### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 17, 2015

Daniell Larochelle Regulatory Manager Nufarm Americas Inc. 4020 Aerial Parkway, Suite 101 Morrisville, NC 27545

Subject: Label Amendment: Changes Primary Brand Name to "Cuproxat FL Copper Fungicide"; Changes alternate brand name to "NUP-11050"; adds Chinese Cabbage, Kohlrabi, Okra; removes restriction against use on young Citrus in greenhouses and shadehouses; lowers application rates for many crops.

Product Name: Cuproxat FL Copper Fungicide EPA Registration Number: 55146-151 Application Date: May 6, 2015 Decision Number: 504962

Dear Ms. Larochelle:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2 EPA Reg. No. 55146-151 Decision No. 504962

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Tony Kish by phone at 703 308-9443, or via email at kish.tony@epa.gov; or Craig Reeves by phone at 703 347-0486, or via email at reeves.craig@epa.gov.

Sincerely,

Tomfish

Tony Kish, Product Manager 22 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure: Stamped Accepted Label

# **CUPROXAT™ FL Copper Fungicide**

[Alternate Brand Name: NUP-11050]

# FOR CONTROL OF LISTED DISEASES ON LISTED [AGRICULTURAL] CROPS, ORNAMENTAL PLANTS & TREES

Basic copper sulfate (CAS No. 1344-73-6) OTHER INGREDIENTS:	<u>72.9%</u>
TOTAL:	100.0%
Equivalent to 1.6 pounds per gallon or 15.2% metallic copper	ACCEPTED
	12/17/2015
	Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 55146-151.
KEEP OUT OF REACH OF CHILDREN	
CAUTION	
SEE INSIDE BOOKLET FOR FIRST AID AND PRECAUTIONARY STATE	EMENTS
For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 42 For Medical Emergencies Only, Call (877) 325-1840	24-9300

EPA Reg. No. 55146-151 EPA Est. No. Manufactured For NUFARM AMERICAS INC. AGT DIVISION 11901 S. Austin Avenue Alsip, IL 60803



[MADE IN AUSTRIA]

NET CONTENTS: \_\_\_\_\_ Gallons ( \_\_\_\_ L)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 GAL]

[Grow a better tomorrow.]

FIRST AID			
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. 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 made of any waterproof material. 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 must wear:

- Long-sleeve shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves

Remove and wash contaminated clothing before reuse. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

### **Engineering Controls Statement**

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.

#### Users Should:

- USER SAFETY RECOMMENDATIONS
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when 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. READ ENTIRE LABEL BEFORE USING THIS PRODUCT.

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

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 1 70. 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) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: Long-sleeve shirt, long pants, shoes, socks, and chemical resistant gloves.

# For Greenhouse use the restricted-entry interval may be reduced to 24 hours provided that the following conditions are met:

For at least seven (7) days following the application of copper-containing products in greenhouses:

- At least one container or station designed specifically for flushing eyes is available in operating condition with the WPSrequired decontamination supplies for workers entering the area treated with copper-containing products.
- Workers are informed orally in a manner they can understand:
  - $\circ$   $\;$  that residues in the treated area may be highly irritating to their eyes,
  - o 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 eye flush container that is located with the decontamination supplies, and how to operate the eye flush container or eye flush station.

### NON-AGRICULTURAL USE REQUIREMENTS

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

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

### PRODUCT INFORMATION AND USE INSTRUCTIONS

This product may be used with all types of spray equipment. The volume per acre needed differs depending on the specific crop (amount of foliage to be covered) and the equipment used. No additional surfactants are needed. Thorough coverage is essential for best results. Use this product according to instructions on this label.

**MIXING INSTRUCTIONS:** Proper mixing of this product with water requires use of a spray tank equipped with agitation.

Mixing Order

- 1. Water: Begin by agitating a thoroughly clean sprayer tank containing one-half the required amount of clean water.
- 2. Agitation: Maintain constant agitation throughout mixing and application.
- 3. **Inductor:** If an inductor is used, rinse it thoroughly after each application.
- 4. Slowly add the required amount of this product to the sprayer tank to prevent system and/or port blockage.
- 5. **Remaining Quantity of Water:** Continue agitation while slowly adding the remaining volume of clean water and allow time for good dispersion. Make sure that **the product** is thoroughly mixed and dispersed before adding additives.
- 6. Additives: Add any tank mix partners last. If you do not have previous experience with this product and additive mixtures, conduct a small-jar test to confirm compatibility of tank mixtures prior to full scale use. Follow the most restrictive of the tank mix partners label limitations and precautions.

Maintain constant agitation during application.

**APPLYING SPRAY MIXTURE:** The directions given in the crop specific Use Instructions are for applying dilute spray mixtures unless otherwise stated. The amount of this product applied per acre in concentrate and aerial sprays must be the same as the amount applied per acre in dilute sprays. The required amount of this product must be mixed with enough water to thoroughly cover the crop with spray mixture and is to be applied to the point of runoff for best performance. The volume of water needed depends upon factors such as the spray equipment used, foliage density, size of the crop being sprayed, etc. Refer to the table below for minimum recommended spray volumes for dilute, concentrate, and aerial sprays.

MINIMUM SPRAY VOLUMES†					
Crops	Dilute (Ground) Gallons / Acre	Concentrate (Ground) Gallons / Acre	Aerial Gallons / Acre		
Citrus	800	100 **	10		
Conifers	100	30	10		
Field Crops	20	3	3		
Berries	150	50	5		
Tree Crops (except citrus)	400	50	10		
<b>Tropical Crop (Low volume):</b> Guava, Litchi, Mamey Sapote, Papaya, Passion Fruit, Sugar Apple (Annona)	150	50	10		
Tropical Crops (High volume): Banana, Cacao, Coffee, Mango, Plantain	400	50	10		
Vegetables	20	3	3		
Vines	150 50 5				
Miscellaneous	150	50	10		

\* See crop specific Use Instructions for additional information regarding recommended spray volumes for certain crops.

\*\* Spray volumes as low as 20 gallons per acre may be used with pesticide application equipment such as "Curtec" or similar sprayers that are capable of obtaining thorough coverage at low volumes.

**SMALL VOLUME MIXTURES (< 100 gallons):** One-third (1/3) tablespoon (TBSP) or one (1) level teaspoon (TSP) of this product per gallon of water is equivalent to one (1) pint of this product per 100 gallons of water.

### **USE PRECAUTIONS**

- The pre-harvest interval (PHI) for this product is 0-days unless otherwise noted in the crop specific Use Instructions.
- Do not apply this product in a spray solution having a pH of less than 6.5 as phytotoxicity may occur.
- Do not apply to wet crops or if it is likely to rain before the spray is dry.
- Agricultural chemicals may react with soft metals (e.g., aluminum) and some synthetic materials (e.g., plastics, rubbers, etc.) used in the construction of application equipment. Thoroughly flush all application equipment with clean water after each day's use. In California, do not apply in systems which contain aluminum parts or components.
- This product may react with masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on houses, cars, lawn furniture, or other metal surfaces where the quality of the finish is a concern.
- Do not tank mix this product with Aliette® fungicide unless appropriate precautions have been taken to buffer the spray solution or severe phytotoxicity may result.
- Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of this product resulting in possible phytotoxicity or loss of effectiveness.
- Unpredictable performance or crop injury may result from tank mixing this product with certain pesticides or additives, especially
  when tank mixing multiple products. Do not tank mix with other pesticides or additives unless the mixture has been determined to
  be compatible and non-injurious to the crop under your conditions of use. Conduct a jar test to determine the physical
  compatibility of this product with tank mix partners prior to full scale use.

### FROST INJURY PROTECTION

Bacterial Ice Nucleation Inhibitor: Application of this product made to all crops listed on this label at rates and stages of growth indicated below just prior to anticipated frost conditions will afford control of ice nucleating bacteria (*Pseudomonas syringae, Erwina herbicola and Pseudomonas fluorescens*) and may therefore provide protection against light frost. Use the higher labeled rates (when a range is given) when bacterial infection is severe. Not recommended in those geographical areas where weather conditions favor severe frost.

### SPRAY DRIFT MANAGEMENT

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

### **Droplet Size**

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.

### Wind Speed

Do not apply at wind speeds greater than 15 MPH. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 MPH), and there are no sensitive areas within 250 feet downwind.

### **Temperature Inversions**

If applying at wind speeds less than 3 MPH, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or unstable atmospheric conditions.

### Other State and Local Requirements

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

### Equipment

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

### For Aerial Application:

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

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

### For Groundboom Application:

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

### **CHEMIGATION INSTRUCTIONS**

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (sheet) roll, traveler, big gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

# IF IRRIGATION SYSTEM IS CONNECTED TO A PUBLIC WATER SYSTEM, THE FOLLOWING SAFETY DEVICES MUST BE IN PLACE IN ADDITION TO THE REQUIREMENTS LISTED ABOVE:

Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily, at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall

be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

**NOTE:** IRRIGATION SYSTEMS AND ASSOCIATED PIPING SHOULD BE THOROUGHLY FLUSHED WITH CLEAN WATER FOLLOWING APPLICATION OF COPPER BASED FUNGICIDES. FLUSHING MUST BE DONE IN A MANNER WHICH WILL NOT WASH THE PRODUCT FROM THE FOLIAGE AND REDUCE DISEASE CONTROL.

No additional surfactants are needed unless specified for an individual crop. Add this product to the spray tank followed by any sticker-spreaders, insecticides, nutrients, etc. Observe all cautions and limitations on the label of all products used in mixtures. The specific instructions given on this label are based on general applications and circumstances. The recommendations of the State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per season.

**NOTE:** APPLICATION TO PLANT SURFACES WHICH HAVE LOW pH CHEMICAL RESIDUE MAY ALSO RESULT IN CROP INJURY.

### DIRECTIONS FOR CHEMIGATION USE

It is recommended that the pesticide supply tank be equipped for continuous agitation by either recirculation or a mechanical agitator.

**Mixing Instructions:** Fill the supply tank with approximately one half of the amount of water to be used for dilution. With agitation, add any emulsifiable concentrate to be used, including any oils. Agitate thoroughly. Next add any spreader-sticker or other adjuvant and agitate thoroughly. Then add this product and any other flowable. Agitate thoroughly. Finally, add any wettable powder or dry flowable and agitate thoroughly. With agitation, add the remainder of the water to be used for application. Continue agitation during application until supply tank is empty. Observe all precautions and limitations on the labels of all products used in the mixture.

**Application:** For fixed position irrigation systems such as center pivot, big gun, etc., the pesticide should be applied towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system being used. For moving systems, the pesticide should be applied continuously. In all cases, careful attention should be paid to thorough coverage of the crop during application.

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

**Important Notice:** Improper exposure of aluminum irrigation equipment to copper-based formulations may result in corrosion. Before applying this product by chemigation, contact your equipment supplier for any special restrictions or procedures.

# BERRIES, VINES AND HOPS

CROP	DISEASE	PRODUCT RATE PER ACRE	USE INSTRUCTIONS
BRAMBLES Blackberry, Santiam, Logan,	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, and Pseudomonas Blight	(Pints) 3.0	Apply delayed dormant spray after training in spring. Make fall spray application after harvest. The addition of 1 quart of crop oil per acre may improve performance.
Boysen, Marion, Aurora, Cascade, Chehalem and Thornless	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, and Yellow Rust	1.25	Apply when leaf buds begin to open and repeat when flower buds show white. Continue applications at 7-day intervals if needed. The addition of 1 quart of crop oil per acre may improve performance.
Evergreen	periods. Discontinue appli Maximum use rate per acre per ap	cations if signs of oplication: 3.0 pinters and the second	
BLUEBERRY	Bacterial Canker	3.0 - 5.0	Make first application before the fall rains, preferably the first week in October, and a second application four weeks later.
	Fruit Rot Phomopsis Twig Blight	1.5 – 3.5	Dormant application. Begin applications when bloom buds begin to swell. Make additional applications at 7- to 14-day intervals as needed before blooms open.
	Maximum use rate per acre per aç Maximum use rate per acre per ye Minimum retreatment interval (day	ear: 41.4 pints (5.	
CRANBERRY	Fruit Rot	5.0 – 10.0	Apply beginning in late bloom. One or two applications made at 7 to 14 day intervals may be required, depending on disease pressure.
	Rose Bloom		Make three applications at 7 to 14 day intervals as soon as symptoms are observed.
	Bacterial Stem Canker		Apply post harvest and again in the spring before bud burst. One or two additional applications at 7 to 14 day intervals may be required depending on disease severity.
	Tip Blight (Monilinia), Stem Blight, Leaf Blight, Red Leaf Spot		Apply as a delayed dormant spray in the spring. Repeat at 7 to 14 day intervals as needed through prebloom.
	Upright Dieback		Apply as a prebloom application. A second application can be made 7 to 14 days later if required.
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar: 62.1 pints (7.8	nts (1.25 gallons) (2.0 lb metallic copper) 3 gallons) (12.6 lb metallic copper)
CURRANT & GOOSEBERRY	Anthracnose, Leaf Spot	6.0 – 13.0	Make three applications starting after harvest, before bloom and after petal fall. Continue on a 10 to 14 day schedule during wet conditions in the spring.
		ar: 78.8 pints (9.9	s (1.6 gallons) (2.6 lb metallic copper) 9 gallons) (16.0 lb metallic copper)

GRAPE	Black Rot, Phomopsis, Powdery Mildew, Downy Mildew	1.25 – 6.0	Begin application at bud break with additional applications made throughout the season at 3 day intervals if needed.	
		ate of this product	copper-sensitive varieties such as Concord, Delaware, and test for sensitivity when treating these varieties or	
		ar: 98.6 pints (12	ts (0.75 gallon) (1.2 lb metallic copper) .3 gallons) (20.0 lb metallic copper)	
HOPS	Downy Mildew	1.25 to 2.25	Apply as a fungicide crown treatment after pruning, but before training. After training, additional fungicide treatments are needed at about 10 day intervals.	
		oplication: 2.25 pi ear: 13.1 pints (1.0	nts (0.28 gallon) (0.45 lb metallic copper) 6 gallons) (2.65 lb metallic copper)	
RASPBERRY	Leaf and Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, Pseudomonas Blight	3.0	Apply as a delayed dormant spray after training in the spring. Make a fall application after harvest. The addition of one quart of crop oil per acre may improve performance.	
	Leaf and Cane Spot, Purple Blotch, Anthracnose, Yellow Rust	1.25	Apply when leaf buds begin to open and repeat when flower buds show white. Make additional applications at 7- day intervals if needed. The addition of one quart of crop oil per acre may improve performance.	
	<b>NOTE:</b> Crop injury may occur if applied to foliage under certain conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.			
	Maximum use rate per acre per application: 3.0 pints (0.6 lb metallic copper) Maximum use rate per acre per year: 49.3 pints (6.2 gallons) (10.0 lb metallic copper) Minimum retreatment interval (days): 7			
STRAWBERRY	Leaf Spot & Leaf Blight	1.25 – 2.0	Begin application when plants are established and continue on a weekly schedule throughout season. Use a minimum spray volume of 20 gallons.	
	<b>NOTE:</b> Discontinue applications Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	oplication: 2.0 pir ear: 40.4 pints (5.1		

# **FIELD CROPS**

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS
ALFALFA	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	1.25 – 2.5	Apply 10 to 14 days before each harvest or earlier if disease threatens. Repeat applications at 30 day intervals if needed.
	NOTE: Spray injury may occur with sensitive varieties such as Lahontan.		
	Maximum use rate per acre per application: 2.5 pints (0.3 gallon) (0.5 lb metallic copper) Maximum use rate per acre per year: 5.52 pints (0.7 gallon) (1.1 lb metallic copper) Minimum retreatment interval (days): 30		

PEANUT	Cercospora Leaf Spot	1.25 – 3.9	Begin spraying 35 to 40 days after planting or when disease symptoms first appear. Continue applications at 7 to 14 day intervals. One to two quarts of six pounds per gallon flowable sulfur may be added. Use the shorter retreatment interval during humid weather. Use higher rates when conditions favor disease development.
		ear: 23.4 pints (2.	ts (0.48 gallon) (0.79 lb metallic copper) 9 gallons) (4.74 lb metallic copper)
ΡΟΤΑΤΟ	Early Blight, Late Blight	0.75 – 6.0	Apply at 5 to 10 day intervals starting when plants are 6 inches high. Apply 0.75 to 1.75 pints per acre in those locations where disease is light and up to 2.0 to 6.0 pints per acre where disease is severe.
	Colorado Potato Beetle (Suppression Only)		Application of this product at rates and timing recommended for control of <i>early blight</i> and <i>late blight</i> may provide suppression of the Colorado Potato Beetle.
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ear: 123 pints (15	ts (0.75 gallon) (1.2 lb metallic copper) .4 gallons) (25 lb metallic copper)
SOYBEANS *	Alternaria Leaf Spot ( <i>Alternaria</i> spp.)	3.9	Apply when mechanical injury, insect damage or another disease has occurred.
	Bacterial Blight ( <i>Pseudomonas syringae</i> ), Bacterial Pustule ( <i>Xanthomonas campestris</i> )		Begin applications from first node through third node development on the main stem with fully developed leaves beginning with the unifoliolate leaves (V1 -V3 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7 to 10 day schedule when conditions continue to favor disease development.
	Brown Spot (Septoria glycines)		Begin applications at full bloom to when pods are 3/16 inch in length (R2-R3 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7 to 10 day schedule when conditions continue to favor disease development.
	Cercospora Leaf Blight (Cercospora kikuchii)		Begin applications when seed in a pod is 1/8 inch long through beginning pod maturity (R5-R7 growth stages). Continue on a 7 to 10 day schedule when conditions are favorable for disease development.
	Downy Mildew ( <i>Peronospora manchurica</i> )		Begin applications when conditions favor disease development (high humidity and cool temperatures). Continue on a 7 to 10 day schedule if weather conditions remain cool and wet.
	Frogeye Leaf Spot ( <i>Cercospora sojina</i> )		Begin applications when wet conditions exist. Continue on a 7 to 10 day schedule when conditions are favorable for disease development
	Pod & Stem Blight ( <i>Diaporthe phaseolorum</i> and <i>Phomopsis longicola</i> )		Begin applications when seed in a pod is 1/8 inch long through beginning pod maturity (R5-R7 growth stages) or when extended periods of wet weather are favorable for disease development. Continue on a 7 to 10 day schedule if conditions continue to favor disease development.
	Powdery Mildew ( <i>Microsphaera</i> <i>manshurica</i> )		Begin applications when conditions first favor disease development (cool humid nights and mild daytime temperatures). Continue on a 7 to 10 day schedule if weather conditions remain cool and wet.
	Maximum use rate per acre per a Maximum use rate per acre per ye Minimum retreatment interval (day	ear: 23.4 pints (2	ts (0.48 gallon) (0.79 lb metallic copper) .9 gallons) (4.7 lb metallic copper)
	*Not registered for use in Califo	-	

SUGARBEET	Cercospora Leaf Spot	1.25 – 6.0	Start spraying when disease threatens and continue for 4 to 5 applications. Spray every 10 to 14 days depending on weather conditions and depending on disease severity.
		ear: 38.7 pints (4	ts (0.75 gallon) (1.2 lb metallic copper) 8 gallons) (7.86 lb metallic copper)
WHEAT, BARLEY, OATS	Septoria Leaf Blotch, Helminthosporium Spot Blotch	0.75 – 2.5	Make first application by early heading and follow with second application if needed. The minimum retreatment interval is 10 days. Use the higher rates when conditions favor disease development.
	Maximum use rate per acre per application: 2.5 pints (0.3 gallon) (0.5 lb metallic copper) Maximum use rate per acre per year : 5.22 pints (0.65 gallon) (1.05 lb metallic copper) Minimum retreatment interval (days): 10		

# **TREE CROPS**

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS
ALMOND, APRICOT, CHERRY,	Bacterial Blast ( <i>Pseudomonas</i> )	0.75	<b>ALMOND ONLY:</b> For Bacterial Blast control in sprinkler irrigated orchards or where disease is severe, apply postbloom at two week intervals or just prior to sprinkling.
PLUM, PRUNE	Coryneum Blight [Shot Hole] ( <i>Stigmina carpophila</i> ), Bacterial Canker, Bacterial Blast ( <i>Pseudomonas</i> )	5.0 -10.0	Apply before fall rains and again at late dormant before foliage buds swell. The addition of an agricultural-type spray oil may improve performance. For <b>CHERRIES</b> : Where disease is severe, an additional application at leaf fall may be required.
	Coryneum Blight (Shot Hole) ( <i>Stigmina carpophila)</i> , Blossom Brown Rot	5.0 - 7.5	Make early bloom (popcorn) application prior to full bloom. Repeat at 5-day intervals if needed.
	<ul> <li>NOTES:</li> <li>To avoid plant injury, do not app</li> <li>In sensitive varieties of ALMON post-bloom spray.</li> </ul>	•	prless, Mission, and Neplus, slight leaf injury may occur from
<b>Dormant, late dormant applications</b> Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copp Maximum use rate per acre per year: 88.7 pints (11 gallons) (18 lb metallic copper) Minimum retreatment interval (days): 7			
	<b>Bloom/growing season applications</b> Maximum use rate per acre per application: 7.5 pints (1.5 lb metallic copper) Maximum use rate per acre per year: 88.7 pints (11 gallons) (18 lb metallic copper) Minimum retreatment interval (days): 5		

APPLE	Anthracnose, European Canker, Blossom Blast, Shoot Blast ( <i>Pseudomonas</i> )	7.5 - 10.0	Make one application before fall rains.	
	Fire Blight, Apple Scab	5.0 - 10.0	Make one application as a full cover spray between silver- tip and green-tip for early season disease suppression. <b>NOTE:</b> Discontinue use when green-tip reaches ½ inch as moderate to severe crop injury could occur from late applications.	
	Crown Rot, Collar Rot	3.0	Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply either in early spring or in fall after harvest each year. Do not apply to foliage or fruit. <b>NOTE:</b> Do not use if soil pH is below 5.5 or copper toxicity	
	NOTE: Liss on vallow variation m		may result. ration. To avoid, pick before spraying.	
	Fall / late dormant applications	lay cause discolo	ration. To avoid, pick before spraying.	
	Maximum use rate per acre per Maximum number of application Applications between silver-tip	ns: 1 and green-tip application for:	pints (1.25 gallons) (2.0 lb metallic copper) 10 pints (1.25 gallons) (2.0 lb metallic copper)	
	For all uses:	ns. 1		
	Do not exceed a total of 78.8. pin	ts (9.9 gallons) (1	6 lb metallic copper) per acre per year	
AVOCADO	Anthracnose, Blotch, Scab	5.0 - 7.5	Apply when bloom buds begin to swell. Continue application at 14- to 30-day intervals for five to six applications. Use the higher rates when conditions favor disease development.	
	Maximum use rate per acre per application: 7.5 pints (1.5 lb metallic copper) Maximum use rate per acre per year : 93.1 pints (11.6 gallons) (18.9 lb metallic copper) Minimum retreatment interval (days): 14			
CITRUS	Melanose, Scab, Algal Spot	3.0 – 7.5	Apply as pre-bloom and post-bloom sprays at 7-day intervals. Use the higher rates when conditions favor disease development.	
	Greasy Spot, Pink Pitting	1.25 – 4.0	Apply in summer on expanded new flush. Repeat on subsequent flushes when disease pressure is severe.	
	Phytophthora Brown Rot, Septoria Spot	3.0 – 5.0	Apply beginning in fall before or just after the first rain. Continue applications at 7-day intervals if needed. Use higher rates when conditions favor disease development.	
			For Brown Rot only, apply to skirts of trees to a height of at least 4 feet.	
			For Septoria Spot or if fruit have already been infected with Brown Rot, apply to the entire tree. Apply also to bare ground one foot beyond skirt of trees.	
			<b>NOTE:</b> In California, add 1/5 to 2/3 pound of high quality lime per pint of product in areas subject to copper injury.	
	Citrus Canker (Suppression Only)	1.5 – 4.0	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications are dependent on disease pressure. Under heavy disease pressure, each flush or new growth should be sprayed.	
	Alternaria Brown Spot	3.0 – 5.0	Apply to susceptible varieties on the first flush in the spring and every additional flush. Start applications to fruit after two-thirds of the petals have fallen and repeat at 7- to 21- day intervals.	

CITRUS (Cont'd)	Phytophthora Foot Rot	0.75	Mix with 1 quart of water, Tre-Hold, or latex paint and paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May prior to summer rains and/or in the fall prior to wrapping trees for freeze protection. Treatment serves as protection for up to one year but does not cure existing infections. <b>NOTE:</b> Due to wash off, retreatment may be needed in areas where microjet or low volume irrigation hit the tree trunk.		
	Black Spot*	1.5 – 4.5	Begin applications prior to or when disease symptoms first appear and repeat at 7- to 21-day intervals if needed. Use the higher rates and shorter spray intervals when conditions favor disease development.		
	<ul><li>grown in greenhouses or shad</li><li>The addition of foliar nutritional and applied to citrus during the</li></ul>	lehouses. Ils (micronutrients e post bloom perio	tic to young tender flush when it is applied to citrus seedlings ) or other products to spray mixtures containing this product od when young fruit are present may result in spray burns.		
	Maximum use rate per acre per ye	Maximum use rate per acre per application: 7.5 pints (1.5 lb metallic copper) Maximum use rate per acre per year : 62.1 pints (7.8 gallons) (12.6 lb metallic copper) Minimum retreatment interval (days): 7			
<b>CITRUS</b> Field nursery Grown	Melanose, Scab, Greasy Spot, Pink Pitting, Brown Rot and Suppression of Citrus Canker	3.0 – 5.0	Make applications at 28-day intervals if needed depending on disease pressure.		
	Maximum use rate per acre per a Maximum use rate per acre per ye Minimum retreatment interval (day	ear : 62.1 pints (7.	ts (1.0 lb metallic copper) 8 gallons) (12.6 lb metallic copper)		
FILBERT	Bacterial Blight	10.5 – 29.6	Apply as a postharvest spray. In seasons of heavy rainfall, apply another spray when three-fourths of the leaves have dropped. Add 1 pint of superior type oil per 100 gallons of water.		
	Eastern Filbert Blight		Apply in sufficient water to obtain thorough coverage. Make initial application at budswell to budbreak. Additional sprays should be made on a 14 day interval depending on disease severity or when conditions are conducive for disease development. Add 1 pint of superior type oil per 100 gallons of water. Thorough coverage is essential.		
		oplication: 29.6 p ear : 118 pints (14	ints (3.7 gallons) (6 lb metallic copper) .75 gallons) (24 lb metallic copper)		
KIWIFRUIT *	Blossom Blight (Bud Rot), Leaf Spot (Phomopsis), Erwinia herbicola, Pseudomonas syringae, Pseudomonas fluorescens	5.0 – 10.0	Make two to three applications during dormant season. Do not apply at time of or after leaf emergence.		
	Maximum use rate per acre per a Maximum use rate per acre per ye Minimum retreatment interval (day	ear : 30 pints (3.7	ints (1.25 gallons) (2. lb metallic copper) 5 gallons) (6 lb metallic copper)		
	*Not registered for use in Califo	ornia			

MACADAMIA	Blossom Blight & Raceme Blight, Anthracnose*	2.0 - 8.0	Apply, depending on disease pressure, in 50 to 300 gallons of water during peak raceme development and bloom periods. For aerial application apply 3 to 6 pints per acre in 10 to 30 gallons of water.	
	Maximum use rate per acre per ye Minimum retreatment interval (day	ear : 46.5 pints (5. /s):  7	ts (1.0 gallon) (1.6 lb metallic copper) 8 gallons) (9.4 lb metallic copper)	
	*Not registered for use in Califo	ornia		
OLIVE	Peacock Spot, Olive Knot	5.25 – 16.0	Make first application before winter rains fall. A second application in early spring should be made if disease is severe.	
	Maximum use rate per acre per a Maximum use rate per acre per ye Minimum retreatment interval (day	ear: 32 pints (4 g	nts (2 gallons) (3.2 lb metallic copper) allons) (6.5 lb metallic copper)	
PEACH & NECTARINE	Leaf Curl, Coryneum Blight (Shot Hole), Bacterial Canker, Bacterial Blast ( <i>Pseudomonas</i> ), Bacterial Blight ( <i>Xanthomonas</i> )	5.0 – 10.0	Make first application before fall rains and the second application at late dormant. <u>For Leaf Curl</u> : Make late dormant application before leaf buds swell. The addition of an agricultural-type spray oil may improve performance.	
	Blossom Brown Rot, Leaf Curl, Coryneum Blight (Shot Hole)	5.0 – 7.5	Apply as a full cover spray at pink bud.	
	Bacterial Spot	0.4 – 0.75	Apply as a post bloom cover spray. Repeat applications at 5-day intervals if needed. Do not exceed 6 applications. <b>NOTE</b> : Cover spray applications may cause leaf spotting and defoliation. Discontinue use if injury occurs.	
	<ul> <li>Dormant, late dormant, up to pink bud</li> <li>Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper)</li> <li>Minimum retreatment interval (days): 7</li> <li>Bloom, growing season applications</li> <li>Maximum use rate per acre per application: 0.75 pint (0.15 lb metallic copper)</li> <li>Minimum retreatment interval (days): 5</li> </ul>			
	For all uses: Do not exceed a total of 88.7 pi	ints (11.1 gallons)	(18 lb metallic copper) per acre per year	
PEAR	Fireblight	0.75	Apply at 5-day intervals throughout bloom period. <b>NOTE:</b> Russeting may occur on copper sensitive varieties or on any variety if excessive rates are used.	
	Pseudomonas Blossom Blast	7.5 – 10.0	Apply before fall rains or as a dormant spray before spring growth starts.	
	<ul> <li>Bloom, growing season applications <ul> <li>Maximum use rate per acre per application: 0.75 pint (0.15 lb metallic copper)</li> <li>Minimum retreatment interval (days): 5</li> </ul> </li> <li>Fall, late dormant application <ul> <li>Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper)</li> <li>Maximum of one application per year</li> </ul> </li> <li>For all uses: <ul> <li>Do not exceed a total of 78.8 pints (9.85 gallons) (16 lb metallic copper) per acre per year</li> </ul> </li> </ul>			
PECAN*	Shuck Rot, Kernel Rot ( <i>Phytophthora cactorum</i> ), Zonate Leaf Spot ( <i>Cristulariella</i> <i>pyramidalis</i> )	3.75 – 5.0	<b>Suppression Only</b> : Apply at 14 to 28 day intervals when kernel growth begins through shuck opening. Apply in sufficient water to ensure thorough coverage.	
	Maximum use rate per acre per application: 5.0 pints (0.6 gallon) (1.0 lb metallic copper) Maximum use rate per acre per year : 41.4 pints (5.2 gallons) (8.4 lb metallic copper) Minimum retreatment interval (days): 14			
	*Not registered for use in California			

PISTACHIO	Botrytis Blight, Botryosphaeria Panicle and Shoot Blight, Septoria Leaf Blight, Late Blight ( <i>Alternaria alternata</i> )	2.5 – 10.0	Apply beginning at budswell. Repeat at 14 to 28 day intervals depending on disease conditions. If disease conditions are severe, use the high rate and the short spray interval.	
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar: 41.4 pints (5.2	s (1.25 gallons) (2 lb metallic copper) 2 gallons) (8.4 lb metallic copper)	
QUINCE	Fire Blight	1.5	Apply at 5 day intervals throughout the bloom period. Apply in sufficient water to provide thorough coverage.	
	Maximum use rate per acre per application: 1.5 pints (0.3 lb metallic copper) Maximum use rate per acre per year : 78.8 pints (9.9 gallons) (16 lb metallic copper) Minimum retreatment interval (days): 5			
WALNUT	NUT       Walnut Blight       5.25 – 19.7       Apply first spray at early pre-bloom prior are partially expanded. Make additional bloom and early nutlet stage at 7 day when frequent rainfall occurs.			
	<b>NOTE:</b> When applied as a dilute spray, 1 pint of Summer oil emulsion may be added per 100 gallons of spray. Adequate control may not be obtained when copper tolerant species of <i>Xanthamonas</i> bacteria are present.			
	Maximum use rate per acre per application: 19.7 pints (2.5 gallons) (4.0 lb metallic copper) Maximum use rate per acre per year : 158 pints (19.8 gallons) (32 lb metallic copper) Minimum retreatment interval (days): 7			

# TROPICAL CROPS

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS		
BANANA	Sigatoka	1.25 – 2.5	Apply by air. Mix this product in 3 gallons of water containing 1/2 gallon agricultural oil. Apply on a 7 to 14 day schedule throughout the wet season. Apply at 21 day intervals during dry periods.		
	Black Pitting	2.5 – 5.17	Mix in 100 gallons of water. Apply directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.		
	Maximum use rate per acre per application: 5.17 pints (0.65 gallon) (1.05 lb metallic copper) Maximum use rate per acre per year : 93.1 pints (11.6 gallons) (18.9 lb metallic copper) Minimum retreatment interval (days): 7				
CACAO	Black Pod	1.25 – 11.0 Begin applications at the start of the rainy season continue while infection conditions persist. Sprays sho be made as often as 14 to 21 days in high rainfall ar at varying rates from 1.25 to 11.0 pints per a depending on disease severity. For drier areas, wh two to four applications are recommended during critinfection periods and at long intervals, use 8.0 to 1 pints per acre, according to disease pressure incide and planting density.			
	Maximum use rate per acre per application: 11.0 pints (1.38 gallons) (2.2 lb metallic copper) Maximum use rate per acre per year : 77.6 pints (9.7 gallons) (15.75 lb metallic copper) Minimum retreatment interval (days): 14				

COFFEE	Coffee Berry Disease	3.75 – 10.3	Apply first spray after flowering and before onset of long		
	(Colletotrichum coffeanum)		rains and then at 14 to 28 day interval until picking. Use higher rates when rainfall is heavy and disease pressure is high.		
	Bacterial Blight ( <i>Pseudomonas</i> syringae)	3.75 – 10.3	Begin spray program before onset of the long rains and continue throughout the rainy season at 14 to 21 day intervals. The critical time of spraying to control this disease is just before, during, and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.		
	Leaf Rust (Hemileia vastatrix)	1.25 – 6.0	Apply before the onset of rain and then at 14 to 21 day intervals while the rains continue. Use higher rates when rainfall is heavy and disease pressure is high.		
	Iron Spot ( <i>Cercospora</i> coffeicola) and Pink Disease ( <i>Corticium salmonicolor</i> )	1.25 – 2.5	Apply as a concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.		
		ear : 62.1 pints (	pints (1.3 gallons) (2.1 lb metallic copper) (7.8 gallons) (12.6 lb metallic copper)		
GUAVA	Anthracnose, Red Algae	2.0 - 6.0	Apply beginning just prior to flowering and repeat weekly until just prior to harvest.		
	Maximum use rate per acre per application: 6.0 pints (0.75 gallon) (1.2 lb metallic copper) Maximum use rate per acre per year : 24.2 pints (3.0 gallons) (4.92 lb metallic copper) Minimum retreatment interval (days): 7				
LITCHI	Anthracnose	2.0 - 6.0	Apply beginning just prior to flowering and repeat weekly until just prior to harvest.		
	Maximum use rate per acre per application: 6.0 pints (0.75 gallon) (1.2 lb metallic copper) Maximum use rate per acre per year : 24.2 pints (3.0 gallons) (4.92 lb metallic copper) Minimum retreatment interval (days): 7				
MAMEY SAPOTE	Anthracnose, Algal Leaf Spot	3.75 – 8.0	Apply when conditions favor disease development. Repeat at 14 to 30 day intervals as needed.		
		ear: 41.4 pints (	bints (1 gallon) (1.6 lb metallic copper) (5.2 gallons) (8.4 lb metallic copper)		
MANGO (Florida & Puerto Rico)	Anthracnose	3.0 - 12.0	Apply monthly after fruit set until harvest.		
	Maximum use rate per acre per application: 12.0 pints (1.5 gallons) (2.4 lb metallic copper) Maximum use rate per acre per year: 237 pints (29.6 gallons) (48 lb metallic copper) Minimum retreatment interval (days): 30				
ΡΑΡΑΥΑ	Anthracnose	2.5 – 12.0	Apply beginning before disease is expected to appear. Repeat at 10 to 14 day intervals or at 7 day intervals during periods of heavy rainfall. Use the higher rates when conditions favor disease. The addition of a suitable spreader-sticker may be desirable especially during periods of heavy rains.		
	Maximum use rate per acre per application: 12.0 pints (1.5 gallons) (2.4 lb metallic copper) Maximum use rate per acre per year : 104 pints (13 gallons) (21.2 lb metallic copper) Minimum retreatment interval (days): 7				

PASSION FRUIT	Anthracnose	3.75 – 10.0	Apply beginning just prior to flowering and repeat weekly.
Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb n Maximum use rate per acre per year : 46.5 pints (5.8 gallons) (9.4 lb metallin Minimum retreatment interval (days): 7			
SUGAR APPLE Annona	Anthracnose	8.0 – 15.0	Apply beginning just prior to flowering and repeat weekly.
	Maximum use rate per acre per application: 15 pints (1.9 gallons) (3.0 lb metallic copper) Maximum use rate per acre per year : 62.1 pints (7.8 gallons) (12.6 lb metallic copper) Minimum retreatment interval (days): 7		

# **VEGETABLE CROPS**

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS	
<b>BEAN</b> Dry, Green	Brown Spot, Bacterial Blight (Halo & Common), Downy Mildew	0.75 – 3.9	For protective sprays, apply first application when plants are six inches high. Apply on 7 to 14 day schedule depending on local conditions. Adjust rates depending on disease severity.	
		ar : 23.4 pints (	ints (0.5 gallon) (0.8 lb metallic copper) 2.9 gallons) (4.74 lb metallic copper)	
BEET Table Beet, Beet Greens	Cercospora Leaf Spot	1.25 –3.0	Apply when conditions first favor disease development. Repeat treatment at 10- to 14-day intervals as needed. The addition of an agricultural spray oil is recommended.	
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar : 38.7 pints (	ints (0.6 lb metallic copper) 4.8 gallons) (7.86 lb metallic copper)	
CARROT	Alternaria Leaf Spot, Cercospora Leaf Spot	1.25 – 2.25	When disease threatens apply at 7- to 14-day intervals depending on disease pressure.	
	Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper) Maximum use rate per acre per year : 24.6 pints (3.1 gallons) (5 lb metallic copper) Minimum retreatment interval (days): 7			
CELERY & CELERIAC	Cercospora Early Blight, Septoria Late Blight, Bacterial Blight	1.25 – 2.25	Apply as soon as plants are first established in the field, then every 7 days depending on disease severity and weather.	
	Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper) Maximum use rate per acre per year : 26.1 pints (3.3 gallons) (5.3 lb metallic copper) Minimum retreatment interval (days): 7			
<b>CRUCIFERS</b> Broccoli, Brussels Sprout, Cabbage, Cauliflower, Chinese Cabbage, Collard	Black Rot ( <i>Xanthomonas</i> ), Black Leaf Spot ( <i>Alternaria</i> ), Downy Mildew	0.75 – 1.25	Apply at 7- to 10-day intervals beginning after transplants are set in the field or shortly after emergence of field seeded crop. Use the higher rates when conditions favor disease development.	
Greens, Kale, Kohlrabi, Mustard	<b>NOTE:</b> Reddening of older leaves may occur on broccoli at the higher rate and flecking of wrapper leaves may occur on cabbage.			
Greens, and Turnip Greens	Maximum use rate per acre per application: 1.25 pints (0.25 lb metallic copper) Maximum use rate per acre per year : 13.1 pints (1.6 gallons) ( 2.65 lb metallic copper) Minimum retreatment interval (days): 7			

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS		
CUCURBITS Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, and Watermelon	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Powdery Mildew, Gummy Stem Blight, Watermelon Bacterial Fruit Blotch (Suppression)	0.75 – 1.75	Apply beginning when conditions are favorable for disease development and repeat at 5- to 7-day intervals if needed.		
	injury occurs. Maximum use rate per acre per ap	oplication: 1.75 ar : 25.9 pints (	t shorter intervals or higher rates. Discontinue use if pints (0.35 lb metallic copper) 3.2 gallons) (5.25 lb metallic copper)		
EGGPLANT	Alternaria Blight, Anthracnose, Phomopsis	1.25 – 2.25	Use before disease appears. Repeat at 7- to 10-day intervals.		
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar : 38.9 pints (	pints) (0.45 lb metallic copper) 4.9 gallons) (7.9 lb metallic copper)		
ENDIVE* ESCAROLE*	Downy Mildew	1.25 – 2.25	Begin treatment when disease first appears or when conditions favor disease development. Repeat every 5 to 10 days as needed.		
	<ul> <li>NOTE: Before application, determine if there is varietal sensitivity to copper. Injury may occur to sensitive varieties or under adverse weather conditions. Discontinue use if injury occurs.</li> <li>Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper)</li> <li>Maximum use rate per acre per year : 39.4 pints (4.9 gallons) (8 lb metallic copper)</li> <li>Minimum retreatment interval (days): 5</li> <li>*Not registered for use in California and Arizona</li> </ul>				
LETTUCE*	Downy Mildew	1.25 – 2.25	Begin treatment when disease first appears or when conditions favor disease development. Repeat every 5 to 10 days as needed.		
	<b>NOTE</b> : Before application, determine if there is varietal sensitivity to copper. Injury may occur to sensitive lettuce varieties or under adverse weather conditions. Discontinue use if injury occurs.				
	Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper) Maximum use rate per acre per year : 39.4 pints (4.9 gallons) (8 lb metallic copper) Minimum retreatment interval (days): 5 *Not registered for use in California and Arizona				
OKRA	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	1.25 – 3.0	Begin applications when disease threatens. Continue applications at 5- to 10-day intervals depending on disease pressure.		
	Maximum use rate per acre per application: 3.0 pints (0.6 lb metallic copper) Maximum use rate per acre per year : 26.25 pints (3.3 gallons) (5.25 lb metallic copper) Minimum retreatment interval (days): 5				
ONION GARLIC LEEK	Bacterial Blight, Downy Mildew, Purple Blotch	1.25 – 2.25	Apply when plants are four to six inches high and repeat at 7- to 10-day intervals if needed. This product can cause phytotoxicity.		
	Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper) Maximum use rate per acre per year : 29.6 pints (3.7 gallons) (6 lb metallic copper) Minimum retreatment interval (days): 7				

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS		
PEA	Powdery Mildew	0.75 – 1.75	Begin spray treatment when disease symptoms first appear. Adjust rates according to disease severity. Repeat applications at weekly intervals.		
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar : 19.5 pints (	pints (0.35 lb metallic copper) 2.4 gallons) (3.95 lb metallic copper)		
PEPPER Bell & Chili (non-bell)	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	1.25 – 1.75	When disease threatens, apply in sufficient water for adequate coverage at 3- to 10-day intervals depending on disease pressure.		
	Maximum use rate per acre per ap Maximum use rate per acre per ye Minimum retreatment interval (day	ar : 58.4 pints (	pints (0.35 lb metallic copper) 7.3 gallons) (11.85 lb metallic copper)		
SPINACH	Anthracnose, Cercospora Leaf Spot, Downy Mildew*, White Rust, Blue Mold	1.25 – 1.75	Begin treatment when conditions favor disease development and repeat every 7 to 10 days as needed.		
	NOTE: Flecking may occur on spinach leaves.				
	Minimum retreatment interval (day	ear : 19.5 pints (; rs):  7	pints (0.35 lb metallic copper) 2.4 gallons) (3.95 lb metallic copper)		
	*Not registered for use in Califo	rnia			
TOMATO (Fresh Market)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Late Blight, Gray Leaf Mold, Septoria Leaf Spot	1.25 – 2.75	Apply at 3- to 10-day intervals beginning when disease threatens. Use the higher rate and shorter retreatment interval when disease pressure is high.		
	Maximum use rate per acre per application: 2.75 pints (0.55 lb metallic copper) Maximum use rate per acre per year: 39.4 pints (4.9 gallons) (8 lb metallic copper) Minimum retreatment interval (days): 3				
WATERCRESS	Cercospora Leaf Spot	1.25 – 2.25	Apply when plants are first established in the field. Make ground applications in a minimum spray volume of 50 gallons per acre. Repeat at 7- to 14-day intervals. Make up to 4 applications per crop.		
	Maximum use rate per acre per application: 2.25 pints (0.45 lb metallic copper) Maximum use rate per acre per year : 10.4 pints (1.3 gallons) (2.12 lb metallic copper) Minimum retreatment interval (days): 7				

# SEED DRESSING

CROP	DISEASE	PRODUCT RATE per CWT of SEED (fl. oz.)	USE INSTRUCTIONS
RICE	Water Mold & Seed Rot ( <i>Achlya</i> spp., <i>Pythium</i> spp.)	2.0 - 7.0	Use at the recommended rate for each 100 pounds of rice seed. For ease of handling and when using a seed treating machine, dilute with an equal amount of water. Maintain continuous agitation of the mixture throughout the operation. Consult State Agricultural Experiment Station regarding specific recommendations for your area.
WHEAT & BARLEY	Bacterial Leaf Blight ( <i>Pseudomonas syringae</i> ), Bacterial Leaf Streak ( <i>Xanthomonas translucens</i> ), Common Bunt ( <i>Tilletia caries</i> )	2.0 - 3.5	Apply at the rate of formulated product per 100 pounds of seed. It should be diluted with equal parts of water before applying.

Do not use treated seed for food, feed or oil purposes. Care must be exercised in the handling of treated seed. Do not use augers used for handling treated seed to move seed for feed, food or oil processing. Do not re-use bags from treated seed to handle food or feed products.

Seeds treated with this product that are then packaged or bagged for future use must be suitably colored with an EPA approved dye, such as one of the dyes listed in 40 CFR Section 180.910 or Section 180.920 to prevent their subsequent inadvertent use as a food for man or feed for animals. Treated seed must contain the following labeling on the outside of the seed package or bag: "*This package or bag contains seed that has been treated with basic copper sulfate. Do not use for food, feed or oil purposes.* Store away from feeds and foodstuffs. Persons opening this bag or package or loading/pouring the treated seed must wear a long-sleeved shirt, long pants, shoes and socks, chemical resistant gloves made of any waterproof material, and eye protection such as goggles or face shield."

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS		
ΑΤΕΜΟΥΑ	Anthracnose	2.0 - 6.0	Apply just prior to flowering and repeat weekly until just prior to harvest.		
		er year : 62.1 pints	pints (0.75 gallon) (1.2 lb metallic copper) (7.8 gallons) (12.6 lb metallic copper)		
CARAMBOLA	Anthracnose	3.75 – 10.0	Apply just prior to flowering and repeat weekly until just prior to harvest.		
	Maximum use rate per acre per application: 10.0 pints (1.25 gallons) (2 lb metallic copper) Maximum use rate per acre per year : 51.7 pints (6.5 gallons) (10.5 lb metallic copper) Minimum retreatment interval (days): 7				
CHIVES	Downy Mildew	1.25 – 2.25	Apply when plants are established in the field. Repeat at 7- to 10-day intervals as needed.		
	Maximum use rate per acre per application: 2.25 pints(0.45 lb metallic copper) Maximum use rate per acre per year : 13.1 pints (1.6 gallons) (2.65 lb metallic copper) Minimum retreatment interval (days): 7				

# MISCELLANEOUS

CROP	DISEASE	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS
DILL	Phoma Leaf Spot, Rhizoctonia Foliage Blight	1.25 – 1.75	Apply when plants are first established in the field. Repeat at 7- to 10-day intervals as needed.
		er year : 19.5 pints	5 pints (0.35 lb metallic copper) (2.44 gallons) (3.95 lb metallic copper)
GINSENG	Alternaria Leaf & Stem Blight	1.5 – 2.75	Apply as a tank mix with an Iprodione-containing fungicide at the rate of 1 lb iprodione ai/Acre in 100 gallons of water. Begin tank mix applications as soon as plants have emerged in spring and repeat every 7 days if needed until plants become dormant in the fall. Apply at least eight hours before rainfall, giving the fungicides time to dry on the plants. Use of a spreader-sticker is advised.
			<b>NOTE:</b> Alternaria Leaf & Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old ginseng. Complete and thorough spray coverage is required for control.
		er year : 25.9 pints	5 pints (0.55 lb metallic copper) (3.2 gallons) (5.25 lb metallic copper)
PARSLEY	Bacterial Blight ( <i>Pseudomonas</i> spp.)	1.75 – 3.0	Apply when plants are first established in the field and repeat at 10-day intervals.
	Maximum use rate per acre per application: 3.0 pints (0.6 lb metallic copper) Maximum use rate per acre per year : 9.86 pints (1.2 gallons) (2 lb metallic copper) Minimum retreatment interval (days): 10		
PERSIMMON	Cercospora Leaf Spot	2.25	Apply beginning in May/June, during leaf flush, and repeat at 14 day intervals throughout the season depending on disease severity.
		er year : 29.6 pints	5 pints (0.3 gallon) (0.46 lb metallic copper) (3.7 gallons) (6 lb metallic copper)

## TURFGRASS \*

CROP	DISEASE	PRODUCT RATE	USE INSTRUCTIONS
TURFGRASS (such as sodfarms, golf courses, cemeteries, home lawns, and	Algae Control	3 oz / 100 ft <sup>2</sup>	FOR SPOT TREATMENT ONLY: Apply in 1/2 gallon of water to control algae. This product may be used alone or in combination with other registered fungicides as a maintenance spray.
industrial or municipal turf areas (including parks, playgrounds, athletic fields))	Do not apply in spray solu Do not treat more than 8,000 ft <sup>2</sup> of	tions with a pH c turf per applicat of product per ye s): 10	

# CONIFERS

For use on conifers, including Douglas Fir, Fir, Juniper, Leyland Cypress, Pine and Spruce, in Christmas tree plantings, forest stands and silviculture nurseries.

CROP	DISEASE / PEST	PRODUCT RATE PER ACRE (Pints)	USE INSTRUCTIONS
<b>DOUGLAS FIR</b> ( <i>Pseudotsuga menziesii</i> )	Rhabdocline Needlecast	1.25 – 3.0	For control of foliar diseases apply as a thorough cover spray. Begin applications in the spring at the initiation of new growth and repeat at 7- to 28-day intervals or as needed. Use the higher rates when disease pressure is
FIR (Abies spp.) PINE (Pinus spp.) SPRUCE (Picea spp.)	Needlecasts	-	severe or when environmental conditions favor disease development.
JUNIPER (Juniperus spp.)	Anthracnose, Phomopsis Twig Dieback		
LYELAND CYPRESS (Cupressocyparis leylandii)	Cercospora Needle Blight		
DOUGLAS FIR (Pseudotsuga menziesii) FIR (Abies spp.) JUNIPER (Juniperus spp.) LYELAND CYPRESS (Cupressocyparis leylandii) PINE (Pinus spp.)	Lichens	5.0	To control lichens, apply as a dormant spray before new growth emerges in the spring. The addition of a non-ionic surfactant will improve control. A second application may be required 12 months later.

Maximum use rate per acre per year : 98.6 pints (12.3 gallons) (20 lb metallic copper)

### Minimum retreatment interval (days): 7

# **GREENHOUSE AND SHADEHOUSE CROPS**

This product may be used in greenhouses and shadehouses to control diseases on crops listed on this label. Specific directions are provided below for certain crops and the grower should be aware that the sensitivity of crops grown under such conditions differ greatly from field conditions. The user must determine if this product can be used safely prior to commercial application by testing a small area and observing the results for 7 to 10 days.

Three quarter (3/4) tablespoon (TBSP) of this product per 1,000 square feet is equivalent to 1 pint per acre. Begin application at first sign of disease and repeat if needed, according to the following use information:

CROP	DISEASE	PRODUCT RATE PER 1000 ft <sup>2</sup> (TBSP)	USE INSTRUCTIONS
CITRUS (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	2	Begin applications when disease first threatens and repeat at 7- to 30-day intervals or as needed depending on disease pressure.
			<b>NOTE:</b> This product has the potential for being phytotoxic to young tender flush when it is applied to citrus seedlings grown in greenhouses or shadehouses.
	Maximum use rate per application: 2 TBSP / 1000 ft <sup>2</sup> (0.53 lb metallic copper/Acre) Maximum use rate per year: 19 TBSP / 1000 ft <sup>2</sup> (0.6 pint / 1000 ft <sup>2</sup> ) (5.25 lb metallic copper/Acre) Minimum retreatment interval (days): 5		

CROP	DISEASE	PRODUCT RATE PER 1000 ft <sup>2</sup> (TBSP)	USE INSTRUCTIONS
CUCUMBER	Angular Leaf Spot, Downy Mildew	3/4 – 2	Apply when plants begin to vine. Repeat at 5- to 7-day intervals.
	Maximum use rate per application: 2 TBSP / 1000 ft <sup>2</sup> (0.53 lb metallic copper/Acre) Maximum use rate per year: 19 TBSP / 1000 ft <sup>2</sup> (0.6 pint / 1000 ft <sup>2</sup> ) (5.25 lb metallic copper/Acre) Minimum retreatment interval (days): 5		
EGGPLANT	Alternaria Blight, Anthracnose, Phomopsis	3/4	Begin applications prior to development of disease symptoms and repeat at 7- to 10-day intervals as needed.
	Maximum use rate per application: 3/4 TBSP / 1000 ft <sup>2</sup> (0.2 lb metallic copper/Acre) Maximum use rate per year: 28.6 TBSP (0.89 pint / 1000 ft <sup>2</sup> ) (7.9 lb metallic copper/Acre) Minimum retreatment interval (days): 7		
<b>PEPPER</b> Bell & Chili (non- bell)	Bacterial Spot	3/4 – 2	Apply when conditions first favor disease development and repeat at 3- to 10-day intervals as needed.
	Maximum use rate per application: 2 TBSP / 1000 ft <sup>2</sup> (0.53 lb metallic copper/Acre) Maximum use rate per year: 42.9 TBSP (1.3 pints / 1000 ft <sup>2</sup> ) (11.85 lb metallic copper/Acre) Minimum retreatment interval (days): 3		
TOMATO Fresh market	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Grey Leaf Mold, Late Blight, Septoria Leaf Spot	3/4 – 2	Apply when conditions first favor disease development and repeat at 3- to 10-day intervals as needed.
	Maximum use rate per application: 2 TBSP / 1000 ft <sup>2</sup> (0.53 lb metallic copper/Acre) Maximum use rate per year: 28.9 TBSP (0.9 pint / 1000 ft <sup>2</sup> (8 lb metallic copper/Acre) Minimum retreatment interval (days): 3		

# ORNAMENTALS

Use this product on container, bench, or bed-grown ornamentals in greenhouses, shadehouses, fields, and nurseries (container, bench, or bed-grown), for professional use on ornamentals grown in indoor and outdoor landscaping, and for control of bacterial and fungal diseases of foliage, flowers and stems.

CROP	DISEASE	USE INSTRUCTIONS	
PECAN	Ball Moss Spanish Moss	Mix 3.75 to 5.0 pints in 100 gallons of water. Apply in spring when moss is actively growing. Use1-1/2 gallons of spray per foot of tree height. Make sure to wet moss tufts thoroughly. The addition of a non-ionic surfactant may improve control. A second application may be required 12 months later. Do not make more than one application per year.	
	Zonate Leaf Spot ( <i>Cristulariella</i> <i>pyramidalis</i> )	<b>Suppression Only</b> : Apply 1.25 to 3.0 pt/A at 14- to 28-day intervals when kernel growth begins through shuck opening. Apply in sufficient water to ensure thorough coverage. Minimum retreatment interval is 14 days.	
	Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper) Maximum use rate per acre per year: 41.4 pints (5.2 gallons) (8.4 lb metallic copper)		
LIVE OAK *	Ball Moss Spanish Moss	Mix 5.0 pints in 100 gallons of water. Apply in spring when moss is actively growing. Use1-1/2 gallons of spray per foot of tree height. Make sure to wet moss tufts thoroughly. The addition of a non-ionic surfactant may improve control. A second application may be required 12 months later.	
	NOTE: This product may be injurious to ornamentals grown under live oaks.		
	Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper) Do not make more than one application per year.		
	*Not registered for use	in California	

CROP	DISEASE	USE INSTRUCTIONS
PHILODENDRON	Bacterial Leaf Spot	Mix 1.25 pints in 100 gallons of water. Apply before disease appears and repeat weekly if needed.
	Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper) Maximum use rate per acre per year : 100 pints (12.5 gallons) (20 lb metallic copper) Minimum retreatment interval (days): 7	
SYCAMORE	Anthracnose	Mix 1.25 to 2.0 pints in 100 gallons of water. Apply as a full cover spray. Make first application at bud crack and a second application 7 to 10 days later at 10% leaf expansion.
	Maximum use rate per acre per application: 10 pints (1.25 gallons) (2.0 lb metallic copper) Maximum use rate per acre per year : 100 pints (12.5 gallons) (20 lb metallic copper) Minimum retreatment interval (days): 7	

# FOR CONTROL OF BACTERIAL AND FUNGAL DISEASES ON FOLIAGE, FLOWERS, AND STEMS OF ORNAMENTALS grown in greenhouses, shadehouses, fields, and nurseries (container, bench, or bed-grown), and on ornamentals grown in indoor and outdoor landscapes:

Apply this product at 1.25 pints per 100 gallons as a full cover spray beginning at first sign of disease. Apply 10 - 20 gallons solution per 1000 ft<sup>2</sup>. Apply no more than 800 gallons solution per acre dilute per application (2.0 lb metallic copper per acre). Do not make more than 10 applications at these rates per year (maximum of 20.0 lb metallic copper per acre per year). **NOTE:** Compact flowers may take as little as 20 gallons solution per acre while large trees may take as much as 800 gallons solution per acre. Repeat at intervals of 7 to 14 days depending on rainfall and disease severity. Due to the large number of species, widely varying growth conditions, and varieties of ornamentals and nursery plants it is not possible to test every variety for sensitivity to this product. Prior to large-scale use, apply the specified rate of this product on a small area and check for symptoms of phytotoxicity in 7 to 10 days.

Do not tank mix with Aliette® fungicide without buffering the spray solution.

One-third (1/3) TBSP or 1 TSP of this product per gallon of water is equivalent to 1 pint per 100 gallons.

ORNAMENTAL	DISEASE
AGLAONEMA	Bacterial Leaf Spot
ALTHEA (Rose of Sharon)	Bacterial Leaf Spot
ARALIA	Xanthomonas & Cercospora Leaf Spots, Alternaria
ARBORVITAE	Alternaria Twig Blight, Cercospora Leaf Spot
AZALEA (1)	Cercospora Leaf Spot, Botrytis Blight, Phytophthora Dieback, Powdery Mildew
BEGONIA	Bacterial Leaf Spot (Xanthomonas spp., Erwinia spp., Pseudomonas spp.)
BOSTON FERN	Bacterial Leaf Spot
BOUGAINVILLEA	Anthracnose, Bacterial Leaf Spot
BULBS (Tulip), (Easter lily) (2)	Botrytis Blight, Anthracnose
CAMELLIA	Anthracnose, Bacterial Leaf Spot
CAMPHOR TREE	Pseudomonas Leaf Spot
CANNA	Pseudomonas Leaf Spot
CARNATION (1)	Alternaria Blight, Pseudomonas Leaf Spot & Botrytis Blight
CHINESE TALLOW TREE	Bacterial Leaf Spot (Xanthomonas spp., Pseudomonas spp.)
CHRYSANTHEMUM (1)	Septoria Leaf Spot, Botrytis Blight
COTONEASTER	Botrytis Blight
DAHLIA	Alternaria Leaf Spot, Cercospora Leaf Spot, Botrytis Grey Mold
DATE PALM	Pestalotia Leaf Spots
DIANTHUS	Bacterial Spot, Bacterial Soft Rot

ORNAMENTAL	DISEASE
DOGWOOD	Anthracnose
DRACAENA	Bacterial Leaf Spot
DUMB CANE	Bacterial Leaf Spot
DUSTY MILLER	Bacterial Leaf Spot (Pseudomonas cichorii)
ECHINACEA	Botrytis Blight
ELM (Drake)	Xanthomonas Leaf Spot
EUONYMUS	Botrytis Blight, Anthracnose
EUROPEAN FAN PALM	Pestalotia Leaf Spot
GARDENIA	Alternaria Leaf Spot, Cercospora Leaf Spot, Botrytis Bud Rot
GERANIUM	Alternaria Leaf Spot, Cercospora Leaf Spot, Botrytis Grey Mold
GLADIOLUS	Alternaria Leaf Spot, Botrytis Grey Mold, Bacterial Leaf Blight, Botrytis Blight, Anthracnose
GOLDEN RAIN TREE	Alternaria Leaf Spot, Botrytis Grey Mold, Bacterial Leaf Blight
GRAPE IVY	Bacterial Leaf Spot
HIBISCUS (3)	Bacterial Leaf Spot
HOLLY FERN	Pseudomonas Leaf Spot
HONEY LOCUST	Bacterial Leaf Spot
IMPATIENS	Bacterial Leaf Spot
INDIA HAWTHORN (4)	Anthracnose, Entomosporium Leaf Spot
IRIS	Bacterial Leaf Spot
IVY (English, Algerian) (1)	Xanthomonas Leaf Spots
IXORA	Xanthomonas Leaf Spots
JUNIPER (Eastern red cedar)	Anthracnose
LANTANA	Bacterial Leaf Spot
LILAC	Cercospora Leaf Spot
LOBLOLLY BAY	Anthracnose
LOQUAT (Ornamental)	Entomosporium maculate, Colletotrichum spp.
MAGNOLIA (Southern)	Anthracnose, Bacterial Leaf Spot, Algal Leaf Spot
MAGNOLIA (Sweet bay)	Anthracnose
MAGNOLIA	Bacterial Leaf Spot
MANDEVILLAS	Anthracnose
MULBERRY (Contorted)	Bacterial Leaf Spot
MULBERRY (Weeping)	Bacterial Leaf Spot
NEPHYTIS	Bacterial Leaf Spot
OLEANDER	Bacterial Leaf Spot, Fungal Leaf Spot
OAK, LAUREL	Algal Leaf Spot (Cephaleuros virescens)
PACHYSANDRA	Volutella Leaf Blight
PANSY	Downy Mildew
PARLOR PALM	Bacterial Leaf Spot
PEAR (Flowering)	Fire Blight, Leaf Spot
PENTAS (Egyptian star)	Bacterial Leaf Spot (Xanthomonas)
PEONY	Botrytis Blight
PERIWINKLE	Phomopsis Stern Blight

ORNAMENTAL	DISEASE
PHLOX	Alternaria Leaf Spot
PHOTINA (Red tip, Red leaf)	Anthracnose, Entomosporium
PISTACHIO (5)	Anthracnose
PLANTAIN LILY	Bacterial Leaf Spot
POTHOS	Bacterial Leaf Spot
POWDER PUFF PLANT	Bacterial Leaf Spot
PURPLE OSIER WILLOW	Anthracnose
PYRACANTHA	Fireblight, Scab
QUEEN PALM	Exosporium Leaf Spot, Phytophthora Bud Rot
RHODODENDRON	Alternaria Flower Spot
ROSE (1)	Powdery Mildew, Black Spots
SNAPDRAGON	Anthracnose, Dieback, Downy Mildew
SPATHE FLOWER	Bacterial Leaf Spot
TATARIAN HONEYSUCKLE	Bacterial Leaf Spot
UMBRELLA TREE	Bacterial Leaf Spot
VERBENA	Xanthomonas Leaf Spot
VIBURNUM	Anthracnose
WASHINGTON PALM	Pestalotia Leaf Spot
WEEPING FIG	Bacterial Leaf Spot
WEEPING WILLOW	Bacterial Leaf Spot
YUCCA (Adam's needle)	Cercospora & Septoria Leaf Spots

(1) On some varieties a discoloration may occur on foliage or blooms. To prevent residues on commercial plants, do not spray just before selling season.

(2) Apply 2.0 to 5.75 pints of this product in 20 to 100 gallons of water per acre. Do not apply more than 100 pints product (20 lb metallic copper) per acre per year. The minimum retreatment interval is 7 days.

(3) Hibiscus – Do not apply to plants in flower.

(4) For India Hawthorn use 1.25 to 5.0 pints per 100 gallons or 1/2 to 1-1/3 tablespoons per gallon. Do not apply more than 100 pints product (20 lb metallic copper) per acre per year. The retreatment interval is 7 days.

(5) For bearing trees that will produce harvestable pistachios, the maximum annual rate is 41.4 pints (5.2 gallons) of product (equivalent to 8.4 lb metallic copper) per acre; the minimum retreatment interval is 14 days.

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** 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 Environmental Protection Agency Regional Office for guidance.

### CONTAINER HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] "NOTE: This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type/size."

### [Nonrefillable Containers 5 Gallons or Less]

**Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) 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 1/4 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

### [Nonrefillable containers larger than 5 gallons]

**Nonrefillable container.** Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities, by burning. If burned stay out of smoke.

### [Refillable containers larger than 5 gallons]

**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 a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

### LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations of liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV113015)

[ Cuproxat is a registered trademark of Nufarm GmbH & Co KG. Inc.]

All [other] trademarks that appear on this label which are not owned by Nufarm Americas Inc. or its subsidiaries are the property of their respective owners.