



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

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

FEB 20 2004

Subject: Drexel Captan 80W  
EPA Reg. No. 19713-405  
Amendment dated September 30, 2003

Dear Ms Chan:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

1. In the "Personal Protective Equipment" section (page 4):
  - In the sentence "(including mixers, loader, applicators...)", add a closed parenthesis ")" after the word "treatments".
  - Add "protective eyewear" to the list of required PPE.
2. In the "Agricultural Use Requirements" section (page 7), add "protective eyewear" to the list of required PPE in the sentence starting "PPE required for early entry..."
3. In the section "Aerial Spray Drift Management", delete the sentence "These requirements do not apply to applications using dry formulations."
4. Break the section "Application Information" into two different sections
  - Original (or Wettable Powder) Formulation: Start instructions with the sentence "Do not apply this product with aerial or chemigation equipment". Delete all references to aerial applications from the instructions. Note on the master label that this section will be deleted from WSP labels.
  - WSP formulation: Use existing text and highlight the entire section.

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Drexel Captan 80W  
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One copy of the label stamped "Accepted with comments" is enclosed for your records. Please submit one copy of the final printed label that incorporates the required changes before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at [westin.robert@epa.gov](mailto:westin.robert@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "C. Giles-Parker", written over a horizontal line.

Cynthia Giles-Parker  
Product Manager (22)  
Fungicide Branch  
Registration Division (7505C)

Enclosure

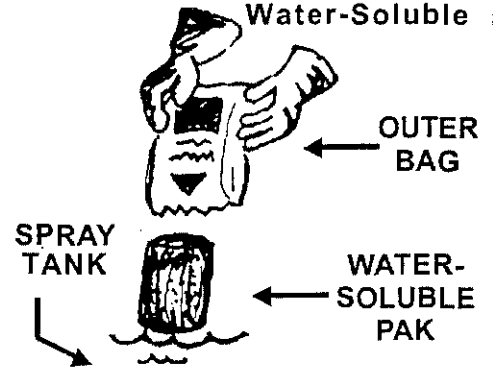
Note: Shaded graphics and text used only on WSP packaging label.

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# MASTER LABEL



Tear Open Outer Bag to Obtain the Water-Soluble Pak.



# Captan 80W

Fungicide

## Water-Soluble Packaging

405MSP-0903++ Pending

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ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
FEB 20 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act, the Administrator of the Environmental Protection Agency has found that the use of the pesticide Captan 80W is necessary to protect the public health and the environment from the pest which it is intended to control.

19713-405

**ACTIVE INGREDIENTS:**

Captan ..... 78.3%

Related derivatives ..... 1.7%

**OTHER INGREDIENTS:** ..... 20.0%

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

**KEEP OUT OF REACH OF CHILDREN**

**DANGER / PELIGRO**

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.)

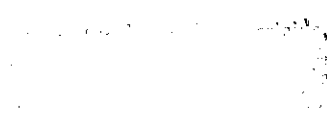
**See FIRST AID Below**

**EPA Reg. No. 19713-405**

**EPA Est. No. 19713-GA-1**

**Net Contents: 15 lbs.**

**Water-Soluble Package**



19713-405

## FIRST AID

### IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

### IF SWALLOWED:

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

### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.

### 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 treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**DANGER:** Causes irreversible eye damage. Harmful if swallowed or inhaled. May cause allergic skin reactions. Do not get in eyes. Avoid contact with skin and clothing. Avoid inhalation of dust or spray mist.

(Continued)

## **PRECAUTIONARY STATEMENTS (Cont.)**

### **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 an EPA chemical-resistance category selection chart.

**All mixers, loaders, applicators, flaggers, and other handlers (including handlers participating in transplanting as part of root dip treatments or greenhouse-soil treatments must wear:**

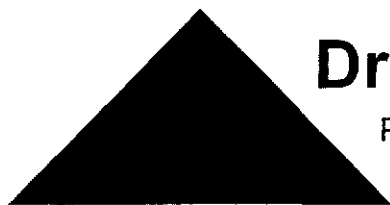
Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride (except for flaggers, pilots, and applicators driving motorized equipment), shoes plus socks and chemical-resistant apron when participating in dip treatments. In addition a NIOSH-approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N<sup>2</sup>, R, P or HE filter must be worn by all handlers except (1) applicators driving motorized equipment and (2) mixers/loaders/applicators participating in backpack, low pressure handwand/handgun and dip treatments and (3) mixers/loaders participating in aerial applications. Mixers/loaders participating in aerial applications must wear an air-purifying NIOSH-approved respirator with any N100, R100, or P100 filter.

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

## ENGINEERING CONTROLS

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.

**IMPORTANT:** Water-soluble packets when used correctly qualify as a closed loading system under the WPS. Mixers and loaders using water-soluble packets (1) must wear the PPE specified above for mixers and loaders and (2) must be provided a NIOSH-approved dust/mist respirator (type specified below), and (3) must have the respirator immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown. The respirator must be either a dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N<sup>2</sup>, R, P, or HE filter.



Manufactured By:

**Drexel Chemical Company**

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

**SINCE 1972**

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## USER SAFETY RECOMMENDATIONS

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

## ENVIRONMENTAL HAZARDS

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

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the REI of: 24 hours for Strawberries, Almonds, Apples, Apricots, Cherries, Nectarines, Plums / Fresh Prunes, Peaches.

48 hours for soil treatments and root dips: for soil and Greenhouse bench treatments and root dips, once the treatment and any seedling or transplanting tasks done as part of the treatment are complete, the 48 hour REI begins. **EXCEPTION:** Once the seeds or transplants are planted in the soil, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no contact with the soil subsurface.

Continued



48 hours for sod farms.

72 hours for Blueberries, Grapes, Raspberries, Blackberries and Dewberries.

96 hours for Ornamentals. **EXCEPTION:** For the last 48 hours of the REI, workers may enter the treated area to perform hand labor or other tasks involving contact with anything that has been treated, such as plants, soil or water, without time limit, if they wear the early-entry PPE listed below.

**Eye Protection:** To mitigate eye irritation concerns from post-application exposures, the Agency is requiring that, for at least seven days following the application of captan:

1. At least one container designed specifically for flushing eyes is available in operation condition at the WPS-required decontamination site for workers entering the area treated with captan, and
2. Workers are informed orally, in a manner they can understand:
  - that residues in the treated area may be highly irritating to their eyes,
  - that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes,
  - that if they do get residues in their eyes, they should immediately flush their eyes with the eyeflush container that is located at the decontamination site, and
  - how to operate the eyeflush container.

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

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

### **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 protect agricultural plants on farms, forests, nurseries, or greenhouses. Entry Restriction: Do not allow people or pets to enter treated areas until sprays have dried. For post-application fruit dips: Do not contact or allow others to contact the treated fruit until the treatment solution on the fruit has dried.

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Read all precautions and directions for use before using. Use only for claims listed and only as specified on this label. In order that pesticide residues on food and forage crops will not exceed Federal tolerances, use only at recommended rates and intervals and do not apply closer to harvest than specified. Do not apply or allow to drift to adjoining food, fiber or pasture crops. Drift of captan onto sensitive crops (e.g., D'Anjou pears) can cause severe phytotoxicity and crop loss. Consult State Agricultural Experiment Stations or State Agricultural Extension Service for additional information, as the time of applications needed will vary with the local conditions.

#### **CAPTAN AERIAL DRIFT LANGUAGE**

Do not allow this product to drift.

#### **FOLIAR SPRAY DRIFT MANAGEMENT**

Avoid spray drift from foliar applications is the responsibility of the applicator. Similar to aerial spray drift, the interaction of many equipment-and-weather-related factors determine the potential for spray drift from foliar applications. To protect water resources, the applicator and the grower are responsible for considering all these factors when making decisions.

#### **AERIAL SPRAY DRIFT MANAGEMENT**

Avoid spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to applications using dry formulations.

The distance of the outer most nozzles on the boom must not exceed three-fourth the length of the wingspan or rotor. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information below.

#### **AERIAL DRIFT REDUCTION ADVISORY**

This section is advisory in nature and does not supersede the mandatory label requirements.

#### **Information On Droplet Size**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

**Controlling Droplet Size**

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles - Use minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - Orienting nozzles so that the spray is released parallel of the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**Boom Length**

For some use patterns, reducing the effective boom length to less than three-fourth of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment**

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc).

**Wind**

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud in (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

**COMPATIBILITY AND PLANT SAFETY:** CAPTAN 80W can be combined safely and effectively at recommended dosage rates with most commonly used fungicides and insecticides, with the exception of oil and strongly alkaline materials. Alkaline materials such as spray lime, lime-sulfur and bordeaux mixtures will reduce the fungicidal activity of this product. Do not apply this product in combination with or immediately before or closely following oil sprays. Do not allow oil sprays on adjacent crops to drift onto crops which have been or will shortly be treated with this product. The time factor governing the safe interval between this product and oil sprays varies due to general climatic conditions; therefore, consult local agricultural spray programs and authorities to determine the proper timing. The use of spreaders which cause excessive wetting is not advised. Combinations with solvent formulations of organic phosphates should not be used. Combinations of captan and sulfur should not be used on crops sensitive to sulfur. Used at high rates or in drenching sprays, captan may cause a necrotic spotting of tender, immature leaves of certain varieties of Apples, Peaches, Plums and Cherries. This type of injury is most likely to occur in the early cover sprays during long periods of warm, cloudy, humid weather. To avoid the hazard of leaf spotting under such conditions, use this product and other spray materials at lowest recommended rates and avoid drenching trees.

**APPLICATION INFORMATION**

Applications can be made by aircraft or ground equipment (including concentrate and semi-concentrate equipment). Pour recommended amount of this material into nearly filled spray tank. Add balance of water. Maintain agitation during filling and spraying operations. Do not allow mixture to stand. Do not combine with emulsifiable liquids or wettable powders unless previous experience has proven them to be physically compatible and safe to plants. (Read "COMPATIBILITY AND PLANT SAFETY" section above.) For aerial or concentrate spray applications, apply the same amount of this product per acre as would normally be applied for dilute spray applications. Apply aerial or concentrate sprays in sufficient water for coverage. Do not apply this product through any type of irrigation system.

**GENERAL USE PRECAUTIONS**

Do not apply this product to seeds or seed pieces.

Except as specified, begin applications before or at first sign of disease and repeat as needed to maintain control, but observe use limitations. Unless otherwise specified, application can be made on the day of harvest. Maximum application is for a crop cycle. Crop cycle is defined as pre-bloom through post-harvest.

Apply the high rate and/or spray at shorter intervals when climatic conditions most favor disease(s). Apply the low rate and/or spray at longer intervals when climatic conditions least favor disease(s). If you are unaware of the climatic conditions favorable for disease(s) claimed for the specific use sites, you must consult with your State Agricultural Extension Service to learn of these conditions.

**IMPORTANT:** Read label carefully. Although most of the directions on this label may be followed nationwide, a few are limited to either the Eastern or Western U.S. Follow those directions for your growing area where specified.

**DIRECTIONS FOR ORIGINAL FORMULATION**

Pour needed amount into spray tank under agitation. If necessary, add a few drops of oil to avoid foaming. Application of this material through any type of irrigation equipment is prohibited.

**DIRECTIONS FOR WATER-SOLUBLE BAGS**

Paks containing this product are water-soluble. Do not allow pak to become wet prior to adding to the spray tank. Do not handle paks with wet hands. To prepare the spray mixture, drop the required number of unopened paks into spray tank while filling with appropriate amount of water. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the paks should be completely dissolved in approximately 5 minutes from the time they are added to the water. Use the specified dosage of this product in the amount of water necessary to give complete coverage. Determine the total amount to be added to the spray tank based on the rates in the "Crop" section.

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**Note:** Products containing boron and/or fertilizers will prevent the water-soluble packet from dissolving. Boron and/or fertilizer products must only be added after packet(s) have completely dissolved.

**FRUIT AND NUT CROPS**

Crop	Disease(s)	Rate per Acre	Number of Water-Soluble Paks
Almonds	Anthracnose, Blossom blight, Brown rot, Leaf blight, Scab, Shothole, Twig blight	2.5 to 5.7 lbs.	1 pak per 2.6 to 6 acres
	<p><b>SPECIFIC DIRECTIONS:</b> Apply in 20 to 300 gals. of water using ground equipment or in 5 to 20 gals. of water by air. Use 3.75 to 5.7 lbs. per acre (1 pak per 2.6 to 4 acres) when captan is used alone. Use 2.5 to 3.75 lbs. per acre (1 pak per 4 to 6 acres) in tank mixtures with fungicides having a similar spectrum. Apply at popcorn, bloom, petal fall post petal fall, and full cover sprays.</p>		
<p><b>Note:</b> Do not apply within 30 days of harvest. Hulls may be fed to livestock. Do not apply more than 25 lbs. of this product per acre (2.2 paks per acre [1 pak per 0.44 acre]) per crop cycle. See "GENERAL USE PRECAUTIONS" section for definition of crop cycle.</p>			
Apples (Eastern U.S.)	Black rot (Frogeye), Botrytis blossom end rot, Primary scab	5 lbs.	1 pak per 3 acres .
	<p><b>SPECIFIC DIRECTIONS:</b> Apply in 20 to 400 gals. of water using ground equipment or in 5 to 20 gals. of water by air. Apply at 5- to 7-day intervals as needed to maintain control in pre-bloom, bloom, petal fall and first cover sprays.</p>		
	Bitter rot, Black pox, Black rot, Botryosphaeria rot, Brooks fruit spot, Fly speck, Secondary scab, Sooty blotch	2.5 to 5 lbs.	1 pak per 3 to 6 acres
<p><b>SPECIFIC DIRECTIONS:</b> Apply in 20 to 400 gals. of water by using ground equipment or in 5 to 20 gals. of water by air. Apply at 10- to 14-day intervals in second and later cover sprays.</p>			

**Note:** Do not apply more than 40 pounds of this product per acre (2.7 paks per acre [1 pak per 0.38 acre]) per crop cycle. May be applied up to the day of harvest. If Powdery mildew is a problem, add 6 to 12 pounds of sulfur per acre to all post-bloom sprays until foliage matures.

Do not use this product in combination with or closely following or in alternation with wettable sulfur products on sulfur-sensitive varieties of Apples such as Red Delicious, Staymen, Baldwin, King, etc. as severe injury and defoliation may occur.

Apples (Western U.S.)	Primary scab*	2.5 to 5 lbs.	1 pak per 3 to 6 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water per acre using ground equipment or in 5 to 20 gals. of water by air. To reduce potential for tolerance development to other fungicides having a similar spectrum, the lower rate may be used in tank mixtures. *Secondary scab – In mid-Summer cover sprays, the dosage may be reduced to 2.5 pounds per acre (1 pak per 6 acres ).		
	Botrytis rot, Bull's eye rot (Pacific Northwest)	3.75 lbs.	1 pak per 4 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water using ground equipment or in 5 to 20 gals. of water by air. Make 1 or 2 applications with late cover sprays and one final spray prior to harvest.		

**Note:** Do not apply more than 40 pounds of this product per acre (2.7 paks per acre [1 pak per 0.38 acre]) per crop cycle. May be applied up to day of harvest.

Apricots	Brown rot (Twig blight), Jacket rot	1.88 to 3.13 lbs.	1 pak per 5 to 8 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 250 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply at red bud, bloom, 75% petal fall and in cover sprays. To reduce potential for tolerance development to other fungicides having a similar spectrum, use the lower rate in tank mixtures.		

**Note:** Do not apply more than 15.63 lbs. of this product per acre (1.1 paks per acre [1 pak per 0.96 acre]) per crop cycle. May be applied up to day of harvest.

Crop	Disease(s)	Rate per Acre	Number of Water-Soluble Paks
Blackberries, Dewberries, Raspberries	Anthracnose, Botrytis blight, Spur blight	2.5 lbs.	1 pak per 6 acres
	SPECIFIC DIRECTIONS: Apply when blossoms are in bud (young canes are 8 to 10 inches long). Make a second application two weeks later. Apply a Fall spray after old canes are removed.		
	Fruit rot	4 lbs.	4 paks per 15 acres
	SPECIFIC DIRECTIONS: Apply at early bloom (5 to 10% bloom) and again at full bloom. Additional applications can be made at 10 to 14 day intervals as needed. Apply as indicated above in 45 to 100 gallons of water per acre. Use the higher volume as foliage increases.		
<b>Note:</b> Do not apply within 3 days of harvest. Do not apply more than 12.5 pounds of this product per acre (1 pak per 1.2 acres) per season.			
Blueberries (Eastern U.S.)	Berry rot, Botrytis gray mold, Mummy berry	3.13 lbs.	1 pak per 5 acres
	SPECIFIC DIRECTIONS: Apply in sufficient water for thorough coverage or a minimum of 5 gals. of water by air. Start spray program when buds swell and earliest buds have loose scales. Repeat at 7-day intervals through blossom period. Repeat at 7- to 10-day intervals from late bloom.		
Blueberries (Western U.S.)	Berry rot, Botrytis gray mold, Mummy berry	1.25 to 3.13 lbs.	1 pak per 5 to 12 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water by ground or in 5 to 20 gals. of water by air. Begin at mid-bloom, repeat at 7- to 10-day intervals until maturity.		
<b>Note: (All Blueberries):</b> Do not apply more than 43.75 lbs. of this product per acre (2.9 paks per acre [1 pak per 0.34 acre]) per crop cycle. May be applied up to day of harvest.			



Cherries (Eastern U.S.)	Botrytis rot, Brown rot, Leaf spot	2.5 lbs.	1 pak per 6 acres
<p>SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply in pre-bloom, bloom, petal fall, shuck, cover and pre-harvest sprays. Application at 3- to 4-day intervals may be necessary during bloom to control Blossom blight. Repeat applications at 7- to 20-day intervals as needed to maintain control up to start of harvest. If Powdery mildew is a problem, add 6 lbs. of sulfur per acre to the petal fall, shuck and early cover sprays. If sulfur is added, this product may be reduced to 1.25 lbs. per acre [1 pak per 12 acres] in these sprays.</p> <p><b>Post-harvest Sprays:</b> Leaf spot - Apply 2.5 lbs. of this product per acre (1 pak per 6 acres) per crop cycle in 20 to 200 gallons of water using ground equipment. Apply immediately after harvest and repeat application in 10 to 14 days.</p>			
Cherries (Western U.S.)	Blossom blight, Brown rot, Brown rot (Fruit), Leaf spot	1.88 to 2.5 lbs.	1 pak per 6 to 8 acres
<p>SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply in pre-bloom, bloom, petal fall, shuck, cover and pre-harvest sprays.</p>			
<p><b>Note: (All Cherries):</b> Do not apply more than 17.5 lbs. of this product per acre (1.2 paks per acre [1 pak per 0.86 acre]) per crop cycle. May be applied up to day of harvest.</p>			
Grapes (Except CA)	Downy mildew, Leaf spot, Phomopsis cane, Suppression of Black rot	1.25 to 2.5 lbs.	1 pak per 6 to 12 acres
<p>SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water using ground equipment or in 7 to 20 gals. of water by air when shoots are 0.5 to 1.5 inches long, 3 to 5 inches long and 9 to 12 inches long. Repeat just before bloom, immediately after bloom and continue at 10- to 14-day intervals as long as disease conditions persist. Use the lower rate when spraying less susceptible Grape varieties or when conditions are less favorable for disease development. Use the higher rate on susceptible Grape varieties and during periods of weather highly favorable for disease development.</p>			
Grapes (CA)	Bunch rot (Botrytis)	2.5 lbs.	1 pak per 6 acres
<p>SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water using ground equipment or in 7 to 20 gals. of water by air. Make 2 applications before bloom and one immediately after bloom. Repeat periodically making 3 cover applications before bunches close.</p>			

Crop	Disease(s)	Rate per Acre	Number of Water-Soluble Paks
(Con't.) Grapes (CA)	Leaf spot, Phomopsis cane (current season infection)	2 to 2.5 lbs.	2 paks per 12 to 15 acres
	<p>SPECIFIC DIRECTIONS: Apply in 20 to 200 gals. of water using ground equipment or apply 2.5 lbs. of this product per acre (1 pak per 6 acres) in 7 to 20 gals. of water by air. Apply first spray when green tissue begins to show, but before shoots are 1 inch long and repeat application when shoots are 6 to 8 inches long.</p>		
<p><b>Note: (All Grapes):</b> Do not apply more than 15 lbs. of this product per acre (1 pak per acre) per crop cycle. May be applied up to day of harvest.</p>			
Nectarines	Brown rot, Scab	2.5 to 5 lbs.	1 pak per 3 to 6 acres
	<p>SPECIFIC DIRECTIONS: Apply in 20 to 250 gals. of water using ground equipment or in 10 to 20 gals. of water by air. To reduce the potential for tolerance development to other fungicides having a similar spectrum, use the lower rate in tank mixtures. Apply in full pink, bloom, petal fall, shuck, cover and pre-harvest sprays. Applications at 3- to 4-day intervals may be necessary during bloom to control Blossom blight. Repeat applications at 7- to 14-day intervals as necessary to maintain control. Continue applications throughout harvest if conditions favor Brown rot. If Powdery mildew is a problem, add 7.5 lbs. of sulfur per acre to the petal fall and shuck sprays and early cover spray. If sulfur is added, this product may be reduced to 1.6 lbs. per acre (1 pak per 9 acres) in these sprays.</p>		
	Coryneum blight (Peach blight, Shothole)	2.5 to 5 lbs.	1 pak per 3 to 6 acres
<p>SPECIFIC DIRECTIONS: Apply in 20 to 250 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply in pink bud, full bloom, petal fall and cover sprays as necessary and as a post-harvest spray (but before leaves drop).</p>			
<p><b>Note:</b> Do not apply more than 30 lbs. of this product per acre (2 paks per acre [1 pak per 0.5 acre]) per crop cycle (including post-harvest sprays). Pre-harvest sprays may be applied up to day of harvest.</p>			

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Peaches	Brown rot, Scab	2.5 to 5 lbs.	1 pak per 3 to 6 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water using ground equipment or in 10 to 20 gals. of water by air. To reduce the potential for tolerance development to other fungicides having a similar spectrum, use the lower rate in tank mixtures. Apply at full pink, bloom, petal fall and shuck stages and in cover and pre-harvest sprays. When conditions are favorable, make applications at 3- to 4-day intervals during bloom to control Blossom blight. Then repeat application at 7- to 14-day intervals as needed to maintain control. Continue applications through harvest if conditions favor Brown rot. If Powdery mildew is a problem, add 12 lbs. of sulfur per acre to the petal fall, shuck and early cover spray. If sulfur is added, this product may be reduced to 2.5 lbs. per acre (1 pak per 6 acres) in these sprays.		
	Coryneum blight (Peach blight, Shothole)	5 lbs.	1 pak per 3 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply at pink bud, full bloom, petal fall stages and in cover sprays as necessary and as a post-harvest spray (but before leaf drop).		
<b>Note:</b> Do not apply more than 40 lbs. of this product per acre (2.7 paks per acre [1 pak per 0.38 acre]) per crop cycle (including post-harvest sprays). Pre-harvest spray may be applied up to day of harvest.			
Plums, Fresh Prunes (Eastern U.S.)	Brown rot	3.75 lbs.	1 pak per 4 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 300 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Apply in full pink, bloom and petal fall sprays. Repeat applications at 7- to 14-day intervals as needed to maintain control. Continue applications through harvest if conditions favor Brown rot. The addition of a neutral spreader has improved coverage.		
Plums, Fresh Prunes (Western U.S.)	Brown rot	2.5 to 3.75 lbs.	1 pak per 4 to 6 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 300 gals. of water using ground equipment or in 10 to 20 gals. of water by air. Use the lower rate when tank mixes with fungicides of similar spectrum of activity are used. Apply at green bud, popcorn, bloom and petal fall stages. Repeat in cover sprays as conditions warrant.		
	Prune russet scab (Lacy scab)	2.5 to 3.75 lbs.	1 pak per 4 to 6 acres
	SPECIFIC DIRECTIONS: Apply in 20 to 300 gals. of water using ground equipment. Apply at full bloom.		
<b>Note: (All Plums, Prunes):</b> Do not apply more than 33.75 lbs. of this product per acre (2.25 paks per acre [1 pak per 0.44 acre]) per crop cycle. May be applied up to day of harvest.			

Crop	Disease(s)	Rate per Acre	Number of Water-Soluble Paks
Strawberries	Botrytis (Gray mold), Leaf spot	1.88 to 3.75 lbs.	1 pak per 4 to 8 acres
	SPECIFIC DIRECTIONS: Apply in sufficient water for thorough coverage by ground equipment or in 10 to 20 gals. of water by air. Begin applications when new growth starts in the Spring and before fruit starts to form. Repeat at 7- to 14-day intervals. Under conditions favorable to Fruit rot, continue applications through harvest period treating immediately after each picking.		
<b>Note:</b> Do not apply more than 30 lbs. of this product per acre (2 paks per acre [1 pak per 0.5 acre]) per crop year. May be applied up to day of harvest.			

**NOTE:** Restricted Entry Interval (REI) for all uses listed above is 24 hours. After expiration of the 24 hour period, no personal protective equipment is required. **Exception:** The REI for Grapes, Raspberries, Blackberries, Dewberries and Blueberries is 72 hours. If applying as a directed/banded spray; use band rate of this product according to the following formula:

$$\frac{\text{Plant Bed Width (inches)}}{\text{Row Spacing (inches)}} \times \text{Broadcast rate per acre} = \text{Banded rate of this product per acre}$$

### SPECIAL USES

**PEACH PRE-PLANT ROOT DIP (CA):** For preventative pre-plant dip treatment for Crown gall, use 2.5 pounds of this product plus 3.2 pints of diluted sodium hypochlorite (5.25% household bleach) per 100 gallons of water. Wash nursery trees to remove soil from roots. Cut off all dormant buds and suckers in crown area and prune root system if necessary. Submerge the entire dormant tree for 5 minutes. Recharge dip during operation at a rate of 3.2 pints of diluted sodium hypochlorite per 100 gallons of water.

**\* RATES PER 100 GALLONS NOT ON WSP LABEL**

RATES PER 100 GALLONS NOT ON WSP LABEL

**POST-HARVEST FRUIT APPLICATION:**

For use in mechanical fruit-dip operations only. Hand dipping of fruit is prohibited.

For control of various molds and storage rots (Botrytis, Gloeosporium, Rhizopus), use as a post-harvest dip or wash on the following fruits — **Apples, Cherries, Pears:** Use 1.6 pounds of this product per 100 gallons of water. Apply as a spray or in a dip tank. When used as a dip, recharge wash solution periodically when tank volume is reduced by 25%. Bring water back to volume and add 1.6 pounds of this product for each 100 gallons added. At end of every 8 hour shift, empty tank, flush and charge with fresh dilution. Do not allow dip tank solution to stand overnight. Maintain continuous agitation during dipping operation.

Do not allow workers or others to contact the treated fruit until the surface has dried.

**DISPOSAL OF LEFTOVER POST-HARVEST TREATMENT MIXTURE:**

Leftover dip or spray mixtures containing captan may be used as a foliar spray for the same crop in the case of Apples and Cherries (but not Pears) as treated by the dip or spray mixture or to registered turf Ornamental sites. Observe all restrictions such as maximum pounds applied per application and season. When calculating application rates, if analytical services are not available to determine the exact quantity of captan remaining in the mixture, assume that the tank still contains 1.6 pounds of this product per 100 gallons of water. If the dip or spray mixture contains other pesticides in addition to captan, refer to the product label(s) for information regarding disposal. Captan wastes are acutely hazardous to the eyes. Improper disposal of spray or dip tank mixtures is a violation of Federal Law. If the leftover dip or spray mixture cannot be disposed of in the manner prescribed above, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance concerning the disposal of spent or excess dip tank mixtures.

**ORNAMENTALS**



The Restricted Entry Interval for these uses is 96 hours, except 48 hours for soil treatments, root dips, and Grass.

**Use Precautions**

Do not apply spray to ornamental plants listed below beyond the point of drip from the leaf surface. When applying as a drench, apply only sufficient mixture to wet the surface of the soil except when the dose is specified in terms of volume of mixture per square foot of area.

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Crop	Disease(s)	Rate per 100 Gallons of Water
Azaleas	Damping-off of cuttings	2.3 lbs.
	SPECIFIC DIRECTIONS: Dip cuttings before bedding.	
	Petal blight	1.25 lbs.
	SPECIFIC DIRECTIONS: Apply to soil area around plants and spray flowers just before bloom. Repeat at 7- to 14-day intervals through bloom	
Begonias (Tuberous)	Damping-off, Tuber rot	2.5 lbs.
	SPECIFIC DIRECTIONS: Dip tubers for 30 minutes, drain and plant.	
Camellias	Petal blight	0.63 lb.
	SPECIFIC DIRECTIONS: Apply to drench soil around plants beginning when flowers start to open. Repeat at 7- to 10-day intervals through bloom.	
Carnations:	Alternaria leaf spot, Rust	1.25 lbs.
	SPECIFIC DIRECTIONS: Begin application at first sign of disease. Repeat at 7- to 10-day intervals. Shorten intervals during frequent rains and heavy dews.	
	Damping-off of cuttings	2.3 lbs.
	SPECIFIC DIRECTIONS: Dip cuttings before bedding.	
Chrysanthemums	Botrytis flower blight, Septoria leaf spot	1.5 lbs.
	SPECIFIC DIRECTIONS: Apply at first sign of disease. Repeat at 7- to 10-day intervals.	
	Damping-off of cuttings	2.3 lbs.
	SPECIFIC DIRECTIONS: Dip cuttings before bedding.	


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Dichondra (CA Only)	White mold ( <i>Sclerotium rolfsii</i> )	1.25 lbs.
	SPECIFIC DIRECTIONS: Apply 1 gallon of spray per 10 square feet. Make 2 to 3 applications at 7-day intervals.	
Gladiolus (Corms)	Corm rot and Decay, Damping-off	3.75 ozs. per 10 gals. water*
	SPECIFIC DIRECTIONS: (*Equivalent to 1 pound of this product in 42.75 gals. of water) Dip corms 20 to 30 minutes. Drain and plant.	
Grasses (Ornamental in non-pastured areas only)	Brown patch, Brown spot (on St. Augustine grass), Damping-off, Leaf spot, Melting out, Seedling blight	1.25 lbs.
	SPECIFIC DIRECTIONS: Apply 10 gallons of spray per 1,000 square feet. Begin when growth starts in Spring. Repeat at 7- to 14-day intervals throughout season. Do not graze treated areas or feed clippings to livestock.	
Grasses (Lawn Seedbeds)	Damping-off and other soil-borne diseases	1.25 lbs.
	SPECIFIC DIRECTIONS: Use 0.2 to 0.25 pound in 15 gallons of spray per 1,000 square feet. Cultivate into upper 3 to 4 inches before planting.	
Roses	Black spot, Botrytis blossom blight	1.25 lbs.
	SPECIFIC DIRECTIONS: Begin at first growth or first sign of disease. Repeat at 7- to 14-day intervals and more frequently during frequent rains and heavy dews.	
Soil and Greenhouse bench treatment	Preplant treatment for damping-off, root rot diseases on seedlings or transplants of roses (and other shrubs, trees, flowers) and lawn seedbeds.	1.25 lbs.
	SPECIFIC DIRECTIONS: Use at a rate of 15 gallons of spray per 1,000 square feet. Cultivate into upper 3 to 4 inches of soil before planting. The REI for soil and greenhouse bench treatments is 48 hours. Once the treatment, and immediately following seeding and transplanting activities are complete, the surface of the soil cannot be disturbed for 48 hours.	

RATES PER 100 GALLONS NOT ON WSP LABEL

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep pesticide in original container. Keep container tightly closed when not in use. Protect from excessive heat. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Do not reuse container. Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

**WATER-SOLUBLE PAKS:** Carefully open outer bag. Never open the water-soluble pouch.



**WARRANTY—CONDITIONS OF SALE**

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.