PM 23 10182-164 Page 1715

DEC 23 1993

Ms. Dana Enyedy Zeneca Agricultural Products 1800 Concord Pike Wilmington, DE 19897

Dear Ms. Enyedy:

Subject: Captan 80WP

EPA Registration No. 10182-164

Application Dated December 2, 1993 and Letter

Dated December 16, 1993, Request To Revise Labeling To Comply with Residue Chemistry Update of July 22,

1991 and February 12, 1993

The proposed amendment to the registration of the subject pesticide product have been reviewed and found to be acceptable for registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended provided that you:

- 1. Revise the last line of page 9, to read: "Applications at 3 to 4 day intervals may .....".
- 2. Submit five (5) printed copies of the final printed label before releasing the product for shipment.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Joanne I. Miller Product Manager (23) Fungicide-Herbicide Branch Registration Division (7505C)

Enclosure

EWilson:Diskette NC-2: 12-21-93

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CAPTAN 80-WP

Con one change CAP164.RSK - RS-121493K

Lo be rund of . C. ACCEPTED with COMMENTS In EPA Letter Dated

In EPA Letter Dated DEC 23 1993

## Captan 80-WP

A Fungicide For Plant Disease Control

Under the Federal Insecticide, Fundicide, and Redenticide Act as amended, for the posticide registered under EPA Rog. No.

**ACTIVE INGREDIENTS** 

*Captan	. 78.3%
Related Derivatives	. 1.8%
INERT INGREDIENTS	. <u>19.9%</u>
TOTAL	. 100.0%

<sup>\*</sup>N-Trichloromethylthio-4-cyclohexene-1,2-dicarboximide

Captan 80-WP is a microfine wettable powder for use in water as a spray for the control of certain fungal diseases of fruit, and ornamental crops, and as a soil treatment for the control of certain seed roots and damping-off diseases.

# **KEEP OUT OF REACH OF CHILDREN**

# DANGER PELIGRO

### PRECAUCION AL USUARIO:

Si usted no lee ingles, no usu este producto hasta que la etiqueta le haya sido explicada ampliamente.

### CAUSES IRREVERSIBLE EYE DAMAGE

EPA Reg. No. 10182-164 EPA Est. No.

> Made in U.S.A. ZENECA Ag Products ZENECA inc. Wilmington, DE 19897

. . . .

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# STATEMENT 'F PRACTICAL TREATMENT

### **FIRST AID**

If a known exposure occurs or is suspected, immediately start the procedures given below and contact a POISON CENTER, PHYSICIAN, OR THE NEAREST HOSPITAL. Describe the type and extent of exposure, the victim's symptoms and follow the advice given.

IF IN EYES: Flush with plenty of water. Call a physician.

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solutions, or if these are not available, drink large quantities of water. Avoid alcohol.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if abnormal reaction occurs.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL 1-800-F-A-S-T-M-E-D (327-8633)

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



## **PRECAUTIONARY STATEMENTS**

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### DANGER

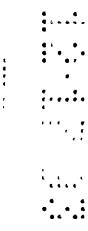
Causes irreversible eye damage. Harmful if swallowed or inhaled. May cause allergic skin reactions. Do not get in eyes. Wear goggles or face shield when handling. Avoid contact with skin and clothing. Avoid inhalation of dust or spray mist. Remove and separately launder clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. For terrestrial uses, 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 clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources.

## STORE IN COOL, DRY PLACE -- PROTECT FROM EXCESSIVE HEAT

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States



### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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.

COMPATIBILITY AND PLANT SAFETY: Captan 80-WP 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 mixture will reduce the fungicidal activity of Captan 80-WP. Do not apply Captan 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 Captan. The time factor governing the safe interval between Captan 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 Captan and other spray materials at lowest recommended rates and avoid drenching trees.

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 information).

For aerial or concentrate spray applications, apply the same amount of Captan 80-WP 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.



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## **USE PRECAUTIONS**

Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and separately launder clothing before reuse.

A NIOSH- or MSHA-approved dust mask must be worn when mixing and loading this product. When mixing and loading this product, handlers must wear a long-sleeved shirt and long pants or a coverall that covers all parts of the body except the head, hands and feet. Wear chemical resistant gloves, goggles or a face shield and a chemically resistant apron.

Field workers and harvesters must wear chemical resistant gloves if entering treated areas within 4 days following applications. Leather or fabric gloves are not acceptable.

During application, even from a tractor with a completely enclosed cab or from an aircraft with an enclosed cockpit, a long-sleeved shirt and long-legged pants must be worn. Chemically resistant gloves must be available in the cab or cockpit and worn while exiting.

Only the applicator is permitted to be in the greenhouse during application of Captan. Open vents to greenhouse during application and for at least 1 hour after application.

Workers planting in Captan-treated soil must wear chemical resistant gloves.

AFTER WORK: Take off all clothes and shoes. Shower using soap and water. Do not wear contaminated clothing. Wash protective clothing and equipment with soap and water after each use. Personal clothing wom during use must be laundered separately from household articles. Clothing and protective equipment heavily contaminated or drenched with Captan must be destroyed according to state and local regulations.

#### R. SNTRY

- Do not apply this product in such a manner as to directly, or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons.
- Do not allow persons to enter treated areas within 4 days following application unless a long-sleeved shirt and long pants or a coverall that covers all parts of the body except the head, hands and feet and chemically resistant gloves are worn. Conspicuously post reentry information at site of application.
- Certain states may require more restrictive reentry intervals for various crops treated with this product. Consult your State Department of Agriculture for further information.
- Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers.



### **GENERAL USE PRECAUTIONS**

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 prebloom through postharvest. 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.

### **FRUIT AND NUT CROPS**

ALMONDS: Brown rot twig and blossom blight, shothole, scab, leaf blight -- Apply 2½ to 5½ pounds Captan 80-WP per acre in 20 to 300 gallons of water using ground equipment or in 5 to 20 gallons of water by air. Use 3¾ to 5¾ pounds per acre when Captan is used alone. Use 2½ to 3¾ pounds per acre in tank mixtures with fungicides having a similar spectrum. Apply at popcorn, bloom and petal fall stages and up to 5 weeks after petal fall. Do not apply within 30 days of harvest. Hulls may be fed to livestock. Subsequent applications may be made up to 12 days of harvest in accordance with pest infestations and state agricultural extension service recommendations, provided the hulls are not fed to dairy animals or animals being finished for slaughter. Do not apply more than 28½ pounds per acre per crop cycle (see GENERAL USE PRECAUTIONS section on Page \_\_\_\_\_\_ for definition of crop cycle).

APPLES (Eastern U.S.): Primary scab, black rot (frogeye), botrytis blossom-end-rot -- Apply 3% pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 5 to 20 gallons of water by air. Apply at 5 to 7 day intervals as needed to maintain control in prebloom, bloom, petal fall and first cover sprays.

Secondary scab, Brooks fruit spot, scoty blotch, fly speck, black rot, black pox, botryosphaeria rot, bitter rot -- Apply 2½ to 3¾ pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 5 to 20 gallons of water by air. Apply at 10 to 14 day intervals in second and later cover sprays. Do not apply within 14 days of harvest. Do not apply more than 40 pounds of Captan 80-WP per acre per crop cycle.

Powdery mildew -- If powdery mildew is a problem add, 6 to 12 pounds sultur per acre to all postbloom sprays until foliage matures. CAUTION -- Do not use Captan 80-W/P in combination with or closely following, or in alternation with wettable sulfur products on sultur sensitive varieties of apples such as Red Delicious, Staymen, Baldwin, King, etc. as severe injury and defoliation may occur.

APPLES (Western U.S., except CA): Primary scab -- Apply 3¾ pounds Captan 80-WP per acre in a high volume application for preblossom sprays. In mid-summer, the dosage may be reduced to 2½ pounds per acre in high volume applications. (Pacific northwest) - Buil's eye



rot, Botrytis rot -- Apply 3-3/4 pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 5 to 20 gallons of water by air. Make 1 or 2 applications with late cover sprays and 1 final spray prior to harvest. Do not apply within 14 days of harvest. Do not apply more than 40 pounds of Captan 80-WP per acre per crop cycle.

APPLES (California): Primary scab — for prebloom through petal fall sprays, apply 2½ to 3¾ pounds Captan 80-WP in 20 to 400 gallons of water per acre using ground equipment or in 5 to 20 gallons of water by air. The lower rate may be used in tank mixtures with fungicides having similar spectrum of activity.

Secondary scab -- in mid-summer cover sprays, the dosage may be reduced to 2½ pounds per acre. Do not apply with 21 days prior to harvest. Do not apply more than 18¾ pounds of Captan 80-WP per acre per crop cycle.

APPLES (SEVERE SUMMER DISEASE DEVELOPMENT) (Arkansas, Louisiana, Missouri, Texas and states east of the Mississippi River Only): Upon recommendation of the local cooperative extension office, during periods highly favorable for severe summer disease development (black rot, bitter rot, sooty blotch, flyspeck, etc.), apply 5 pounds of Captan 80-WP per acre on a 7 to 10 day schedule. Do not apply more than 40 pounds of Captan 80-WP per acre per crop cycle. May be applied up to day of harvest.

APRICOTS: Brown rot (twig blight), jacket rot -- Apply 1% to 3% pounds Captan 80-WP per acre in 20 to 250 gallons of water using ground equipment or 10 to 20 gallons of water by air. Apply in red bud, bloom, 75% petal fall, and cover sprays.

To reduce the potential for disease resistance development to other fungicides having a similar spectrum, use the lower rate in tank mixtures. Do not apply within 7 days prior to harvest. Do not apply more than 15% pounds per acre per crop cycle.

BLUEBERRIES (Eastern U.S.): Botrytis gray mold or berry rot, mummy herry - Apply 31/2 pounds Captan 80-WP per acre in sufficient water for thorough coverage or a minimum of 5 gallons 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. Do not apply more than 43% pounds per acre per crop cycle.

BLUEBERRIES (Western U.S., except CA): Botrytis gray mold or berry rot, mummy berry - Apply 1½ pounds Captan 80-WP per acre in sufficient water for thorough coverage or a minimum of 5 gallons of water by air. Begin at mid-bloom, repeat at 7 to 10 day intervals until maturity. Do not apply more than 43¾ pounds per acre per crop cycle.

BLUEBERRIES (California): Botrytis gray mold or berry rot, mummy berry 4 Apply 1 1/4 to 3 1/4 pounds Captan 50-WP per acre in 20 to 200 gallons of water by ground of 5 to 20 gallons of water by air. Begin at mid-bloom, repeat at 7 to 10 day intervals until maturity: Do not apply more than 15% pounds per acre per season. Do not apply within 4 days of nervest.

CHERRIES (Eastern U.S.): Brown rot, leaf spot, Botrytis rot -- Apply 2½ ocunds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in prebloom, bloom, petal fall, shuck, cover and preharvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom tilight.



Repeat applications at 7 to 10 day intervals as needed to maintain control up to start of harvest. If powdery mildew is a problem, add 6 lbs. sulfur per acre to the petal fall, shuck or early cover sprays. If sulfur is added, Captan 80-WP may be reduced to 1½ pounds per acre in these sprays. Do not apply more than 17½ pounds per acre per crop cycle.

Postharvest sprays: leaf spot -- Apply 2½ pounds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment. Apply immediately after harvest and repeat application in 10 to 14 days.

CHERRIES (Western U.S., except CA): Brown rot blossom blight, brown rot (fruit), leaf spot -- Apply 2½ pounds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in prebloom, bloom, petal fall, shuck, cover and preharvest sprays. Do not apply more than 17½ pounds per acre per crop cycle

CHERRIES (California): Brown rot blossom blight, brown rot (fruit), leaf spot -- Apply 1% to 2½ pounds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in prebloom, bloom, petal fall, shuck, cover, and preharvest sprays. Do not apply more than two late cover preharvest sprays. Do not apply within 7 days of harvest. Do not apply more than 17½ pounds per acre per crop cycle.

GRAPES (U.S., except CA): Phomopsis cane and leaf spot, downy mildew, suppression of black rot -- Apply 1½ to 2½ pounds Captan 80-WP per acre in 20 to 200 gallons water using ground equipment or in 7 to 20 gallons water by air; when shoots are ½ to 1½ inches long, when shoots are 3 to 5 inches long, and when shoots are 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. Do not apply more than 15 pounds of Captan 80-WP per acre per crop cycle. Do not apply within 14 days of harvest.

GRAPES (California): Bunch rot (Botrytis) — Apply 2½ pounds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment or in 7 to 20 gallons of water by air. Make 2 applications before bloom and 1 immediately after bloom. Repeat periodically making 3 cover applications before the bunches close. Phomopsis cane and leaf spot (current season infection) -- Apply 2 to 2½ pounds Captan 80-WP per acre in 20 to 200 gallons of water using ground equipment or apply 2½ pounds Captan 80-WP per acre in 7 to 20 gallons 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. Do not apply more than 15 pounds of Captan 80-WP per acre per crop cycle. Do not apply within 45 days of harvest. Do not conduct cultural practices which require intensive foliar contact (tipping, cluster thinning, cane throwing) within 7 days after application.

NECTARINES (U.S., except CA): Brown rot, scab — Apply 5 pounds Captan &0-WP per acre in 20 to 250 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in full pink, bloom, petal fall, shuck, cover and preharvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom blight. Repeat application at 7 to 14 day intervals as needed to maintain control. Continue applications throughout harvest if conditions favor brown rot. If powdery mildew is a problem, add 7½ pounds sulfur per acre



to the petal fall, shuck and early cover spray. If sulfur is added, Captan 80-WP may be reduced to 2½ pounds per acre in these sprays.

Coryneum blight (peach blight, shothole) -- Apply 5 pounds Captan 80-WP per acre in 20 to 250 gallons of water using ground equipment or in 10 to 20 gallons 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).

Do not apply more than 30 pounds per acre per crop cycle.

NECTARINES (California): Brown rot, scab -- Apply 2½ to 5 pounds Captan 80-WP per acre in 20 to 250 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Use the lower rate when tank mixed with a fungicide that controls a similar spectrum of diseases. Apply in full pink, bloom, petal fall, shuck, cover and preharvest sprays. Applications at 3 to 4 day intervals may be necessary during bloom to control blossom blight. Repeat application at 7 to 14 days intervals as conditions favor brown rot. If powdery mildew is a problem, add 7½ pounds sulfur per acre to the petal fall, shuck and early cover spray. If sulfur is added, Captan 80-WP may be reduced to 1% pounds per acre in these sprays.

Coryneum blight (peach blight, shothole) — Apply 2½ to 5 pounds Captan 80-WP per acre in 20 to 250 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in pink bud, full bloom, petal fall and cover sprays as necessary and as a postharvest spray (but before leaves drop).

Do not apply within 7 days of harvest. Do not apply more than two late cover/preharvest sprays. Do not apply more than 25 pounds per acre per crop cycle.

PEACHES (U.S., except CA): Brown rot, scab -- Apply 5 pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in full pink, bloom, petal fall, shuck stages and in cover and preharvest sprays. When conditiona are favorable, make applications at 3 to 4 day intervals may be necessary 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 pounds sulfur per acre to the petal fall, shuck and early cover spray. If sulfur is added, Captan 80-WP may be reduced to 2½ pounds per acre in these sprays.

Coryneum blight (peach blight, shothole) -- Apply 5 pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in pink bud, full bloom, petal fall stages and cover sprays as necessary and as a post harvest spray (but before leaves drop).

Do not apply more than 40 pounds per acre per crop cycle.

PEACHES (California): Brown rot, scab — Apply 2½ to 5 pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Use the lower rate when tank mixed with a fungicide that controls a similar spectrum of dispascs. Apply in full pink, bloom, petal fall, shuck stages and in cover and preharvest sprays. Applications at 3 to 40 day intervals may be necessary during bloom to control bloom. Blight.



Repeat application at 7 to 10 day intervals as needed to maintain control. Continue applications through harvest if conditions favor brown rot. If powdery mildew is a problem, ass 12 pounds sulfur per acre to the petal fall, shuck and early cover spray. If sulfur is added, Captan 80-WP may be reduced to 1% pounds per acre in these sprays.

Coryneum blight (peach blight, shothole) -- Apply 5 pounds Captan 80-WP per acre in 20 to 400 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply in pink bud, full bloom, petal fall stages and cover sprays as necessary and as a postharvest spray (but before leaves drop).

Do not apply within 7 days of harvest. Do not apply more than two late cover/preharvest sprays. Do not apply more than 25 pounds per acre per crop cycle.

PLUMS, FRESH PRUNES (Eastern U.S.): Brown rot -- Apply 3¾ pounds Captan 80-WP per acre in 20 to 300 gallons of water using ground equipment or in 10 to 20 gallons 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. Do not apply more than 33¾ pounds per acre per crop cycle.

PLUMS, FRESH PRUNES (Western U.S., except C4): Brown rot -- Apply 3¾ pounds Captan 80-WP per acre in 20 to 300 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Apply at green bud, popcorn, bloom and petal fall stages. Repeat in cover sprays as conditions warrant. Prune-russet seab (lacy-seab) (in California only)—Apply 3-3/4 pounds Captan 80 WP per acre in 20 to 300 gallons of water using ground equipment. Apply at full bloom. Do not apply more than 33¾ pounds per acre per crop cycle.

PLUMS, FRESH PRUNES (California): Brown rot -- Apply 2½ to 3¾ pounds Captan 80-WP per acre in 20 to 300 gallons of water using ground equipment or in 10 to 20 gallons of water by air. Use the lower rate when tank mixed with a fungicide that controls a similar spectrum of diseases. Apply at green bud, popcom, bloom and petal fall stages. Repeat in cover sprays as conditions warrant. Prune russet scab (lacy scab) -- Apply 2½ to 3¾ pounds Captan 80-WP per acre in 20 to 300 gallons of water using ground equipment. Apply at full bloom. Do not apply within 7 days of harvest. Do not apply more than two late cover/preharvest sprays. Do not apply more than 18¾ pounds per acre per crop cycle.

STRAWBERRIES (U.S., except CA): Botrytis (gray mold), leaf spot -- Apply 3¾ pounds Captan 80-WP per acre in sufficient water for thorough coverage by ground equipment or in 10 to 20 gallons of water by air. Begin applications when new growth starts in the sping and before fruit starts to form. Repeat at weekly intervals. Under conditions favorable to fruit rot, continue applications through harvest period treating immediately after each picking. Do not apply more than 30 pounds per acre per crop cycle.

STRAWBERRIES (California): Botrytis (gray mold), leaf spot -- Apply 1% to 3% pounds , Captan 80-WP per acre in sufficient water for thorough coverage by ground equipment of in 10 to 20 gallons of water by air. Begin applications when new growth starts in the spring and before fruit starts to form. Repeat at 10 to 14 day intervals as disease conditions war and Under conditions favorable to fruit rot, continue applications through harvest period treating



immediately after picking. Do not apply within 48 hours prior to harvest. Do not apply more than 20 pounds per acre per crop cycle.

### **SPECIAL USES**

PEACH (NURSERY STOCK) PREPLANT ROOT DIP (California): Preventative preplant dip treatment for crown gall. Use 2½ pounds Captan 80-WP plus 3.2 pints diluted sodium hypochlorite (5.25% household bleach) per 100 gallons 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 as necessary to maintain a proper-concentration of 200 ppm chlorine. Check the concentration frequently using a chlorine test kit. Recharge dip during operation at a rate of 3.2 pints diluted sodium hypochlorite per 100 gallons of water.

POSTHARVEST DIP FRUIT APPLICATION: For control of various molds and storage rots (Botrytis, Gleosporium, Rhizopus). Use as a post harvest dip or wash on the following fruits: Apples, Cherries, Pears -- Use 13/s pounds Captan 80-WP 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 13/s pound Captan 80-WP 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.

DISPOSAL OF LEFTOVER POSTHARVEST TREATMENT MIXTURE: Leftover dip or spray mixtures containing Captan may be used as a foliar spray for the same crop in case of apples and cherries (but not pears) as treated by the dip or spray mixture, or to registered turf and ornamentals sites; observing 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 Captan 80-WP per 100 gallons of water. all Captan which was added to the dip or spray tank during the treatment-period still remains in the tank. 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 thisposed 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**

### **USE PRECAUTIONS**

Do not apply spray to omamental 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.

AZALEAS: Damping-off of cuttings -- Use 2½ pounds Captan 80-WP per 100 gallons of water. Dip cuttings before bedding. Petal blight -- Use 1½ pounds Captan 80-WP per 100 gallons of water. 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 -- Use 2½ pounds Captan 80-WP per 100 gallons of water. Dip tubers 30 minutes, drain and plant.

CAMELLIAS: Petal blight -- Use 5/8 pound Captan 80-WP per 100 gallons of water. 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 -- Use 1½ pounds Captan 80-WP per 100 gallons of water. 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 -- Use 2½ pounds Captan 80-WP per 100 gallons of water. Dip cuttings before bedding.

CHRYSANTHEMUM: Botrytis flower blight, Septoria leaf spot -- Use 1½ pounds Captan 80-WP per 100 gallons of water. Apply at first sign of disease. Repeat at 7 to 10 day intervals. Damping-off of cuttings -- Use 2½ pounds Captan 80-WP per 100 gallons of water. Dip cuttings before bedding.

DICHONDRA (California Only): White mold (Sclerotium rolfsii) -- Use 1½ pounds Captan 80-WP per 100 gallons of water. Apply 1 gallon spray per 10 square feet. Make 2 to 3 applications at 7 day intervals.

GLADIOLUS (Corms): Corm rot and decay, damping-off -- Use 1/3 to 1 pound Captan 80-WP per 10 gallons of water, dip corms 20 to 30 minutes. Drain and plant.

GRASSES (Ornamental in Non-Pastured Areas Only): Leaf spot, damping-off, brown patch, melting out, seedling blights, and brown spot on St. Augustine grass -- Use 1½ pounds Captan 80-WP per 100 gallons of water. Apply 10 gallons 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 - Use 1/5 to 1/4 pound Captan 80-WP per 1,000 square feet or 1½ pounds Captan 80-WP per 100 gallons of water, using 15 gallons spray per 1000 square feet. Cultivate into upper 3 to 4 inches before planting.

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ROSES: Black spot, Botrytis blossom blight -- Use 1½ pounds Captan 80-WP per 100 gallons of water. 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 -- Use 1½ pounds Captan 80-WP per 100 gallons of water at a rate of 15 gallons of spray per 1,000 square feet. Cultivate into upper 3 to 4 inches of soil before planting.

Only the applicator is permitted to be in the greenhouse during application of Captan. Open vents to greenhouse during application and for at least 1 hour after application.

Workers planting in Captan-treated soil must wear chemical resistant gloves.



# STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited. Do not reuse empty container.

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.

NOTICE TO BUYER AND USER: Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Seller, and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

