



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

December 4, 2025

Audrey Sehn
Regional Regulatory Manager
UPL NA Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Subject: Label Amendment - Registration Review Mitigation for Copper Compounds
Product Name: Cuprofix Ultra 40 Disperss
EPA Registration Number: 70506-201
Case Number: 673277
Application Date: February 4, 2019

Dear Audrey Sehn:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Copper Compounds Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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 12 months from the date of this letter. After 12 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.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at rodriguez.concepcion@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie R. Javier". The signature is fluid and cursive, with the first name "Julie" being the most prominent.

Julie Javier, Team Leader
Risk Mitigation and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

ENCLOSURE: Stamped label

**[Optional Package Opening Instructions: EASY OPENING
PULL ON ONE OF THE ENDS OF THE RED THREAD]**

COPPER	GROUP	M1	FUNGICIDE
--------	-------	----	-----------

**Cuprofix® Ultra 40 Disperss®
Dry Flowable Fungicide/Bactericide**

ACTIVE INGREDIENT:

Basic Copper Sulfate * (CAS # 1344-73-6)71.1%

OTHER INGREDIENTS:.....28.9%

TOTAL.....100.0%

* Metallic copper equivalent, 40%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See back for additional Precautionary Statements and complete Directions For Use.

[Optional Booklet Use Text:

PEEL DOWN FOR DIRECTIONS

See attached label for First Aid, additional Precautionary Statements, and Directions For Use.

See attached booklet for additional Precautionary Statements and complete Directions For Use.]

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

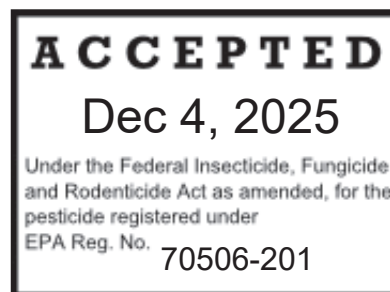
EPA Registration No. 70506- 201

Net Contents _____

EPA Establishment No. 4581-FRA-002

Batch/Lot No. _____

UPL NA Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406



FIRST AID	
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 by a poison control center or doctor. Do not give anything to an unconscious 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 advice.
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact the Rocky Mountain Poison Control Center at 1-866-673-6671 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Harmful if inhaled. Avoid breathing dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Engineering Controls

Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40CFR 170.305].

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, Loaders, Applicators, and other handlers must wear the following:

- Long-sleeved shirt and long pants
- Shoes plus socks

USER SAFETY REQUIREMENTS

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 materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS

Users Should:

- 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. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

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.

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.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 ft. above the vegetative canopy or water, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speed exceeds 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the application area.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with the spray release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify

that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no

wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a

ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. This standard also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals (REI). 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 24 hours for greenhouse uses and 48 hours for all other applications without required PPE.

Notify workers of the application by warning them orally.

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:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear if overhead exposure
- Protective eyewear

For at least seven 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 WPS-required decontamination supplies for workers entering the area treated with copper-containing products,
- workers are informed orally, in a manner they can understand:
 - that residues in the treated area may be highly irritating to their eyes,
 - that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes,
 - that if they do get residues in their eyes, they should immediately flush their eyes with the eye flush container for eye flush station that is located with the decontamination supplies, and
 - how to operate the eye flush container or eye flush station.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in the original container in a cool, dry place out of reach of children and animals. Store pesticides separately to prevent cross contamination of other pesticides, fertilizer, food and feed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

PRODUCT INFORMATION

Cuprofix Ultra 40 Disperss may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise in the specific crop use directions.

The per acre use rate of Cuprofix Ultra 40 Disperss is applicable for both dilute and concentrate spraying. Depending upon the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Spray Mix Volume Table. Complete spray coverage is essential to assure optimum performance from Cuprofix Ultra 40 Disperss. When treating by aerial application, or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full-scale commercial utilization.

While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental conditions and sprayer calibrations, have a greater impact. Always be sure that sprayers are calibrated to spray equipment manufacturer's specifications and environmental conditions are within those recommended by state and local regulatory authorities.

Consult this Cuprofix Ultra 40 Disperss label for specific rates and timing of application by crop. Where application rates are provided in a range (3 to 6 pounds), the higher rates are recommended when rainfall is heavy and/or disease pressure high. Under heavy disease pressure or when conditions favor such, use the higher rate and shorter spray intervals specified for each crop. In addition, use the higher rates for large mature tree crops.

When mixing, fill spray tank half full with water. Add Cuprofix Ultra 40 Disperss to tank while hydraulic or mechanical agitation is operating and continue filling with water. Spreaders, stickers (cleared for application to growing crops,) nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank.

RESTRICTIONS

- Pilots must use an enclosed cab that meets the definition listed in the WPS for agricultural pesticides [40CFR 170.305].
- Do not apply Cuprofix Ultra 40 Disperss in a spray solution having a pH of less than 6.5 as phytotoxicity may occur.
- If tank-mixing Cuprofix Ultra 40 Disperss with a benzimidazole type fungicide, do a jar test to check for full compatibility. Do not allow the spray mixture to remain in the tank for an extended period of time.

- Do not tank mix Cuprofix Ultra 40 Disperss with Aliette® fungicide unless appropriate precautions have been taken to buffer the spray solution or severe phytotoxicity may result.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture or other metallic surfaces.
- Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several products are involved. Reduced effect on pests or crop injury may occur. Unless recommended on this label or by a state/local expert or the user has direct experience, tank mixing should not be undertaken. If tank mixes are used, observe the most restrictive of the labeling limitations and precautions of all products used in mixture.
- It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used in the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic materials, such as plastics, rubbers, etc. Therefore, it is necessary when working with equipment containing these materials that they are thoroughly flushed with clean water after each day's use.
- Do not apply this product through any type of irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product. Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, traveler, big gun, plastic pipe solid set system(s) which contain no aluminum parts or components. Do not apply this product through any other type or irrigation system.

Resistance Management

For resistance management, Cuprofix Ultra 40 Disperss contains a Group M1 fungicide that also acts as a bactericide. Any fungal/bacterial population may contain individuals naturally resistant to Cuprofix Ultra 40 Disperss and other Group M1 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide/bactericide resistance, take one or more of the following steps:

- Rotate the use of Cuprofix Ultra 40 Disperss or other Group M1 fungicides/bactericides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide/bactericides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide/bactericide use that include scouting both before and after the application, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or Integrated Pest Management (IPM) recommendations for specific crops and pathogens.

- For further information or to report suspected resistance contact UPL NA Inc. at 1-800-438-6071. You can also contact your pesticide distributor or university extension specialist to report resistance.

DIRECTED USES

CITRUS: Grapefruit, Kumquats, Lemons, Limes, Oranges, Tangelos and Tangerines

FIELD CROPS: Alfalfa, Barley, Oats, Peanuts, Potatoes, Soybeans, Sugar Beets and Wheat

SMALL FRUITS: Blackberries, Blueberries, Cranberries, Currants, Gooseberries, Raspberries and Strawberries

TREE CROPS: Almonds, Apples, Apricots, Avocados, Bananas, Cacao, Cherries, Coffee, Filberts, Mangos, Nectarines, Olives, Peaches, Pears, Pecans, Pistachios, Plums, Prunes, Quinces and Walnuts

VEGETABLES: Beans, Beet Greens, Broccoli, Brussels Sprouts, Cabbage, Cantaloupes, Carrots, Cauliflower, Celeriac, Celery, Cucumbers, Eggplant, Greens (Collard, Mustard, and Turnip), Honeydew, Kale, Muskmelon, Onions, Peas, Peppers, Pumpkins, Spinach, Squash, Table Beets, Tomatoes, Watercress, and Watermelons

VINES: Grapes, Hops, and Kiwi

GREENHOUSE AND SHADEHOUSE CROPS: While specific directions are presented for Citrus, Cucumbers, Eggplant, Peppers and Tomatoes, general use may occur for any crop on this label where physiology allows greenhouse or shadehouse culture.

TURFGRASS

MISCELLANEOUS: Atemoya, Carambola, Chives, Cilantro, Dill, Douglas Fir, Ginseng, Guava, Litchi, Live Oak, Macadamia, Mamey Sapote, Papayas, Parsley, Passion Fruit, Pecan, Sugar Apple, and Sycamore

ORNAMENTALS: Species as listed

**Minimum Spray Mix Volume (Gallons) Per Acre When Applying
Cuprofix Ultra 40 Disperss**

Use	Aerial (gal/Acre)	Ground (gal/Acre)	
		Dilute	Concentrate
Vegetables	3	20	20
Field Crops	3	20	20
Small Fruits	5	150	50
Vines	5	150	50
Tree Crops	10	400	50
Citrus	10	800	100 (Florida*)
Turf and Ornamentals	10	150	50

*When using pesticide application equipment such as Curtec® or other similar sprayers, which are capable of obtaining thorough coverage at low volumes, applications as low as 20 gpa of spray volume may be used.

APPLICATION INSTRUCTIONS

The following specific instructions are based on general application procedures. The recommendations of the State Agricultural Extension Service should be closely followed as to

timing, frequency and number of sprays per season.

CITRUS

Cuprofix Ultra 40 Disperss may be mixed with foliar micronutrients to create “Shot Bag” mixes to meet the various nutritional requirements of citrus and provide disease protection as described on this label. Cuprofix Ultra 40 Disperss per acre rates in these mixes must not exceed the maximum labeled rates for disease control.

NOTE: Adding foliar micronutrients or other products to spray mixture containing Cuprofix Ultra 40 Disperss and applying to citrus during the post-bloom period when young fruit is present may result in phytotoxicity.

DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Melanose, Scab, Algal Spot	1.75 – 7.88 (0.7 – 3.15 lbs. copper)	Apply as pre-bloom and post-bloom sprays. Use higher rates when conditions favor disease development.
Greasy Spot, Pink Pitting	0.75 – 5 (0.3 – 2 lbs. copper)	Apply in summer on expanded new flush. Repeat on subsequent flushes where disease pressure is severe. Use higher rates when conditions favor disease development.
Alternaria Brown Spot (Suppression)	1.75 – 6.5 (0.7 – 2.6 lbs. copper)	On susceptible varieties, apply when the first spring flush appears and each flush thereafter. Application to the fruit should start after two thirds of the petals have fallen and be repeated on a 21-day schedule. NOTE: When using the lower rates, use shorter spray intervals (7 to 14 days).
Phytophthora Brown Rot, Septoria Spot	1.75 – 6 (0.7 – 2.4 lbs. copper)	Begin application in fall before or just after the first rain and continue as needed. Apply to entire tree for Septoria, or just the lower 4 to 5 feet of the tree for Brown Rot. Apply also to bare ground 1 foot beyond skirt. Use higher rates when conditions favor disease development.
Phytophthora Foot Rot	0.5 – 1 (0.2 – 0.4 lbs. copper)	Mix with 1 gallon of water 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 1 year, but does not cure existing infections. NOTE: Areas where microjet or low volume irrigation hit the tree trunk may require retreatment due to wash off.

DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Citrus Canker (Suppression Only)	1.25 – 7.88 (0.5 – 3.15 lbs. copper)	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, each flush of new growth should be sprayed.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1 to 7.88 lbs (0.4 to 3.15 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days. Do not use on citrus seedlings grown in greenhouses or shadehouses 	

CITRUS

Field Nursery Grown

To control melanose, scab, pink pitting, greasy spot, brown rot, and for citrus canker (suppression), apply 3-6 pounds per acre (1.2-2.4 lbs copper) at a rate of 200 gallons of spray mixture per acre. Apply Cuprofix Ultra 40 Disperss at 28-day intervals or at a minimum of 7-day intervals as needed depending on disease severity.

- Maximum use rate per acre per application: 6.0 lbs (2.4 lbs copper)
- Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper)
- Minimum retreatment interval: 7 days
- Preharvest Interval (PHI): 0 days.

FIELD CROPS

CROP	DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	1.25 (0.5 lbs. copper)	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 2.8 lbs (1.12 lbs copper) Minimum retreatment interval: 30 days Preharvest Interval (PHI): 0 days 		
Peanuts	Cercospora Leaf Spot	1 – 2 (0.4 – 0.8 lbs. copper)	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14-day intervals as needed. Use higher rates and reduce spray intervals to 7 days when conditions

CROP	DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
			favor disease development. Two to four pounds of Microthiol® Disperss® sulfur per acre may be added.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 11.85 lbs (4.74 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Potatoes	Early Blight Late Blight	0.75 – 3 (0.3 – 1.2 lbs. copper)	Apply lower rates at 7 to 10-day intervals starting when plants are 6 inches high when disease pressure is light and up to 3 pounds per acre where disease pressure is more severe. Under conditions of severe disease, control with Cuprofix Ultra 40 Disperss will be improved by tank mixing with other compatible fungicides registered for use on potatoes such as Penncozeb® 75DF (mancozeb). Read and follow all label instructions of tank mix partners.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 62.5 (25.0 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days 		
Soybeans *			* Not registered for use on soybeans in California unless otherwise allowed by supplemental labeling.
	Bacterial Blight (<i>Pseudomonas syringae</i>) Bacterial Pustule (<i>Xanthomonas campestris</i>)	0.75 – 1.25 (0.3 – 0.5 lbs. copper)	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 (<i>Septoria glycines</i>)	0.75 – 1.75 (0.3 – 0.7 lbs. copper)	Begin applications at full bloom to when pods are 3/16" 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.

CROP	DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	Pod & Stem Blight (<i>Diaporthe phaseolorum</i> and <i>Phomopsis longicola</i>)	1.25 – 2 (0.5 – 0.8 lbs. copper)	Begin applications when seed in a pod is 1/8" 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 manshurica</i>)	1 – 2 (0.4 – 0.8 lbs. copper)	Begin applications when conditions 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.
	Downy Mildew (<i>Peronospora manchurica</i>)	1.25 – 2 (0.5 – 0.8 lbs. copper)	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>)	1.25 – 2 (0.5 – 0.8 lbs. copper)	Begin applications when wet conditions exist. Continue on a 7 to 10-day schedule when conditions are favorable for disease development.
	Cercospora Leaf Blight (<i>Cercospora kikuchii</i>)	1.25 – 2 (0.5 – 0.8 lbs. copper)	Begin applications when seed in a pod is 1/8" long through beginning pod maturity (R5 – R7 growth stages). Continue on a 7 to 10-day schedule when conditions are favorable for disease development.
	Alternaria Leaf Spot (<i>Alternaria spp.</i>)	1.25 (0.5 lbs. copper)	Apply when mechanical injury, insect damage or another disease has occurred.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25-2.0 lbs (0.5-0.8 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 11.85 lbs (4.74 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Sugar Beets	Cercospora Leaf Spot	1.25 – 3 (0.5 – 1.2 lbs. copper)	Begin applications when conditions first favor disease development and repeat at 10 to 14-day intervals as needed. Use the higher rate when disease is severe.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 19.65 lbs (7.86 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days 		
Wheat, Oats,	Septoria Leaf Blotch,		Make first application at early heading and

CROP	DISEASE	USE RATE LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Barley	Helminthosporium Spot, Helminthosporium Blotch	1 - 1.25 (0.4 – 0.5 lbs. copper)	follow with second spray 10 days later. Use the higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 2.65 lbs (1.06 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days 		

SMALL FRUIT

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Blackberries (Santiam, Logan, Boysen, Marion, Aurora, Cascade, Chehalem, Thornless Evergreen)			
	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, Pseudomonas Blight	2.5 – 3 (1 – 1.2 lbs. copper)	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. Add 1 quart of crop oil per acre.
	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, Yellow Rust	1.25 (0.5 lbs. copper)	Apply when leaf buds begin to open and repeat when flower buds show white. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25-3.0 lbs (0.5-1.2 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 25.0 lbs (10.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days. 		
Blueberries			
	Bacterial Canker	3 – 4 (1.2 – 1.6 lbs. copper)	Make first application before fall rains and a second application 4 weeks later.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	Fruit Rot Phomopsis Twig Blight	2 – 4 (0.8 – 1.6 lbs. copper)	Dormant application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14-day intervals before blooms open.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 4.0 lbs (1.6 lbs copper) Maximum use rate per acre per year: 21.0 lbs (8.4 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days. 		
Cranberries			
	Fruit Rots	5 (2 lbs. copper)	Make first application at mid bloom. One or two additional applications at 7 to 10-day intervals may be required.
	Rose Bloom	5 (2 lbs. copper)	Apply three sprays on a 10 to 14-day schedule as soon as symptoms are observed.
	Tip Blight (Monilinia), Leaf Spots Red Leaf Spot, Lophodermium Twig Blight	5 (2 lbs. copper)	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals through pre-bloom.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.0 lbs (2.0 lbs copper) Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper) Minimum retreatment interval: 7days Preharvest Interval (PHI): 0 days 		
Currants, Gooseberries	Anthravnose, Leaf Spot	6.25 (2.5 lbs. copper)	Make initial application after first leaves have expanded. Continue on a 10 to 14 day schedule during wet conditions in the spring. Make an additional application after harvest.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 6.25 lbs (2.5 lbs copper) Maximum use rate per acre per year: 40.0 lbs (16.0 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Raspberries	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, Pseudomonas Blight	2.5 – 3 (1 – 1.2 lbs. copper)	Make fall application after harvest. Apply delayed dormant spray after training in the spring. Add quart of crop oil per acre.
	Leaf Spot, Cane Spot, Purple Blotch, Anthracnose, Yellow Rust	1.25 (0.5 lbs. copper)	Apply when leaf buds begin to open and repeat when flower buds show white. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist environmental conditions. Discontinue applications if signs of crop injury appear.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 1.25-3.0 lbs (0.5-0.1.2 lbs copper) according to disease being controlled. • Maximum use rate per acre per year: 25.0 lbs (10.0 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Strawberries	Leaf Spot, Leaf Blight Angular Leaf Spot (Xanthonomas) Leaf Scorch	1.25 - 2.5 (0.5 – 1 lbs. copper)	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 2.50 lbs (1.0 lbs copper) • Maximum use rate per acre per year: 15.0 lbs (6.0 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		

TREE CROPS

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
------	---------	-------------------------------------	--------------------------

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Almonds, Apricots, Cherries, Plums, Prunes	Shot-Hole, Bacterial Canker, Bacterial Blast (Pseudomonas)	5 – 8 (2 – 3.2 lbs. copper)	Make first application before fall rains and a second at late dormant. Use higher rates when rainfall is heavy and disease pressure is high. One pint of superior-type oil per 100 gallons of water may be added. For cherries, where disease is severe, an additional application at leaf fall may be required.
	Shot-Hole, Blossom Brown Rot	3.75 (1.5 lbs. copper)	Early bloom (popcorn) application: Apply before full bloom. Use higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use higher rates after full bloom.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.75-8.0 lbs (1.5-3.2 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 5-7 days* Preharvest Interval (PHI): 0 days <p>*Do not apply more than once every 7 days when using rate range 5 – 8 lbs/A. Do not apply more than once every 5 days when using rate 3.75 lbs/A or less.</p>		
Cherries (tart varieties only)	Cherry Leaf Spot *	3.75 (1.5 lbs. copper)	Begin applications at the first cover spray (7 to 10 days after shuck split). Repeat as needed at 10-day intervals depending on the use of other cherry leaf spot fungicides in the disease control program. Use of copper fungicides, including Cuprofix Ultra 40 Disperss, may result in phytotoxicity including yellow leaf blotches, bronzing of lower leaf surfaces, and premature leaf drop. Phytotoxicity will be more likely under warm dry conditions. The addition of hydrated lime at a rate of 6 to 9 pounds per acre will help reduce phytotoxicity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.75 lbs (1.5 lbs copper) Maximum use rate per acre per year: 45 lbs (18.0 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days. <p>*Not registered for use against Cherry Leaf Spot on tart cherries in California unless otherwise allowed by supplemental labeling.</p>		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Plums	Black Knot *	3 – 3.75 (1.2 – 1.5 lbs. copper)	Make an application at bud swell up to early bloom for early season disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 3.75 lbs (1.5 lbs copper) • Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) • Minimum retreatment interval: 5 days • Preharvest Interval (PHI): 0 days <p>* Not registered for use against Black Knot on plums in California unless otherwise allowed by supplemental labeling</p>		
Almonds (Sprinkler Irrigated Orchards)	Bacterial Blast	0.75 - 1.5 (0.3 – 0.6 lbs. copper)	For bacterial blast control in sprinkler irrigated orchards or where disease is severe, apply 0.75 to 1.5 pounds per acre post-bloom, at 2-week intervals or just before irrigation. NOTE: Injury may occur from post-bloom sprays on almonds, especially on Neplus varieties.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 1.5 lbs (0.6 lbs copper) • Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) • Minimum retreatment interval: 5 • Preharvest Interval (PHI): 0 days 		
Apples	Fire Blight	5 - 7.5 (2 – 3 lbs. copper)	Make one application up to green tip. Apply as a full-cover spray. NOTE: Crop injury may occur from late application; discontinue use at ½ inch green.
	Fire Blight	1.25 (0.5 lbs. copper)	Recommended for processing apples only as fruit russeting and leaf spotting are likely to occur. Make one application during bloom.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	Black Rot, Black Pox, Brooks Spot, Flyspeck, Sooty Blotch, Summer Scab, White Rot	1.25 (0.5 lbs. copper)	Do not apply prior to 3 rd cover and make 3 applications in rotation with other registered fungicides. Do not make more than 2 consecutive applications of Cuprofix Ultra 40 Disperss. Recommended for processing apples only as fruit russetting and leaf spotting are likely to occur. NOTE: Injury is more likely to occur on strains of Golden Delicious & Stayman. Use of copper on weak or stressed trees can increase potential for leaf spotting/drop.
	Crown Rot, Collar Rot	2.5 (1 lb. copper)	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 late fall after harvest. NOTE: Do not use if soil pH is below 5.5 since copper toxicity may result.
	Anthracnose, European Canker, Blossom Blast, Shoot Blast/Blister Spot (Pseudomonas), Fire Blight	8 – 15 (3.2 – 6 lbs. copper)	Make one application after harvest before fall rains. Use higher rates under severe disease conditions.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25-15.0 lbs (0.5-6.0 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 40.0 lbs (16.0 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days. 		
Avocados	Anthracnose, Blotch, Scab	5 – 7.88 (2 – 3.15 lbs. copper)	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 7.88 lbs (3.15 lbs copper) Maximum use rate per acre per year: 47.25 lbs (18.9 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Bananas			
	Sigatoka	1.25 (0.5 lbs. copper)	Apply by air in 10 gallons of water combining 0.5 gallon of agricultural oil. Apply on a 14-day schedule throughout the wet season. Apply at 21-day intervals during dry periods.
	Black Pitting	2.5 (1 lb. copper)	Mix in 100 gallons of water directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25-2.5 lbs (0.5-1 lb copper) according to disease being controlled. Maximum use rate per acre per year: 47.25 lbs (18.9 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Cacao	Black Pod	1.25 – 5.5 (0.5 – 2.2 lbs. copper)	Begin applications at the start of the rainy season and continue while infection periods persist. Apply 1.25 to 2.5 pounds at 14 to 21-day intervals in high rainfall areas. For drier areas, where two to four applications are recommended during critical infection periods and at long intervals, use 5.5 pounds per acre, according to disease incidence and planting density.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.5 lbs (2.2 lbs copper) Maximum use rate per acre per year: 39.25 lbs (15.7 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days 		
Coffee			
	Coffee Berry Disease	4 – 5.25 (1.6 – 2.1 lbs. copper)	Apply first spray after flowering and before onset of rains and then at 21 to 28 day intervals until picking. Use higher rates when rainfall is heavy and disease pressure is high.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	Bacterial Blight	4 – 5.25 (1.6 – 2.1 lbs. copper)	Begin spray program applications before the onset of the 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 higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (<i>Hemileia vastatrix</i>)	1.25 – 3 (0.5 – 1.2 lbs. copper)	Apply before the onset of rain and then at 21 day intervals while the rains continue. Use higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (<i>Cercospora</i>), Pink Disease (<i>Corticium</i>)	1.25 (0.5 lbs. copper)	Use concentrate or dilute spray. Begin treatments at the start of the wet season and continue at monthly intervals for three applications.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 1.25-5.25 lbs (0.5-2.1 lbs copper) according to disease being controlled. • Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper) • Minimum retreatment interval: 14 days • Preharvest Interval (PHI): 0 days 		
Filberts			
	Bacterial Blight	10 – 15 (4 – 6 lbs. copper)	Apply as a postharvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Add 1 pint of superior-type oil per 100 gallons of water. Use higher rates when rainfall is heavy and disease pressure is high.
	Eastern Filbert Blight	10 – 15 (4 – 6 lbs. copper)	Apply as a dilute spray in adequate water for thorough coverage. Make an application after harvest in October before winter rains begin. Additional applications should be made at bud swell to bud break and continued on a two week interval until early May. If desired, add 1 pint of a sticking agent or superior-type oil per 100 gallons of water. Use higher rates when rainfall is heavy and disease pressure is high.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 15.0 lbs (6.0 lbs copper) Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days Application is only permitted in Washington and Oregon. 		
Mangos	Anthracnose	5 – 6 (2 – 2.4 lbs. copper)	Apply monthly after fruit set until harvest.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 6.0 lbs (2.4 lbs copper) Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Olives	Peacock Spot, Olive Knot	5 – 8 2 – 3.2 lbs. copper)	Apply post harvest before winter rains fall. A second application in early spring should be made if disease is severe. Apply the high rate for heavy disease pressure or when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 8.0 lbs (3.2 lbs copper) Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 30 days Preharvest Interval (PHI): 0 days 		
Peaches, Nectarines WEST	Leaf Curl, Shot-Hole, Bacterial Canker/ Bacterial Blast (Pseudomonas), Bacterial Spot (Xanthomonas)	5 – 10 (2 – 4 lbs. copper)	Make dormant application after leaf drop and/or prior to bud swell. Can be used with superior type oils.
	Blossom Brown Rot, Shot-Hole	3.75 (1.5 lbs. copper)	Full cover spray at pink bud.
	Bacterial Spot	0.75 (0.3 lbs. copper)	Post-bloom application applied at first and second cover sprays. Note: Do not spray 3 weeks prior to harvest. Spotting of leaves and defoliation may occur from use in cover sprays.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 0.75-10.0 lbs (0.3-4 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 5-7* days Preharvest Interval (PHI): 0 days <p>*Do not apply more than once every 7 days when using rates of 5.0 lbs/A or greater Do not apply more than once every 5 days when using rate of 3.75 lbs/A or less</p>		
Peaches, Nectarines EAST	Leaf Curl, Bacterial Canker/ Bacterial Blast (Pseudomonas), Bacterial Spot (Xanthomonas)	5 – 7.5 (2 – 3 lbs. copper)	Make dormant application after leaf drop and/or prior to bud swell. Can be used with superior type oils.
	Bacterial Spot	1 – 2.5 (0.4 – 1 lb. copper)	After initial dormant application, use 2.5 lbs per acre at early bud swell. At pink bud, make another application at 1.5 lbs per acre. At petal fall, apply 1 lb per acre. Do not apply after shuck split. Three lbs per acre of Ziram 76DF can be mixed in all post-dormant applications. Some leaf spotting may occur on newly emerged leaves.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.5-7.5 lbs (1.0-3.0 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 45.0 lbs (18.0 lbs copper) Minimum retreatment interval: 5 days when using rates of 5 to 7.5 lbs/A; 7 days when using rates of 1 to 2.5 lbs/A. Preharvest Interval (PHI): 0 days 		
Pears	Fire Blight	0.75 (0.3 lbs. copper)	Apply at 5-day intervals throughout the bloom period. NOTE: Do not apply to D’Anjou pears. Excessive dosages may cause fruit russet.
	Blossom Blast (Pseudomonas)	7.5 – 10 (3 – 4 lbs. copper)	Make one application during dormancy before spring growth starts. Use the higher rate when disease pressure is high or when conditions favor disease development.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 0.75-10.0 lbs (0.3-4.0 lbs copper) according to disease being controlled. Maximum use rate per acre per year: 40.0 lbs (16.0 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days 		
Pecans	Shuck Rot, Kernel Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	1.25 – 2.5 (0.5 – 1 lbs. copper)	For suppression, apply in sufficient water volume to ensure complete coverage at 2 to 4-week intervals starting at kernel growth and continuing until shucks open. Use the higher rate and shorter interval if frequent rainfall occurs.
	Ball Moss	5 (2 lbs. copper)	Apply 5 pounds per 100 gallons of water in the spring when Ball Moss is actively growing, using 1.5 gallons of spray per foot of tree height. Make sure to wet Ball Moss tufts thoroughly. A second application may be required after 12 months.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.5-5.0 lbs (1.0-2.0 lbs copper) according to disease being controlled Maximum use rate per acre per year: 15.75 lbs (6.3 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days 		
Pistachios	Botrytis Blight, Botryosphaeria Panicle Blight, Shoot Blight, Septoria Leaf Blight, Late Blight (Alternaria alternata)	3 – 5.25 (1.2 – 2.1 lbs. copper)	Make initial application at bud swell and repeat on a 14-day schedule as dictated by disease conditions. If disease conditions are severe, use the higher rates.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.25 lbs (2.1 lbs copper) Maximum use rate per acre per year: 21.0 lbs (8.4 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days 		
Quince	Fire Blight	0.75 (0.3 lbs. copper)	Apply at 5 day intervals throughout the bloom period. Apply in adequate water volume for thorough coverage.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 0.75 lb (0.3 lbs copper) Maximum use rate per acre per year: 40.0 lbs (16.0 lbs copper) 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days 		
Walnuts	Walnut Blight	5 – 10 (2 – 4 lbs. copper)	<p>Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed if frequent rainfall occurs. Thorough coverage of catkins, leaves, and nutlets is essential for effective control. When applied as a dilute spray, 1 pint of summer oil emulsion may be added per 100 gallons.</p> <p>NOTE: Adequate control may not be obtained when copper tolerant strains of Xanthomonas bacteria are present.</p>
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 10.0 lbs (4.0 lbs copper) Maximum use rate per acre per year: 80.0 lbs (32.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

VEGETABLES

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Beans (Dry, Green)	Brown Spot, Halo Blight, Common Blight, Downy Mildew	0.75 – 2 (0.3 – 0.8 lbs. copper)	Use the higher rates when conditions favor disease development. For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14-day schedule depending upon environmental conditions.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 11.9 lbs (4.74 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Carrots	Alternaria Leaf Spot, Cercospora Leaf Spot	1.25 (0.5 lbs. copper)	Begin applications when disease first threatens and repeat at 7 to 14 day intervals depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 12.5 lbs (5.0 lbs copper) Minimum retreatment interval: 7days Preharvest Interval (PHI): 0 days 		
Celery,	Cercospora Early		Begin applications when plants are first

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Celeriac	Blight, Septoria Late Blight, Bacterial Blight	1.25 (0.5 lbs. copper)	established in the field, repeating at 7-day intervals depending on disease severity and environmental conditions.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 13.25 lbs (5.3 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Crucifers (Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collard Greens, Kale, Mustard Greens, Turnip Greens)	Black Rot (Xanthomonas), Black Leaf Spot (Alternaria), Downy Mildew	0.75 – 1.25 (0.3 – 0.5 lb. copper)	Apply at 7 to 10-day intervals. Begin applications after transplants are set in the field or shortly after emergence of field seeded crops or when conditions favor disease development. Use higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lb copper) Maximum use rate per acre per year: 6.6 lbs (2.65 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Cucurbits (Cantaloupes, Cucumbers, Honeydew, Muskmelon, Pumpkins, Squash, Watermelons)	Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Powdery Mildew, Gummy Stem Blight, Watermelon Bacterial Fruit Blotch (Suppression)	1 – 2 (0.4 – 0.8 lbs. copper)	Begin application when conditions are favorable for disease development. Repeat at 5 to 7-day intervals. Use shorter intervals when conditions are favorable for disease development. NOTE: Crop injury may occur from application at shorter intervals. Discontinue use if injury occurs.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 13.0 lbs (5.2 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days 		
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	1.25 (0.5 lbs. copper)	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10-day intervals depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 19.75 (7.9 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Onions Garlic	Purple Blotch, Downy Mildew Bacterial Blight	1.25 – 2.5 (0.5 – 1 lb. copper)	Begin when plants are 4 to 6 inches high and repeat at 7 to 10-day intervals depending upon disease pressure. Can cause phytotoxicity to leaves.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.5 lbs (1.0 lb copper) Maximum use rate per acre per year: 15.0 lbs (6.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Peas	Powdery Mildew	1 – 2 (0.4 – 0.8 lbs. copper)	Begin applications when disease symptoms first appear and repeat at weekly intervals as needed. Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 9.88 lbs (3.95 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Peppers	Bacterial Spot Anthracnose Cercospora Leaf Spot	0.75 – 2 (0.3 – 0.8 lbs. copper)	Begin applications when conditions first favor disease development and repeat at 5 to 10-day intervals as needed depending on disease severity. Use higher rates when conditions are favorable for disease development. Maneb 75DF can be tank mixed with Cuprofix Ultra 40 Disperss for added disease control.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 29.5 lbs (11.8 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Spinach	Anthracnose, White Rust, Blue Mold, Cercospora Leaf Spot	1.25 – 2 (0.5 – 0.8 lbs. copper)	Begin applications when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals as needed. Use higher rates when conditions favor disease development. NOTE: Flecking may occur on spinach leaves.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 9.88 lbs (3.95 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Table Beets	Cercospora Leaf Spot	1.25 – 3 (0.5 – 1.2 lbs. copper)	Begin applications when conditions first favor disease development and repeat at 10 to 14-day intervals. Use the higher rate when disease is severe.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 19.5 lbs (7.8 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days 		
Tomatoes (fresh market)	Anthrachnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.75 – 3 (0.3 – 1.2 lbs. copper)	Begin applications when disease first threatens and repeat at 5 to 10-day intervals depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 20.0 lbs (8.0 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Tomatoes (processing)	Anthrachnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.75 – 1.33 (0.3 – 0.5 lbs. copper)	Begin applications when disease first threatens and repeat at 5 to 10-day intervals or as needed depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.33 lbs (0.5 lbs copper) Maximum use rate per acre per year: 43.5 lbs (17.4 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Watercress	Cercospora Leaf Spot	1.25 (0.5 lbs. copper)	For applications made to watercress, production fields must be drained of water at least 24 hours prior to each application and water must not be reapplied to the field for a minimum of 24 hours following each application. Copper must not be applied to watercress during the aquatic production phase. Begin applications when plants are first established in the field, repeating at 7 to 14-day intervals depending on disease severity and environmental conditions. Do not exceed four

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
			applications per crop. Apply using ground equipment at no less than 50 gallons of water per acre.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 5.3 lbs (2.12 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

VINES

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Grapes	Black Rot, Powdery Mildew, Downy Mildew, Phomopsis	1.25 – 3 (0.5 – 1.2 lbs. copper)	Begin applications at late dormant up to bud break with subsequent applications throughout the season depending upon disease severity. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosette. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of Cuprofix Ultra 40 Disperss.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 50.0 lbs (20.0 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Hops	Downy Mildew	1 – 1.25 (0.4 - 0.5 lbs. copper)	Make crown treatment after pruning, but before training. After training, make additional applications at 10-day intervals as needed. Discontinue use 2 weeks before harvest.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 6.6 lbs (2.64 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days 		
Kiwi	Pseudomonas syringae, Erwinia herbicola, Pseudomonas fluorescens	5 (2 lbs. copper)	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 5.0 lbs (2.0 lbs copper) • Maximum use rate per acre per year: 15.75 lbs (6.3 lbs copper) • Minimum retreatment interval: 30 days • Preharvest Interval (PHI): 0 days
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

MISCELLANEOUS

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Atemoya	Anthrachnose	2 – 3 (0.8 – 1.2 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) • Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Carambola	Anthrachnose	4 – 5 (1.6 – 2 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 5.0 lbs (2.0 lbs copper) • Maximum use rate per acre per year: 26.25 lbs (10.5 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Cilantro	Bacterial Blight (Pseudomonas sp.)	1.3 (0.53 lbs copper)	Begin applications when plants are first established in the field and repeat at 10 day intervals depending upon disease severity and environmental conditions.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 1.3 lbs (0.52 lbs copper) • Maximum use rate per acre per year: 5.0 lbs (2.0 lbs copper) • Minimum retreatment interval: 10 days • Preharvest Interval (PHI): 0 days 		
Chives	Downy Mildew	1.25 (0.5 lbs. copper)	Begin applications when plants are established in the field. Repeat applications every 7 to 10 days as dictated by disease conditions. If disease pressure is high, use the shorter spray interval.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) • Maximum use rate per acre per year: 6.6 lbs (2.64 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Dill	Phoma Leaf Spot Rhizoctonia Foliage Blight	1 – 1.75 (0.4 – 0.7 lbs. copper)	Begin applications when plants are first established in the field and repeat at 7 to 10-day intervals depending upon disease severity and environmental conditions. If disease pressure is high, use the shorter spray interval and the higher rate.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.75 lbs (0.7 lbs copper) Maximum use rate per acre per year: 9.88 lbs (3.95 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Douglas Fir, Fir, (Juniper, Leyland Cypress), Pine, Spruce	Rhabdocline Needlecast, Needlecasts, Anthracnose, Cercospora Needle Blight, Phomopsis Twig Dieback	1.25 (0.5 lbs. copper)	For use on conifers in Christmas tree plantings, forest stands, and silviculture nurseries. Begin applications at bud break and repeat at 3 to 4 week intervals. Apply in a tank mix with another registered fungicide if moderate to severe disease pressure is present.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 50.0 lbs (20.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Ginseng	Alternaria Leaf Blight, Stem Blight	1.75 – 2.5 (0.7 – 1 lb. copper)	Use as a tank mix with Rovral® 50W in 100 gallons of water. Begin Cuprofix Ultra 40 Disperss + Rovral applications as soon as plants have emerged in spring. Applications should be repeated every 7 days until plants become dormant. Apply fungicides at least 8 hours before rain. Use of a spreader-sticker or sticker is advised. NOTE: Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2 to 4 year old Ginseng. It is very important that the stems be thoroughly

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
			covered with fungicide; therefore, use a spray apparatus that distributes the fungicide throughout the canopy.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 2.5 lbs (1.0 lb copper) • Maximum use rate per acre per year: 13.0 lbs (5.2 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Guava	Anthracnose, Red Algae	2 – 3 (0.8 – 1.2 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) • Maximum use rate per acre per year: 12.3 lbs (4.92 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Litchi	Anthracnose	2 – 3 (0.8 – 1.2 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	<ul style="list-style-type: none"> • Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) • Maximum use rate per acre per year: 12.3 lbs (4.92 lbs copper) • Minimum retreatment interval: 7 days • Preharvest Interval (PHI): 0 days 		
Live Oaks	Ball Moss	5 (2 lbs. copper)	<p>Apply 5 pounds per 100 gallons of water in the spring when Ball Moss is actively growing, using 1.5 gallons of spray per foot of tree height. Make sure to wet Ball Moss tufts thoroughly. A second application may be required after 12 months.</p> <p>Do not apply more than 5 lbs. of product per acre (2 lbs. copper) in a single application.</p> <p>NOTE: Cuprofix Ultra 40 Disperss may be injurious to ornamentals grown under Live Oaks. This product may be reactive on metal and masonry surfaces such as galvanized roofing. Avoid contact</p>

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
			with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.0 lbs (2.0 lbs copper) Maximum use rate per acre per year: 50.0 lbs (20.0 lbs copper) Preharvest Interval (PHI): 0 days 		
Macadamia			
	Anthracnose	4 (1.6 lbs. copper)	Begin applications at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	Phytophthora Blight (<i>P. capsici</i>), Raceme Blight (<i>Botrytis cinerea</i>)	3 – 4 (1.2 – 1.6 lbs. copper)	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 4.0 lbs (1.6 lbs copper) Maximum use rate per acre per year: 23.6 lbs (9.44 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Mamey Sapote	Anthracnose, Algal Leaf Spot	4 – 5.25 (1.6 – 2.1 lbs. copper)	Apply when conditions favor disease development. Repeat on 14 to 28-day schedule as disease severity and environmental conditions dictate. Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.25 lbs (2.1 lbs copper) Maximum use rate per acre per year: 21.0 lbs (8.4 lbs copper) Minimum retreatment interval: 14 days Preharvest Interval (PHI): 0 days 		
Papayas	Anthracnose	2.5 – 6 (1 – 2.4 lbs. copper)	Apply before disease appears. Apply at 10 to 14-day intervals. The addition of an approved spreader is recommended. Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 6.0 lbs (2.4 lbs copper) Maximum use rate per acre per year: 53.0 lbs (21.2 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Parsley	Bacterial Blight (Pseudomonas sp.)	2 (0.8 lbs. copper)	Begin applications when plants are first established in the field and repeat at 10-day intervals depending upon disease severity and environmental conditions.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 5.0 lbs (2.0 lbs copper) Minimum retreatment interval: 10 days Preharvest Interval (PHI): 0 days. 		
Passion Fruit	Anthracnose	4 – 5 (1.6 – 2 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 5.0 lbs (2.0 lbs copper) Maximum use rate per acre per year: 23.6 lbs (9.44 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Sugar Apple (Annona)	Anthracnose	7.75 (3.1 lbs. copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water volume for thorough coverage.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 7.75 lbs (3.1 lbs copper) Maximum use rate per acre per year: 31.5 lbs (12.6 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Sycamore	Anthracnose	1.25 – 2 (0.5 – 0.8 lbs. copper)	Apply as a full cover spray. Apply in 100 gallons of water or sufficient volume for thorough coverage. Make first application at bud crack and second application 7 to 10 days later (at 10% leaf expansion). Use higher rates when conditions favor disease development.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 50.0 lbs (20.0 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		

TURFGRASS

Not for this use in California

To control algae in turfgrass, apply 1 to 2.7 oz. of Cuprofix Ultra 40 Disperss per 1,000 square feet in 5 gallons of water. Cuprofix Ultra 40 Disperss may be used alone or in combination with other registered compatible fungicides as a maintenance spray. Observe all precautions and limitations on the label of each product used in tank mixes.

Do not apply more than 52.5 lbs. of Cuprofix Ultra 40 Disperss (21 lbs. copper) per acre per year. This is equivalent to 19.25 oz of Cuprofix Ultra 40 Disperss per 1,000 square feet per year. Do not apply more than once every 10 days.

NOTE: Phytotoxicity may occur depending upon varietal differences. Apply the listed rate to a small area and observe for 7 to 10 days for signs of injury. If phytotoxicity occurs, discontinue use. Do not apply in spray solutions with a pH of less than 6.5.

NOTE: Multiple applications of copper based fungicides to turfgrasses has the potential to cause phytotoxicity.

GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: Cuprofix Ultra 40 Disperss may be used in greenhouses and shadehouses to control diseases on crops that appear on this label; specific instructions have been included for certain crops.

The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differ greatly from crops grown under field conditions. Neither the manufacturer nor seller has determined whether or not Cuprofix Ultra 40 Disperss can be used safely on all greenhouse and shadehouse grown crops. The user should determine if Cuprofix Ultra 40 Disperss can be used safely prior to commercial use. In a small area, apply the listed rates to the plants in question, i.e. foliage, fruit, etc. and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply Cuprofix Ultra 40 Disperss according to specific rates given for those crops in pounds per acre or pounds per 100 gallons. One level teaspoon of Cuprofix Ultra 40 Disperss per 1000 square feet is equivalent to ½ pound per acre. Cuprofix Ultra 40 Disperss should be applied in adequate water for thorough coverage of plant parts. Begin applications at first sign of disease and repeat at 7 to 14 day intervals as needed. Use shorter intervals during periods as allowed by the individual crop use directions below when severe disease conditions persist.

NOTE: Do not use Cuprofix Ultra 40 Disperss on citrus seedlings grown in greenhouses or shadehouses.

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
Cucumber	Angular Leaf Spot, Downy Mildew	1.25 (0.5 lbs. copper)	Apply weekly when plants begin to vine.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Maximum use rate per acre per year: 13.0 lbs (5.2 lbs copper) Minimum retreatment interval: 5 days Preharvest Interval (PHI): 0 days 		
Eggplant	Alternaria Blight, Anthracnose	1.25 (0.5 lbs. copper)	Begin applications prior to development of disease symptoms. Repeat at 7 to 10-day intervals or as disease pressure dictates.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.25 lbs (0.5 lbs copper) Maximum use rate per acre per year: 19.75 lbs (7.9 lbs copper) Minimum retreatment interval: 7 days Preharvest Interval (PHI): 0 days 		
Peppers	Bacterial Spot	1.25 – 2 (0.5 – 0.8 lbs. copper)	Begin applications when conditions first favor disease development and repeat at 5 to 10-day intervals as needed depending on disease severity. Use higher rates for severe disease.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 2.0 lbs (0.8 lbs copper) Maximum use rate per acre per year: 29.5 lbs (11.8 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Tomatoes (fresh market)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.75 – 3 (0.3 – 1.2 lbs. copper)	Begin applications when disease first threatens and repeat at 5 to 10-day intervals depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 3.0 lbs (1.2 lbs copper) Maximum use rate per acre per year: 20.0 lbs (8.0 lbs copper) Minimum retreatment interval: 3 days Preharvest Interval (PHI): 0 days 		
Tomatoes (processing)	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	0.75 – 1.33 (0.3 – 0.5 lbs. copper)	Begin when disease first threatens and repeat at 5 to 10-day intervals depending on disease severity.
	<ul style="list-style-type: none"> Maximum use rate per acre per application: 1.33 lbs (0.5 lbs copper) Maximum use rate per acre per year: 43.5 lbs (17.4 lbs copper) Minimum retreatment interval: 3 days 		

CROP	DISEASE	USE RATE IN LBS/A (lbs copper/A)	APPLICATION INSTRUCTIONS
	<ul style="list-style-type: none"> Preharvest Interval (PHI): 0 days 		

ORNAMENTALS

Notice to User: Plant sensitivities to Cuprofix Ultra 40 Disperss have been found to be acceptable in specific genera and species listed on this label, however, phytotoxicity may occur. Due to the large number of species, widely varying growth conditions, and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to Cuprofix Ultra 40 Disperss. Neither the manufacturer nor seller has determined whether or not Cuprofix Ultra 40 Disperss can be safely used on all ornamental or nursery plants. The user should determine if Cuprofix Ultra 40 Disperss can be used safely prior to commercial use. In a small area, apply the listed rate(s) to the plants in question, i.e. bedding plants, foliage, etc. and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

One level teaspoon of Cuprofix Ultra 40 Disperss per 1.1 gallons of water is equivalent to 1 pound per 100 gallons. Apply as a thorough cover spray using 0.75 pounds of Cuprofix Ultra 40 Disperss (0.3 lbs. copper) per 100 gallons of water per acre. Begin applications at first sign of disease and repeat at 7 to 14-day intervals, as needed. Use the shorter interval during periods of frequent rains or when severe disease conditions persist.

Do not apply more than 50 lbs. of Cuprofix Ultra 40 Disperss (20 lbs. copper)/A/year.

Cuprofix Ultra 40 Disperss may be used alone or in combination with other registered, compatible fungicides as a maintenance spray. Observe all precautions and limitations on the label of each product used in tank mixes.

NOTE: Do not tank mix Cuprofix Ultra 40 Disperss with Aliette® fungicide unless appropriate precautions have been taken to buffer the spray solution. Severe phytotoxicity may result if adequate precautions are not taken.

CROP	LATIN NAME	DISEASE
Althea (Rose of Sharon)	<i>Hibiscus syriacus</i>	Bacterial Leaf Spot
Aralia	<i>Dizygotheca elegantissima</i>	Xanthomonas Leaf Spot, Cercospora Leaf Spot, Alternaria
Arborvitae	<i>Thuja sp.</i>	Alternaria Twig Blight, Cercospora Leaf Blight
Azalea ¹	<i>Rhododendron sp.</i>	Cercospora Leaf Spot, Botrytis Blight, Phytophthora Dieback, Powdery Mildew
Begonia	<i>Begonia semperflorens</i>	Bacterial Leaf Spot (Xanthomonas sp., Erwinia sp., Pseudomonas sp.)
Bougainvillea	<i>Bougainvillea</i>	Anthrachnose, Bacterial Leaf Spot

CROP	LATIN NAME	DISEASE
	<i>spectabilis</i>	
Bulbs (Tulip, Gladiolus)	<i>Miscellaneous</i>	Anthracnose, Bacterial Leaf Spot
Camphor Tree	<i>Cinnamomum camphora</i>	Pseudomonas Leaf Spot
Carnation ¹	<i>Dianthus sp.</i>	Alternaria Blight, Pseudomonas Leaf Spot, Botrytis Blight
Camellia	<i>Camellia japonica</i> , <i>C. sasanqua</i>	Anthracnose, Botrytis Blight
Canna	<i>Canna sp.</i>	Pseudomonas Leaf Spot
Chinese Tallow Tree	<i>Sapium sebiferum</i>	Bacterial Leaf Spot (Xanthomonas sp., Pseudomonas sp.)
Chrysanthemum ¹	<i>Chrysanthemum morifolium</i>	Septoria Leaf Spot, Botrytis Blight
Cotoneaster	<i>Cotoneaster sp.</i>	Botrytis Blight
Dahlia	<i>Dahlia pinnata</i>	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Date Palm	<i>Phoenix canariensis</i>	Pestalotia Leaf Spot
Dianthus	<i>Dianthus sp.</i>	Bacterial Spot, Bacterial Soft Rot
Dogwood	<i>Cornus florida</i>	Anthracnose
Dusty Miller	<i>Senecio cineraria</i>	Bacterial Leaf Spot (Pseudomonas cichorii)
Easter Lily ²	<i>Lilium longiflorum</i>	Botrytis Blight
Echinacea	<i>Echinacea sp.</i>	Bacterial Leaf Spot (Pseudomonas cichorii)
Elm Drake	<i>Ulmus parvifolia</i>	Xanthomonas Leaf Spot
Euonymus	<i>Euonymus sp.</i>	Botrytis Blight, Anthracnose
European Fan Palm	<i>Champaerops numilis</i>	Pestalotia Leaf Spot
Gardenia	<i>Gardenia jasminoides</i>	Alternaria Leaf Spot, Botrytis Bud Rot, Cercospora Leaf Spot
Geranium	<i>Pelargonium sp.</i>	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Gladiolus	<i>Gladiolus sp.</i>	Alternaria Leaf Spot, Botrytis Gray Mold, Bacterial Leaf Blight
Golden Rain Tree	<i>Koelreuteria paniculata</i>	Bacterial Leaf Spot

CROP	LATIN NAME	DISEASE
Hibiscus	<i>Hibiscus rosa-sinensis</i>	Bacterial Leaf Spot
Holly Fern	<i>Cyrtomium falcatum</i>	Pseudomonas Leaf Spot
Impatiens	<i>Impatiens sallerana</i>	Bacterial Leaf Spot
India Hawthorn ³	<i>Raphiolepis indica</i>	Anthracnose, Entomosporium Leaf Spot
Ivy (English, Algerian) ¹	<i>Hedera helix</i> <i>H. canariensis</i>	Xanthomonas Leaf Spot
Ixora	<i>Ixora coccinea</i>	Xanthomonas Leaf Spot
Juniper (Eastern Red Cedar)	<i>Juniperus virginiana</i>	Anthracnose
Lantana	<i>Lantana camara</i>	Bacterial Leaf Spot
Lilac	<i>Syringa sp.</i>	Cercospora Leaf Spot
Loblolly Bay	<i>Gordonia lasianthus</i>	Anthracnose
Loquat	<i>Eriobotrya japonica</i>	Entomosporium maculata, Colletotrichum sp.
Mandevillas	<i>Mandevilla sp.</i>	Anthracnose
Magnolia (Southern)	<i>Magnolia grandiflora</i>	Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot
Magnolia (Sweet Bay)	<i>Magnolia virginiana</i>	Anthracnose
Magnolia	<i>Magnolia soulangiana</i>	Bacterial Leaf Spot
Marigold	<i>Tagetes sp.</i>	Alternaria Leaf Spot, Botrytis Leaf Rot, Flower Rot, Cercospora Leaf Spot
Mulberry, Weeping	<i>Morus alba</i>	Bacterial Leaf Spot
Oleander	<i>Nerium oleander</i>	Bacterial Leaf Spot, Fungal Leaf Spot
Oak, Laurel	<i>Quercus laurifolia</i>	Algal Leaf Spot (Cephaleuros virescens)
Pachysandra	<i>Pachysandra procumbens</i>	Volutella Leaf Blight
Pansy	<i>Viola sp.</i>	Downy Mildew
Pear (Flowering)	<i>Pyrus calleryana</i>	Fire Blight, Leaf Spot
Peony	<i>Paeonia spp.</i>	Botrytis Blight

CROP	LATIN NAME	DISEASE
Pentas (Egyptian Star)	<i>Pentas spp.</i>	Bacterial Leaf Spot (Xanthomomas sp.)
Periwinkle	<i>Catharanchus roseus</i> , <i>Vinca sp.</i>	Phomopsis Stem Blight
Phlox	<i>Phlox sp.</i>	Alternaria Leaf Spot
Pistachio	<i>Pistacia chinensis</i>	Anthrachnose
Plantain Lily	<i>Hosta sp.</i>	Bacterial Leaf Spot
Powder Puff Plant	<i>Calliandra sp.</i>	Bacterial Leaf Spot
Philodendron	<i>Philodendron selloum</i>	Bacterial Leaf Spot
Photinia (Red Tip, Red Leaf)	<i>Photinia fraserii</i> , <i>P. glabra</i>	Anthrachnose, Entomosporium
Pyracantha	<i>Pyracantha sp.</i>	Fire Blight, Scab
Queen Palm	<i>Arecastrum romanzoffianum</i>	Exosporium Leaf Spot, Phytophthora Bud Rot
Rhododendron	<i>Rhododendron sp.</i>	Alternaria Flower Spot
Rose ¹	<i>Rosa sp.</i>	Powdery Mildew, Black Spot
Verbena	<i>Verbena sp.</i>	Xanthomonas Leaf Spot
Viburnum	<i>Viburnum odoratissimum</i> , <i>V. suspensum</i>	Anthrachnose
Washingtonia Palm	<i>Washingtonia robusta</i>	Pestalotia Leaf Spot
Weeping Willow	<i>Salix babylonica</i>	Anthrachnose
Yucca (Adam's needle)	<i>Yucca sp.</i>	Cercospora Leaf Spot, Septoria Leaf Spot

¹ Discoloration of foliage and/or blooms has been noted on some varieties. To prevent residues on commercial plants, do not spray just before selling season.

² Apply 1.125 to 1.875 pounds of Cuprofix Ultra 40 Disperss (0.45 to 0.75 lbs. copper) in 20 to 100 gallons of water per acre. RESTRICTION: Do not apply additional copper to this land for 36 months.

³ For Indian Hawthorn use 0.75 to 1.5 pounds of Cuprofix Ultra 40 Disperss (0.3 to 0.6 lbs. copper) per 100 gallons.

CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of sprinkler irrigation systems:

center pivot, lateral move, traveler, big gun, plastic pipe solid set systems which contain no aluminum parts or components. 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.

Shut off injection equipment after treatment and continue to operate irrigation system until Cuprofix Ultra 40 Disperss has been cleared from the last sprinkler head.

NOTE: It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used in the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic material such as plastics, rubbers, etc. Therefore, it is necessary when working with equipment containing these materials that they are thoroughly flushed with clean water after each day's use.

Do not apply this product through any type of irrigation (chemigation) system using aluminum parts or components as damage to the system may occur. Such application is prohibited regardless of whether the irrigation system is flushed with water after use of this product.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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 the 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 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 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, or in cases where there is no water pump, 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.

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

When mixing, fill nurse tank half full with water. Add Cuprofix Ultra 40 Disperss slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. **DO NOT PRE-MIX OR SLURRY** Cuprofix Ultra 40 Disperss before adding to the nurse tank. Stickers, spreaders (cleared for use on growing crops), nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe the most stringent cautions and limitations on the label of all products used in mixtures.

Cuprofix Ultra 40 Disperss should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Agitation of the mixture in the nurse tank is recommended.

SPRINKLER CHEMIGATION

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.

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

When mixing, fill nurse tank half full with water. Add Cuprofix Ultra 40 Disperss slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. **DO NOT PRE-MIX OR SLURRY** Cuprofix Ultra 40 Disperss. Stickers, spreaders (cleared for use on growing crops), nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe the most stringent cautions and limitations on the label of all products used in mixtures.

Cuprofix Ultra 40 Disperss should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Agitation of the mixture in the nurse tank is recommended.

EMERGENCY TELEPHONE NUMBERS:

CHEMTREC: (800) 424-9300 •

MEDICAL: (866) 673-6671 Rocky Mountain Poison Control Center

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of UPL NA Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of UPL NA Inc. and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold UPL NA Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UPL NA INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, UPL NA Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UPL NA INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT,**

SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UPL NA INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

UPL NA Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of UPL NA Inc.

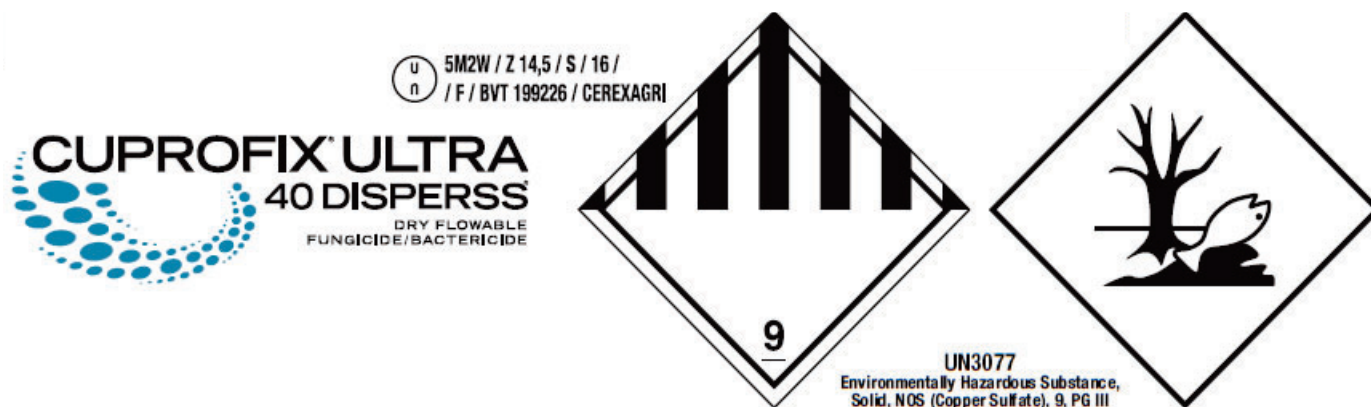
Made in France

Aliette is a registered trademark of Bayer CropScience.

Cuprofix, Disperss, Microthiol, and Penncozeb are registered trademarks of UPL NA Inc.

Curtec is a registered trademark of Curtec Corporation.

Rovral is a registered trademark of Bayer CropScience.



Rev. 12/3/2018 Notification
3/18/2024 IRRD Changes