequate coverage. Start applications when runners begin to form or at first sign of disease and repeat at weekly intervals. Direct spray for thorough coverage of both upper and lower leaf surfaces. Do not apply within 14 days of harvest. **DO NOT APPLY BY AIR.**



## FRUIT

**APPLES** - For the control of scab, cedar apple rust and quince rust. For a protective schedule begin application of Penncozeb 75DF Raincoat Fungicide in the green tip up to half inch green sprays.

Repeat any subsequent pre-bloom, bloom and cover sprays in accordance with the timing in your local schedule for a protective program. Use 2.0 kilograms of Penncozeb 75DF Raincoat Fungicide per 1000 litres of water in single strength sprays or the equivalent in concentrate sprays. If moderate disease conditions prevail, the dosage can be reduced to 1.5 kilograms in the cover sprays. The addition of a wetting agent will ensure a smoother more even coverage of your spray material and help prevent blotchy, visible residues. Fruit color and finish on most apple varieties sprayed with Penncozeb 75DF Raincoat Fungicide have frequently been outstanding. Do not apply within 45 days of harvest. **DO NOT APPLY BY AIR.**

**CAUTION** – Do not feed treated apple pomace to livestock.

**GRAPES** - For the control of Downy Mildew (*Plasmopara viticola*) and Black Rot (*Guignardia bidwellii*) on grapes, use Penncozeb 75DF Raincoat Fungicide at the rate of 2.13 kilograms per 1000 litres (7.2 kilograms per hectare) as follows – start applying when new shoots are 20-25 centimeters long (pre-bloom). Apply two to three more sprays 10-12 days apart post-bloom. Do not use spray within 30 days of harvest.

## FIELD CROPS

### **WHEAT (ALL VARIETIES, INCLUDING DURUM)**

For the control of tan spot, Septoria leaf blotch and leaf rust.

**Early Spray:** Apply at a rate of 1.1 kilograms per hectare at the Feekes 1-3/ Zadoks 12-21 growth stages, when the crop is in the 3-leaf to tillering stage.

### **AND/OR**

**Late Spray:** Apply at a rate of 2.25 kilograms per hectare at the Feekes 10.5/Zadoks 59 growth stages, when the head is fully emerged but prior to flowering (heading stage).

For ground spray applications with flat fan nozzles, use 100 litres of water per hectare at a pressure of 345 kPa. Use 40 litres of water per hectare for aerial applications. Do not make more than two applications during the season and do not apply within 40 days of harvest.

**CAUTION: Do not graze the treated crop or cut for hay; there are not sufficient data to support such use.**

**LENTILS** – For the control of anthracnose and ascochyta blight, apply Penncozeb 75DF Raincoat Fungicide at the rate of 2.25 kilograms of product per hectare. Apply the first

application before bloom, when bud formation is evident. A second application should be applied 10 to 14 days after the initial application at early to mid bloom but prior to row closure. If conditions for disease development persist, a third application may be applied 10 – 14 days later. Do not apply more than three applications of Penncozeb 75DF Raincoat Fungicide per season. For ground spray applications with flat fan nozzles, use 100 – 200 litres of water per hectare at a pressure of 275 – 345 kPa. Use 40 litres of water per hectare for aerial applications. Do not apply within 35 days of harvest.

**SUGAR BEETS:** Cercospora leaf spot - Use. 2.25 kg Penncozeb Raincoat 75DF Fungicide per ha. Begin applications when disease first threatens and repeat at 7 to 10 day intervals. Apply in a minimum of 200 litres of water per hectare. Do not use treated tops for feed or food. Do not apply within 21 days to harvest. **DO NOT APPLY BY AIR.**

## **TOBACCO**

### **GREENHOUSE**

For blue mold control, apply 50 to 100 grams of Penncozeb 75DF Raincoat Fungicide in 25 to 50 litres of water and apply to 100 square meters. Spray seedlings to wet without run-off. Start spraying when plants are 1.5 centimeters across and then twice per week until transplanting.

## **HERBS**

**GINSENG** - For control of Alternaria leaf blight. Use Penncozeb 75DF Raincoat Fungicide at 4.4 kg/ha in 2,000 L of water. Apply when disease first appears and follow with five subsequent sprays at two-week intervals as part of a regular spray program. Do not apply within 30 days of harvest.

Do not feed ginseng foliage to livestock. **DO NOT APPLY BY AIR.**

**NOTE TO BUYER/USER:** READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS: The DIRECTIONS FOR USE for this product for the use described below were developed by persons other than United Phosphorus, Inc. and accepted for registration by Health Canada under the User Requested Label Expansion program. United Phosphorus, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed on the label. Accordingly, the Buyer and User assume all liability arising, and agree to hold United Phosphorus, Inc. harmless from any claim based on efficacy and/or phytotoxicity in connection with the use(s) described on this label.

### **DIRECTIONS FOR USE**

#### **Alfalfa Grown for Seed**

For control of Leaf Spot and Stem spot disease apply prior to 50% BLOOM. Use Penncozeb 75 DF Raincoat Fungicide at 1.46 kilograms per hectare; use a maximum of 3 applications per year.

Repeat 7 – 10 days after the first application and 10 days after the second application. Do not use for human or animal consumption. Do not graze the treated crop or cut for hay. Do not use on alfalfa sprout crops for human consumption. Do not use seed crop residue for animal consumption.

### **Ginseng**

For suppression of Phytophthora Blight (*Phytophthora cactorum*) apply 450 g of ACROBAT® 50 WP Fungicide + 4400 g of Penncozeb 75DF Raincoat Fungicide per hectare. Make the first application when conditions are ideal for disease to occur within the field or nearby but before symptoms are present in the field. Apply every 5 - 7 days under high disease pressure or every 7 - 10 days under low disease pressure.

Refer to the respective tank-mix partner label for additional recommendations, restrictions and precautions. Follow the most restrictive application directions for each of the tank mix partners with respect to the maximum number of applications, application timing and PHI.

Use 2000 L/ha water and ensure thorough coverage.

DO NOT apply more than 3 applications per season.

Do not apply within 30 days of harvest.

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

### **STORAGE AND DISPOSAL**

Keep away from fire and sparks. Store in a cool, dry well ventilated place. Do not allow to become wet or overheated in storage; decomposition, impaired activity, or fire may result. Keep container closed when not in use. Pallets of containers should not be stacked more than 3 high. Provide access aisles for each 2 rows. Decomposition produces foul odor; if observed, check for hot containers and remove immediately to open areas for disposal. Do not contaminate food or feed by storage or disposal.

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