

19713-156

02/06/2012

1/11



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

OFFICE OF CHEMICAL, SAFETY
AND POLLUTION PREVENTION

Luz Chan
Drexel Chemical Company
PO Box 13327
Memphis, TN 38113-0327

FEB 06 2012

Subject: Drexel Captan 4L – Formula Change and Label Amendment
EPA Registration No. 19713-156
Decision No. 458691
Submission Date: 11/28/11 with final resubmission 1/31/12

Dear Ms Chan:

The basic Confidential Statement of Formula (CSF) dated 1/31/2012 referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended, to change the supplier of active ingredient is acceptable. The basic CSF supersedes all CSFs previously accepted for this product.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended to: correctly reflect the percent of active ingredient as stated on the basic CSF dated 1/31/12, update the label according to the Captan RED, and include resistance management language is acceptable provided you make the following changes.

1. In the Storage and disposal section, under Non-refillable Container (less than 5 gallons), correct the word "con tainer" to "container."

A copy of the label stamped "Accepted with Comments" is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions, please contact Dominic Schuler at (703) 347-0260 or via email at schuler.dominic@epa.gov.

Sincerely,

(for)
Tony Kish
Product Manager 22
Fungicide Branch
Registration Division (7504P)

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GROUP M4 FUNGICIDE

Captan 4L

Fungicide

ACTIVE INGREDIENT:

Captan 38.5%

OTHER INGREDIENTS:

..... 61.5%

TOTAL: 100.0%

This product contains 4 pounds of active ingredient per gallon.

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

SHAKE WELL BEFORE USING

EPA Reg. No. 19713-156
EPA Est. No. 19713-GA-001

Net Content: _____

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.
- Call a poison control center or doctor for treatment advice.

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 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 further treatment advise.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advise.

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.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

**ACCEPTED
with COMMENTS
In EPA Letter Dated
FEB 06 2012**



Manufactured By:
Drexel Chemical Company
P.O. BOX 13327, MEMPHIS, TN 38113-0327
SINCE 1972

156SP-0112*Pending

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

19713-156

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: Corrosive. Causes irreversible eye damage. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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, and other handlers (including handlers participating in seeding and transplanting as part of root dip or greenhouse-soil treatments) must wear: Long-sleeved

shirt and long pants, goggles or faceshield, chemical-resistant gloves made of any waterproof material such as poly ethylene or polyvinyl chloride (except for flaggers, pilots or applicators driving motorized ground equipment), shoes plus socks, and chemical-resistant apron when mixing/loading, participating in dip treatments, cleaning up spills, cleaning equipment, or otherwise exposed to the concentrate.

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.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE 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 chemical is toxic to fish. Do not apply directly to water or 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.

USE INFORMATION

CAPTAN 4L is an aqueous suspension for use in water as a spray for the control of listed fungus diseases of fruit. THIS FORMULATION IS NOT SUITABLE FOR USE AS A SEED PROTECTANT. Read all precautions and directions for use before using. Use only for claims listed and only as specified on this label. Observe use limitations given on the label for specific crops.

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 onto 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 the State Agricultural Extension Service for additional information, as the time of applications needed will vary with local conditions.

COMPATIBILITY AND PLANT SAFETY: This product 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 this product. Do not apply this product in combination with or immediately before or closely following oil sprays. 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 this product and sulfur should not be used on crops sensitive to sulfur. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

Used at high rates or in drenching sprays, this product may cause necrotic spotting of tender, immature leaves of certain varieties of Apples, Cherries, Peaches and Plums. 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 power equipment (including concentrate and semi-concentrate equipment). Pour recommended amount of this product 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.) Apply aerial or concentrate sprays in sufficient water for coverage. Do not apply this product through any type of irrigation system.

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 pre-bloom through postharvest. Apply the high rate and/or spray at shorter intervals when climatic conditions most favor disease(s). Apply the lower rate and/or spray at larger 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.

RESISTANCE MANAGEMENT

GROUP M4 FUNGICIDE

This product is a Group M4 fungicide. Fungal isolates with acquired resistance to Group M4 fungicide may eventually dominate the fungal population if Group M4 fungicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group M4 fungicides.

To delay fungicide resistance, consider:

- Avoiding consecutive use of this product or other target site of action Group M4 fungicides that have a similar target site of action on the same pathogens.
- Using tank mixtures or premixes with fungicides from different target site of action Groups as long as the involved products are all registered for the same use and are both effective at the mix or prepack rate on the pathogens(s) of concern.
- Basing fungicide use on a comprehensive IPM program.
- Monitoring treated fungal populations for loss of field efficacy.

Contacting your local extension specialist, certified crop advisors, and/or manufacturer for fungicide resistance management and/or IPM recommendations for specific crops and resistant pathogens.

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 through any type of irrigation system. 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. The REI for each crop is listed in the directions for use associated with each crop.

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.

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 must be available in operating condition at the WPS-required decontamination site for workers entering the area treated with captan, and
2. Workers must be 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.

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

NON-AGRICULTURAL USE REQUIREMENTS

The following requirements apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Entry Restrictions for All Other Uses: 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.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at 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. Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles. Apply only when the wind speed is 2 to 10 mph at the application site.

Additional Requirements for Aerial Applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Do not make applications into temperature inversions.

Additional Requirements for Ground Boom Application:

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

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APPLICATION INSTRUCTIONS

FRUIT AND NUT CROPS

Crop	Disease(s)	Rate Per Acre (qts.)
Almonds (REI = 24 hrs.)	Anthracnose, Blossom blight, Brown rot (Twig blight), Jacket rot, Leaf blight, Scab, Shothole	0.75 to 4.5
	SPECIFIC DIRECTIONS: Apply at popcorn, bloom and petal fall stages, starting 5 weeks after petal fall.	
Note: Do not apply within 30 days of harvest. Hulls may be fed to livestock. Do not apply more than 20 quarts of this product (20 pounds active ingredient) per acre per season from prebloom through postharvest.		
Apples (Eastern U.S.) (REI = 24 hrs.)	Black rot (Frogeye), Botrytis blossom end rot, Primary scab	0.75 to 4
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water using ground equipment or 5 to 10 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.	
	Bitter rot, Black pox, Black rot, Botryosphaeria rot, Brooks fruit spot, Fly speck, Secondary scab, Sooty blotch	0.5 to 4
	SPECIFIC DIRECTIONS: Apply at 10- to 14-day intervals in second and late cover sprays up to start of harvest. If Powdery mildew is a problem, add 3 to 6 pounds of sulfur postbloom until foliage matures.	
Note: May be applied up to day of harvest. Do not apply more than 32 quarts of this product (32 pounds active ingredient) per acre per season from prebloom through postharvest. Do not use captan in combination with or closely following or in alternation with wettable sulfur products on Baldwin, King, Red delicious, Staymen, etc. as severe injury and defoliation may occur.		
Apples (Western U.S.) (REI = 24 hrs.)	Primary scab	0.75 to 4
	SPECIFIC DIRECTIONS: Apply in 20 to 400 gals. of water per acre using ground equipment or in 5 to 20 gallons of water by air.	
	Botrytis rot, Bull's eye rot (Pacific Northwest)	1 to 4
	SPECIFIC DIRECTIONS: Apply using ground equipment or by air. Make 1 to 2 applications with late cover sprays and 1 final spray prior to harvest. In mid-Summer, the dosage may be reduced to 1 pint per acre.	
Note: May be applied up to day of harvest. Do not apply more than 12.5 quarts of this product (12.5 pounds active ingredient) per acre per season from prebloom through postharvest.		
Apricots (REI = 24 hrs.)	Brown rot twig blight, Jacket rot	0.75 to 2.5
	SPECIFIC DIRECTIONS: Apply at red bud, bloom and repeat at 75% petal fall and in cover sprays. To reduce the potential for disease resistance development to other fungicides having a similar spectrum, use the lower rate in tank mixtures.	
Note: Do not apply more than 25 lbs. of this product per acre from prebloom through postharvest. May be applied up to day of harvest.		
Blackberries, Dewberries Raspberries (REI = 48 hrs.)	Anthracnose, Botrytis, Spur blight	0.75 to 2
	SPECIFIC DIRECTIONS: Apply when blossoms are in bud (young canes 8 to 10 inches long), in sufficient amount of water for thorough coverage by ground or air. Make a second application 2 weeks later. Apply a full spray after old canes are removed.	
	Fruit rot	0.75 to 2
	SPECIFIC DIRECTIONS: Apply at early bloom (5 to 10%) and again at full bloom in sufficient water for thorough coverage by ground or air. Additional applications may be made at 10 to 14 day intervals as needed.	
Note: Do not apply more than 10 quarts of this product (10 lbs. active ingredient) per season. Do not apply within 3 days of harvest.		
Blueberries (Eastern U.S.) (REI = 48 hrs.)	Berry rot, Botrytis gray mold, Mummy berry	0.75 to 2.5
	SPECIFIC DIRECTIONS: Apply this product per acre in sufficient water for thorough coverage by ground or in 5 gallons of water by air. Begin spray program when buds swell or when buds have loose scales. Repeat at 7-day intervals through blossom period. Repeat at 7-day intervals from late bloom.	
Blueberries (Western U.S.) (REI = 48 hrs.)	Berry rot, Botrytis gray mold, Mummy berry	0.75 to 2.5
	SPECIFIC DIRECTIONS: Apply in sufficient amount of water for thorough coverage by ground or 5 to 20 gallons of water by air. Begin at midbloom, repeat at 7- to 10-day intervals until maturity.	
Note: (All Blueberries): May be applied up to day of harvest. Do not apply more than 35 quarts of this product (35 pounds active ingredient) per acre per season from prebloom through postharvest.		

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Crop	Disease(s)	Rate Per Acre (qts.)
Cherries (Eastern U.S.) (REI = 24 hrs.)	Botrytis rot, Brown rot, Leaf spot	0.75 to 2
	SPECIFIC DIRECTIONS: Apply at prebloom, bloom, petal fall, shuck and preharvest sprays. Applications at 3- to 4-day intervals may be necessary during bloom to control Blossom blight. Repeat at 7- to 10-day intervals as needed to maintain control up to start of harvest.	
	Powdery mildew	0.75 to 2
	SPECIFIC DIRECTIONS: 3 to 6 pounds of sulfur may be added (not to exceed 6 pounds) to petal fall, shuck or early cover sprays. If sulfur is added, this product may be reduced to 1 quart per acre.	
	Post-harvest sprays: Leaf spot – Apply 0.75 to 2 quarts of this product immediately after harvest, repeating in 10 to 14 days.	
Cherries (Western U.S.) (REI = 24 hrs.)	Brown rot blossom blight, Brown rot (Fruit), Leaf spot	0.75 to 2
	SPECIFIC DIRECTIONS: Apply in prebloom, bloom, petal fall, shuck, cover and preharvest sprays.	
Note (All Cherries): Do not apply more than 14 quarts of this product (14 pounds active ingredient) per acre per season from prebloom through postharvest. May be applied up to day of harvest.		
Grapes (Except CA) (REI = 48 hrs.)	Black rot, Downy mildew (suppression of), Phomopsis cane, Leaf spot	0.75 to 2
	SPECIFIC DIRECTIONS: Apply this product just before bloom; repeat just after bloom and at 10- to 14-day intervals. Use the lower rate when spraying less susceptible Grape varieties and during periods of weather less favorable for disease development. Use the higher rate on susceptible Grape varieties and during periods of weather highly favorable for disease development. Apply when shoots are 0.5 to 1.5 inches long, 3 to 5 inches long and 9 to 12 inches long. Continue thereafter at 10- to 14-day intervals as disease conditions warrant.	
Grapes (CA) (REI = 48 hrs.)	Bunch rot (Botrytis)	1 to 2
	SPECIFIC DIRECTIONS: Make 2 applications before bloom and 1 immediately after bloom. Repeat periodically, making 3 cover applications before the bunches close.	
	Leaf spot, Phomopsis cane (current season infection)	0.75 to 2
SPECIFIC DIRECTIONS: Apply this product when green tissue begins to show but before shoots are 1 inch long and repeat application when shoots are 6 to 8 inches long.		
Note (All Grapes): Do not apply more than 12 quarts (12 pounds active ingredient) per acre per season from prebloom through postharvest. May be applied up to day of harvest.		
Nectarines (REI = 24 hrs.)	Brown rot, Scab	0.75 to 4
	SPECIFIC DIRECTIONS: To reduce the potential for disease resistance development to other fungicides having a similar spectrum, the lower rate may be used in tank mixture. Apply in full pink, bloom, petal fall, shuck stages and in cover and preharvest sprays. Repeat application at 7- to 14-day intervals as needed to maintain cover. Continue applications through harvest if conditions favor Brown rot. If Powdery mildew is a problem, add 7.5 pounds of sulfur per acre to petal fall, shuck and early cover sprays. If sulfur is added, this product may be reduced to the rate of 1.25 quarts per acre in these sprays.	
	Coryneum blight (Peach blight, Shothole)	0.75 to 4
SPECIFIC DIRECTIONS: Apply in pink bud, full bloom, petal fall and cover sprays as necessary and as a post-harvest spray (but before leaves drop).		
Note: Do not apply more than 24 quarts (24 pounds active ingredient) of this product per acre per season from prebloom through postharvest. Preharvest sprays may be applied up to day of harvest.		

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Crop	Disease(s)	Rate Per Acre (qts.)
Peaches (REI = 24 hrs.)	Brown rot, Scab	0.75 to 4
	SPECIFIC DIRECTIONS: Apply in full pink, bloom, petal fall, shuck stages and in cover and preharvest sprays. When conditions are favorable, make applications at 3- to 4-day intervals during bloom to control Blossom blight. Repeat applications at 7- to 14-day intervals as needed to maintain control. Continue applications through shuck harvest if conditions favor Brown rot. If Powdery mildew is a problem add 12 pounds of sulfur per acre to petal fall, shuck and early cover spray. If sulfur is added, this product may be reduced to 4 quarts per acre in these sprays.	
	Coryneum blight (Peach blight, Shothole)	0.75 to 4
SPECIFIC DIRECTIONS: Apply in pink bud, full bloom, petal fall stages and cover sprays as necessary and as a post harvest spray (but before leaves fall).		
Note: Do not apply more than 32 quarts (32 pounds active ingredient) per acre per season from prebloom through postharvest. Preharvest sprays may be applied up to day of harvest.		
Plums, Fresh Prunes (Eastern U.S.) (REI = 24 hrs.)	Brown rot	1 to 3
	SPECIFIC DIRECTIONS: Apply in full pink, bloom and petal fall stages. 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 may improve coverage.	
Plums, Fresh Prunes (Western U.S.) (REI = 24 hrs.)	Brown rot	1 to 3
	SPECIFIC DIRECTIONS: Apply at green bud, popcorn, bloom, and petal fall stages. Repeat in cover sprays as conditions warrant.	
Note (All Plums, Prunes): Do not apply more than 27 quarts (27 pounds active ingredient) per acre per season from prebloom through postharvest. May be applied up to day of harvest.		
Strawberries (REI = 24 hrs.)	Botrytis (Gray mold), Botrytis fruit rot, Leaf spot	1.5 to 3
	SPECIFIC DIRECTIONS: Apply in sufficient water for thorough coverage by ground equipment. 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.	
Note: Do not apply more than 24 quarts (24 pounds active ingredient) per acre per season from prebloom through postharvest. May be applied up to day of harvest.		

If applied as a directed/banded spray; use band rate of this product according to the following formula:

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

SPECIAL USES

PEACH PRE-PLANT ROOT DIP (CA)

For preventative pre-plant dip treatment for Crown gall, use 4 quarts plus 3.2 pints 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.

Use Restrictions

The Restricted Entry Interval (REI) for root dip is 48 hours.

Exception: Once the seeds or transplants are planted in the soil, the Worker Protection Standard (WPS) allows workers to enter the treated area without restriction if there will be no contact with the soil subsurface.

POST-HARVEST FRUIT APPLICATION: For use in mechanical Fruit-dip operations only. Hand dipping of Fruit is prohibited. Do not contact or allow others to contact the treated fruit until sprays have dried. This product can be used as a postharvest dip or wash for prevention of various storage Rots and Molds (Botrytis, Gloeosporium, Rhizopus) on the following fruits:

Apples, Cherries and Pears—Use 1.25 quarts (1.25 lbs. active ingredient) per 100 gallons water. Apply as a spray or in 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 1.25 quarts of this product for every 100 gallons of water added. At the 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 POST-HARVEST TREATMENT MIXTURE: Leftover dip or spray mixtures containing this product may be used as a foliar spray for Apples and Cherries (but not Pears) or to registered Turf and Ornamental sites. Observe all restrictions such as maximum quarts applied per acre and season. When calculating application rates, if analytical services are not available to determine the exact quantity of this product remaining in mixture, assume that the tank still contains 1.25 quarts of this product per 100 gallons of water. If the dip or spray mixture contains other pesticides in addition to captan, refer to product label(s) for information regarding disposal.

Captan wastes are acutely hazardous. 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 a manner pre scribed 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 (REI) for Ornamentals for commercial or research use is 48 hours. 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 area. Do not apply to turfgrass in residential sites, including homes, apartment buildings, daycare centers, schools, playgrounds, parks, recreational areas, sports fields or other residential areas.

Crop	Disease(s)	Rate
Azaleas	Damping-off of cuttings	2 qts.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and dip cuttings in the mixture before bedding.	
	Petal blight	1 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply the mixture as a spray to the soil around the plants prior to bloom; apply as a spray to the flowers just before bloom and repeat at 7- to 14-day intervals through bloom.	
Begonias (Tuberous)	Damping-off, Tuber rot	2 qts.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and dip tubers for 30 minutes in mixture, drain and plant.	
Camellias	Petal blight	0.5 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply as a spray to the soil around plants when flowers begin to open, repeat at 7-to 10-day intervals through bloom.	
Carnations	Alternaria leaf spot, Rust	1 qt..
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply as a spray at first sign of disease. Repeat at 7-to 10-day intervals. Use the shorter interval if there are frequent rains and heavy dews.	
	Damping-off of cuttings	2 qts..
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and dip cuttings in mixture before bedding.	

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Crop	Disease(s)	Rate
Chrysanthemum	Botrytis flower blight, Septoria leaf spot	1 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply as a spray at first sign of disease, repeat at 7- to 10- day intervals.	
	Damping-off of cuttings	2 qts.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and dip cuttings in mixture before bedding.	
Dichondra	White mold (<i>Sclerotium rolfsii</i>)	3.2 fl. ozs.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply 1 gallon of spray for every 10 square feet, making a maximum of 2 applications per season.	
Gladiolus (Corms)	Corm rot and Decay, Damping-off	6 fl. ozs.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and dip corms for 20 to 30 minutes before planting.	
Grasses (Ornamental in non-pastured areas only)/Turf (Golf course)	Brown patch, Brown spot (on St. Augustine grass), Damping-off, Leaf spot, Melting out, Seedling blight	1 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water. Apply 10 gallons of spray for every 1,000 square feet. Begin at Spring growth, repeating at 7- to 14-day intervals throughout the season. Do not graze or feed clippings from treated areas to livestock.	
	USE RESTRICTIONS: The maximum application rate for golf course turf and turf in commercial settings is 4.3 quarts (4.3 pounds active ingredient) per acre with a maximum seasonal application rate of 8.6 quarts (8.6 pounds active ingredient) per acre per season.	
Grasses (Lawn Seedbeds)/Turf (Sod Farms)	Damping-off, Other soil-borne diseases	1 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water, applying 10 gallons of spray for every 1,000 square feet. Cultivate into top 3 to 4 inches of soil before planting.	
	USE RESTRICTIONS: The maximum application rate for turf (sod farms) is 4.3 quarts (4.3 pounds active ingredient) per acre with a maximum seasonal application rate of 8.6 quarts (8.6 pounds active ingredient) per acre per season.	
Roses	Black spot, Botrytis blossom blight	1 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water and apply as a spray at first sign of disease, repeat at 7- to 10- day intervals. Use the shorter interval if there are 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 qt.
	SPECIFIC DIRECTIONS: Mix in 100 gallons of water at a rate of 15 gallons for every 1,000 square feet. Cultivate into top 3 to 4 inches of soil before planting.	
	USE RESTRICTIONS: The REI for Soil and Greenhouse bench treatments is 48 hours. Once the treatment and any seeding or transplanting done as a 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 (WPS) allows workers to enter the treated area without restriction if there will be no contact with the soil subsurface.	

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Avoid contamination with acids or alkalis. Store in original container only. If the contents are leaking or material is spilled, follow these steps:

1. Contain spill. Absorb with a material such as sawdust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with soap and water to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Place a leaking container in a plastic tub and transfer contents, as soon as possible, to an empty, original container.
6. Do not allow runoff to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below.

(continued)

(continuation)

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:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available. 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.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available. 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.

Refillable Container (\geq 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS 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. To the extent consistent with applicable laws, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable laws, 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.

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