



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 13, 2020

Carolyn Miter
Registrations Specialist
Albaugh, LLC.
PO Box 2127
Valdosta, GA 31604

Subject: Registration Review Label Mitigation for Copper Compounds
Product Name: Copper Hydroxide 10% Liquid
EPA Registration Number: 42750-217
Application Date: 2/20/2019
Decision Number: 553389

Dear Carolyn Miter:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of 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.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at stanton.darius@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington".

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

COPPER HYDROXIDE 10% LIQUID
 [Alternate Brand Name Nu-Cop XLR]

ACTIVE INGREDIENT:		
Copper hydroxide	17.06%	
OTHER INGREDIENTS:	<u>82.94%</u>	
TOTAL:	100.00%	

CAS # 20427-59-2
 (Metallic copper equivalent 10.0%) This product contains 1 lb. of metallic copper per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

FIRST AID

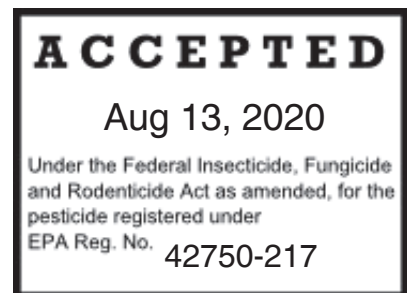
IF IN EYES:	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> 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.
IF SWALLOWED:	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
In case of medical or transport emergency, contact CHEMTREC toll free at 1-800-424-9300	

EPA Reg. No. 42750-217

EPA Est. No. 45002-MEX-2

NET CONTENTS:

MANUFACTURED FOR:
 Albaugh, LLC
 1525 NE 36th Street
 Ankeny, IA 50021



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye injury. Wear goggles, face shield or safety glasses. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse. Prolonged or frequently repeated contact may cause skin sensitization in certain individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, PVC and viton. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear the following:

1. Long-sleeved shirt and long pants
2. Chemical resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils. (If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.)
3. Shoes plus socks
4. Protective eyewear

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This 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.

This copper product is toxic to fish and aquatic organisms. Unlike most organic pesticides, copper is an element and will not break down in the environment and will therefore accumulate in sediment with repeated applications. Copper is a micronutrient, but its pesticidal application rate exceeds the amount of copper needed as a nutrient.

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.

RESISTANCE MANAGEMENT

Copper Hydroxide - GROUP M01 FUNGICIDE

COPPER HYDROXIDE 10% LIQUID contains copper hydroxide, a Group M01 fungicide with a multi-site contact activity. Copper hydroxide is an inorganic non-systemic protectant compound which are generally considered as a low-risk of developing resistance.

Because COPPER HYDROXIDE 10% LIQUID is a protective and not systemic fungicide, thorough coverage of the plant surface must be maintained. A gradual or total loss of control may occur over time if plant growth or weathering reduces the foliage coverage.

However, because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as:

- Rotate the use of COPPER HYDROXIDE 10% LIQUID or other Group M01 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 IPM program for fungicide/bactericide use that includes scouting, 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 IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact your local Albaugh representative at 1-800-247-8013 or local extension specialist to report resistance.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval of 48 hours provide the following instructions are followed.

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
- Chemical resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow others to enter treated areas without protective clothing until sprays have dried.

SPRAY DRIFT

AERIAL APPLICATIONS:

- Do not release spray at a height great than 10 ft. above the vegetative canopy of water, unless a greater application height is necessary for pilot safety.
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions

GROUND BOOM APPLICATIONS:

- Apply with the spray release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a spray release height no more than 4 feet above the ground.
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 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 aurally 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.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep in a cool place. Do not store at temperatures below 32°F. Open dumping is prohibited. Do not reuse empty container.

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

CONTAINER HANDLING:

Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(non-refillable <5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

(non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable container (250 gallon & bulk): Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

PRODUCT USE INSTRUCTIONS

Use Copper Hydroxide 10% Liquid as noted below. Copper Hydroxide 10% Liquid is adaptable to spraying from all types of spray equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. For dilute, high volume sprays use from 25 to 100 gallons of water per acre for most vegetable crops, 400 to 800 GPA for fruit and nut crops, and up to 1500 gallons per acre as may be required for large citrus groves. For aerial spraying, 3 to 15 GPA are commonly used. For concentrate ground sprays, apply from 5 to 20 gallons per acre for vegetable crops and 25 to 100 gallons per acre for fruit and nut crops. Add Copper Hydroxide 10% Liquid slowly to spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc. should be added last. Copper Hydroxide 10% Liquid is compatible with commercially formulated spreader-stickers, oils and such insecticides as carbaryl and other fungicides. Observe all cautions and limitations on label of all products used in mixtures.

The following instructions are based on specific applications. The recommendations of the State Agricultural Extension Services should be closely followed as to timing, frequency, and number of sprays per season. When a range of doses are given for the use site, use the low dose when conditions are not favorable for disease development and use the high dose when conditions are favorable for disease development. Consult your State Agricultural Extension Service for guidance in determining what conditions favor diseases for the particular use site.

CHEMIGATION INSTRUCTIONS

Do not apply this product through any irrigation 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, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

Crop injury or lack of effectiveness 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.

A. Center Pivot, Traveler, Big Gun, Motorized Lateral Move, End Tow, and Side (Wheel) Roll Irrigation Equipment: Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank or injection equipment with water. Operate system for one complete circle for center pivot or one complete run for the other recommended equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run, but continue to operate irrigation system until the product has been cleared from last sprinkler head. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur.

B. Solid Set and Hand Move Irrigation Equipment: Determine acreage covered by sprinkler. Fill tank of

injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of product for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Provide constant mechanical agitation in the mix tank to ensure that the product will remain in suspension during the injection cycle. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until pesticide is cleared from last sprinkler head.

SAFETY DEVICES

- (1) The systems designated above 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.
- (2) All pesticide injection pipelines must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- (3) 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.
- (4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- (5) 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.
- (6) 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.
- (7) Do not apply when wind speed favors drift beyond the area intended for treatment.

SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The system must 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.

For additional instructions on safety precautions refer to statements (2), (3), (4), (6), and (7) in the section on SAFETY DEVICES.

FROST INJURY PROTECTION:

Bacterial Ice nucleation inhibitor - Application of Copper Hydroxide 10% Liquid made to all crops listed on this label at rates and stages of growth indicated on this label at least 24 hours and not more than 72 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola*, and *Pseudomonas fluorescens*) and may thereby provide some protection against light frost. The degree of frost protection will vary with weather conditions and other factors. Not

recommended for those geographical areas where weather conditions favor severe frost.

ALFALFA			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora & Leptosphaerulina Leaf Spots	2.5 – 4.25	30 Days	Apply 10 to 14 days before each harvest or earlier if disease threatens. Apply with ground or aerial equipment. Spray injury may occur with sensitive varieties such as Lahontan.
RESTRICTIONS: Maximum single application rate is 4.25 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 8.5 pt/A (1.06 lbs metallic copper equivalent)			

APPLES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Fall & Late Dormant: Anthracnose European Canker Pseudomonas Syringae	12.0 – 48.0	Only one dormant application allowed per season	Apply before fall rains. Use on yellow varieties may cause discoloration. To avoid, pick before spraying.
Silver-tip to Green-tip stage: Apple scab, Fire Blight	8.4 – 48.0	Only one application allowed per season	Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
Bloom & Growing Season: Fireblight	1.8 – 12.0	5	Make application between ½ inch green-tip to first cover. ATTENTION: Moderate to severe crop injury may occur with this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern due to fruit russetting. The addition of 1 to 3 pounds of hydrated lime per pint of Copper Hydroxide 10% Liquid may reduce crop injury.
Crown or Collar Rot (Phytophthora cactorum)	See comment	5	Apply either in early spring or in fall after harvest each year. Do not use if soil pH is below 5.5 or copper toxicity may result. Mix 4 - 6 pints in 100 gallon of water. Apply 1-4 gallons of suspension as a drench as a drench on the lower trunk area of each tree.
RESTRICTIONS Maximum single dormant season application rate is 48.0 pt/A (6.0 lbs. metallic copper equivalent) Maximum single silver-tip to green-tip season is 48 pt/A (6.0 lbs. metallic copper equivalent) Maximum single growing season application rate is 12 pt/A (1.5 lbs. metallic copper equivalent) Maximum annual application rate is 128 pt/A (16.0 lbs. metallic copper equivalent)			

ALMONDS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bloom/Growing Season: Coryneum Blight Blossom Brown Rot	6.0 – 12.0	5	Use during the early bloom stage (popcorn). A second application in late dormant before foliage buds swell may be necessary when frequent rainfall occurs. To avoid plant injury, do not use above rate after full bloom. NOTE: Foliar injury may occur from post-bloom sprays
Dormant to Pink Bud Season: Bacterial Blast (Pseudomonas)	8.4 – 64.0	7	Use at dormant to early pink bud. For blast control in sprinkler irrigated orchards or where disease is severe, apply 2-4 sprays or as many as required at 1 to 4 pints per acre at 2 week post-bloom intervals or just before sprinkling. Slight leaf injury may occur from post-bloom spray.
RESTRICTIONS Maximum single dormant application rate is 64 pt/A (8.0 lbs. metallic copper equivalent) Maximum single bloom/growing application rate is 12.0 pt/A (1.5 lbs. metallic copper equivalent) Maximum annual application rate is 144 pt/A (18.0 lbs metallic copper equivalent)			

APRICOTS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Fall & Late Dormant: Anthracnose European Canker Pseudomonas Syringae	8.4 – 64.0	7	Apply before fall rains and make a second application at late dormant Use the higher rates when conditions favor disease. Use on yellow varieties may cause discoloration. To avoid, pick before spraying.
Bloom/Growing Season: Coryneum Blight (Shot Hole) Blossom Brown Rot	8.4 – 12.0	5	Apply at popcorn to full bloom as a full cover spray. To avoid spray injury, do not apply after full bloom.
RESTRICTIONS Maximum single dormant application rate is 64 pints/A (8.0 lbs. metallic copper equivalent) Maximum single bloom/growing application rate is 12 pints/A (1.5 lbs. metallic copper equivalent) Maximum annual application rate is 144 pints/A (18.0 lbs metallic copper equivalent)			

ATEMOYA, SUGAR APPLE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	3.0 – 25.0	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS Maximum single application rate is 25 pt/A (3.15 lbs metallic copper equivalent) Maximum annual application rate is 100 pt/A (12.6 lbs metallic copper equivalent)			

AVOCADOS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Scab	8.0 – 25.0	14	Apply when bloom buds begin to swell. Continue application at 2 – 4 week intervals for 5 to 6 applications. Follow recommendations of State Agricultural Experiment Stations.
RESTRICTIONS Maximum single application rate is 25 pt/A (3.125 lbs metallic copper equivalent) Maximum annual application rate is 150 pt/A (18.75 lbs metallic copper equivalent)			

BANANAS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Sigatoka	1.8 - 8.0	7	Apply on a 7 - 14 day schedule throughout the wet season. Apply at 21 day intervals during dry periods.
Black Pitting	4.2 – 8.0	7	Apply directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after emergence.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 150 pt/A (18.75 lbs metallic copper equivalent)			

BEANS (Dry, Green)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Halo & Common)	1.2 – 6.3	7	For protective sprays apply first application when plants are six inches high. Apply on 7 to 14 day schedule depending on local conditions.
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs. metallic copper equivalent) Maximum annual application rate is 37.8 pt/A (4.74 lbs metallic copper equivalent)			

BRAMBLES (Blackberry, Santiams, Logans, Boysens, Marions, Auroras, Cascades, Chehalems, Raspberry & Thornless Evergreens)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Leaf & Cane Spot	4.2 – 16.0	7	Apply delayed dormant spray after training in spring. Apply again in late spring. Make fall spray application after harvest.
RESTRICTIONS Maximum single application rate is 16 pt/A (2.0 lbs metallic copper equivalent) Maximum annual application rate is 80 pt/A (10.0 lbs metallic copper equivalent)			

BLUEBERRIES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Canker	4.2 – 16.8	7	Make first application before the fall rains, preferably the first week in October and a second application 1 - 4 weeks later.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 67.2 pt/A (8.4 lbs metallic copper equivalent)			

CRUCIFERS (Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collard Greens, Mustard Greens, & Turnip Greens)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew Black Rot (Xanthomonas) Black Leaf Spot (Alternaria)	1.2 – 4.2	7	Apply in a minimum of 25 GPA at 7 day intervals. (CAUTION: A slight reddening of older leaves may occur on broccoli, and a slight flecking of wrapper leaves may occur on cabbage.)
RESTRICTIONS Maximum single application rate is 4.2 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 21 pt/A (2.65 lbs metallic copper equivalent)			

CACAO			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Black Pod	1.8 – 18.0	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Sprays should be made as often as 14 to 21 days in high rainfall areas at varying rates per acre depending on disease severity. For drier areas where 2 to 4 applications are recommended during critical infection periods and at long intervals, use 2 - 6 pints per acre, according to disease incidence and planting density.
RESTRICTIONS Maximum single application rate is 18 pt/A (2.25 lbs metallic copper equivalent) Maximum annual application rate is 126 pt/A (15.75 lbs metallic copper equivalent)			

CARAMBOLA			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracoise	6.0 – 16.8	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 84 pt/A (10.5 lbs metallic copper equivalent)			

CARROTS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Carrot Blight (Cercospora)	1.8 – 8.0	7	When disease threatens, apply at 7 to 14 day intervals.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 40 pt/A (5.0 lbs metallic copper equivalent)			

CELERY & CELERIAC			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early, Late & Bacterial Blights	1.8 – 8.0	7	Apply as soon as plants are first established in the field, then every 7 days depending on severity and weather.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 42.4 pt/A (5.3 lbs metallic copper equivalent)			

CHERRY			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Dormant & Late Bloom Season: Dead Bud (Pseudomonas syringae) Coryneum Blight	8.4 – 64.0	7	In orchards where the disease is severe a spray should also be applied shortly after harvest.
Bloom & Growing Season: Brown Rot Blossom	8.4 – 12.0	5	Applied at popcorn and full bloom.
RESTRICTIONS Maximum single dormant season application rate is 64 pt/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 12 pt/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 144 pt/A (18.0 lbs metallic copper equivalent)			

CHIVES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	1.8 – 4.2	7	Begin applications when plants are established in the field. Repeat applications every 7-10 days as dictated by disease conditions.
RESTRICTIONS Maximum single application rate is 4.2 pints/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 21 pints/A (2.65 lbs metallic copper equivalent)			

CITRUS (Grapefruit, Kumquat, Lemon, Orange, Pummelo, Tangelo, Tangerine & Lime)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Melanose Scab Pink Pitting	4.2 – 25.2	7	Apply as pre-bloom and post-bloom sprays.
Greasy Spot	1.8 – 12.6	7	May be used in concentrate sprays at equivalent rates. For aerial application use 4-6 pints Copper Hydroxide 10% Liquid per 10 gallons per acre.
Brown Rot	4.2 – 17.6	7	Apply beginning in the fall and continuing as needed. Apply to skirts of trees to a height of at least 4 feet. Apply also to bare ground one foot beyond skirt. Use the higher rates when conditions favor disease. NOTE: In California, in areas subject to copper injury, add 1/3 to 1 lb. of high quality lime per gallon of Copper Hydroxide 10% Liquid.
Citrus Canker (SUPPRESSION ONLY)	2.4 – 12.0	7	Spraying flushes 7-14 days after shoots begin to grow. Young fruit may need additional application. Number and timing of applications will depend on disease pressure. Under heavy disease pressure, each flush of new growth should be sprayed.

CITRUS (Grapefruit, Kumquat, Lemon, Orange, Pummelo, Tangelo, Tangerine & Lime)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Phytophthora	(See comment)	7	Mix 1-2 pint with one gallon of water and paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May before summer rains and/or in the fall before wrapping trees for freeze protection. This treatment serves as protection for up to one year, but does not cure existing infections.
RESTRICTIONS Maximum single application rate is 25.2 pt/A (3.15 lbs. metallic copper equivalent) Maximum annual application rate is 100.8 pt/A (12.6 lbs metallic copper equivalent)			

COFFEE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Coffee Berry Disease (Collectotrichum coffeanum)	6.0 – 16.8	14	Apply after flowering and before the start of long rains and then at 14-28 day intervals until picking. Use the higher rates when rainfall is heavy and disease pressure is high.
Bacterial Blight (Pseudomonas syringae)	6.0 – 16.8	21	Begin spray program before the start of long rains and then at 21 - 28 day intervals until picking. The critical time of spraying to control disease is just before, during, and after flowering(s), especially when these times coincide with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
Iron Spot (Cercospora coffeicola) & Pink Disease (Corticium salmonicolor)	1.8 – 8.4	14	Begin treatment at start of wet season and continue at monthly intervals for three applications.
Leaf Rust	1.8 – 8.4	14	Apply before the onset of rain and then at 21 day intervals while rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 100.8 pt/A (12.6 lbs metallic copper equivalent)			

CONIFERS (Douglas Fir, Fir, Juniper, Leyland Cypress, Pine, Spruce)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Needlecast, Anthracnose, Rhabdocline needlecast, Phomopsis Twig Dieback	1.8 – 16	7	Begin applications at bud break and repeat at 3 - 4 week intervals. Apply in a tank mix with another registered pesticide if moderate to severe disease pressure is present.
RESTRICTIONS Maximum single application rate is 16 pt/A (2.0 lbs metallic copper equivalent) Maximum annual application rate is 160 pt/A (20.0 lbs metallic copper equivalent)			

CORN (FIELD, POP, SWEET)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Stalk Rot Goss's Wilt (suppression only)	4.0 - 8.0	7	Begin treatment when disease first appears and repeat every 7 to 10 days as needed. Use the higher rates and shorter spray intervals when conditions favor disease.
RESTRICTIONS Maximum single application rate is 8.0 pints/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 33.6 pints/A (4.2 lb metallic copper equivalent)			

CRANBERRY			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Fruit Rot	8.4 – 16.8	7	One or two additional applications made at 7 to 14 day intervals may be required, depending on disease pressure. Follow the advice of the local Agricultural Extension Service.
RESTRICTIONS Maximum single application rate is 16.8 pints/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 100.8 pints/A (12.6 lb metallic copper equivalent)			

CUCURBITS (Cucumbers, Cantaloupes, Honeydews, Muskmelons, Pumpkins, Squash & Watermelons)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Alternaria Leaf Spot Angular Leaf Spot Anthracnose Downy Mildew Powdery Mildew Gummy Stem Blight Watermelon Bacterial Fruit Blotch (suppression)	1.2 – 8.4	5	Begin application when conditions are favorable for disease development. Repeat at 5-10 day intervals. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
RESTRICTIONS Maximum single application rate is 8.4 pints/A (1.05 lbs metallic copper equivalent) Maximum annual application rate is 42 pints/A (5.25 lbs metallic copper equivalent)			

CURRANTS & GOOSEBERRY			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose Leaf Spot	10.2 – 32.0	10	Make applications, starting after harvest, before bloom and after petal fall.
RESTRICTIONS Maximum single application rate is 32 pt/A (4.0 lbs metallic copper equivalent) Maximum annual application rate is 128 pt/A (16.0 lbs metallic copper equivalent)			

DILL			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Phoma Leaf Spot Rhizoctonia Foliage Blight	1.8 – 6.3	7	Begin applications when plants are first established in the field and repeat at 7-10 day intervals depending upon disease severity and environmental conditions. Use the higher rates when conditions favor disease.
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs metallic copper equivalent) Maximum annual application rate is 31.5 pt/A (3.95 lbs. metallic copper equivalent)			

EGGPLANT			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Alternaria Blight Anthracnose Phomopsis	1.8 – 6.3	7	Apply before disease appears. Repeat at 7 to 10 day intervals.
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs metallic copper equivalent) Maximum annual application rate is 63 pt/A (7.9 lbs metallic copper equivalent)			

ENDIVE & ESCAROLE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	1.8 – 8.0	5	Begin treatment when disease first appears and repeat every 5 - 10 days as needed to suppress disease.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 64 pt/A (8.0 lbs metallic copper equivalent)			

FILBERTS (Washington and Oregon only)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Post Harvest application)	16.8 – 48.0	14	In seasons of heavy rain, make another application after the leaves have dropped. Add 1 pint of a superior type oil per 100 gallons of water.
Eastern Filbert Blight	16.8 – 48.0	14	Make initial application at budswell to budbreak in enough water to obtain thorough coverage. Additional applications should be made at intervals of 14 days depending on disease severity or when conditions favor disease pressure. Add 1 pint of superior type oil per 100 gallons of water.
RESTRICTIONS Maximum single application rate is 48 pt/A (6.0 lbs metallic copper equivalent) Maximum annual application rate is 192 pt/A (24.0 lbs metallic copper equivalent)			

GINSENG			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Alternaria Leaf Stem Blight	2.4 – 8.4	7	Begin tank mix applications as a tank mix with two pounds of Iprodione 50WP in 100 gallons of water per acre as soon as plants have emerged in spring. Applications should be repeated every seven days until plants become dormant in fall. Apply fungicides at least eight hours before rain, giving the fungicides time to dry on the plants. Use of a spreader-sticker is advised. NOTE: Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of two, three, and four year old ginseng. Complete and thorough spray is required for control.
RESTRICTIONS Maximum single application rate is 8.4 pt/A (1.05 lbs metallic copper equivalent) Maximum annual application rate is 42 pt/A (5.25 lbs metallic copper equivalent)			

GRAPES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Black Rot Powdery Mildew Downy Mildew Phomopsis	1.8 – 24.0	3	Apply at budbreak with additional applications throughout the rainy season, depending on the disease severity. (Attention: Slight to severe foliage injury may occur on copper-sensitive varieties such as Concord, Delaware, Niagara, and Rosette.)
RESTRICTIONS Maximum single application rate is 24 pt/A (3.0 lbs metallic copper equivalent) Maximum annual application rate is 160 pt/A (20.0 lbs metallic copper equivalent)			

GUAVA			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthrachnose Red Algae	3.0 – 9.8	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS Maximum single application rate is 9.8 pt/A (1.23 lbs metallic copper equivalent) Maximum annual application rate is 39.2 pt/A (4.92 lbs metallic copper equivalent)			

HOPS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	1.8 – 4.2	10	Apply as a fungicide crown treatment (after pruning, but before training) as needed. After training, additional fungicide treatments are needed at 10 day intervals. Discontinue use 2 weeks before harvest.
RESTRICTIONS Maximum single application rate is 4.2 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 21.0 pt/A (2.65 lbs metallic copper equivalent)			

KIWI			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Blossom Blight (Bud Rot) Leaf Spot (Phomopsis)	4.8 – 16.8	30	Make two to three applications during dormant season. Do not apply at time of or after leaf emergence.
Pseudomonas syringae Erwinia herbicola Pseudomonas fluorescens	4.8 – 16.8	30	Make applications on a monthly basis. A maximum of 3 applications may be made.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 50.4 pt/A (6.3 lbs metallic copper equivalent)			

LETTUCE (Not For Use in California)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew	1.8 – 8.0	5	Begin treatment when disease first appears and repeat every 5 - 10 days as needed to suppress disease.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 64 pt/A (8.0 lbs metallic copper equivalent)			

LITCHI			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	3.0 – 9.8	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS Maximum single application rate is 9.8 pt/A (1.23 lbs metallic copper equivalent) Maximum annual application rate is 39.2 pt/A (4.92 lbs metallic copper equivalent)			

LIVE OAK (Not for Use in California)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Ball Moss	See comment *	A second application may be required after 12 months	* Mix 6 - 16 pints per 100 gallons of water. Do not exceed the 16 pints of product per acre limit. Apply in spring after heavy rain, using 1.5 gallons of spray per foot of tree height. Make sure to set tufts thoroughly. (NOTE: Copper Hydroxide 10% Liquid may be injurious to some ornamentals grown under live oaks).
RESTRICTIONS Maximum single application rate is 16 pt/A (2.0 lbs metallic copper equivalent) Maximum annual application rate is 160 pt/A (20.0 lbs metallic copper equivalent)			

MACADAMIA NUTS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	6.0 – 18.8	7	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage
Blossom blight Raceme blight	3.0 – 12.0	7	Apply during peak raceme development and bloom period.
RESTRICTIONS Maximum single application rate is 18.8 pt/A (2.36 lbs metallic copper equivalent) Maximum annual application rate is 75.2 pt/A (9.44 lbs metallic copper equivalent)			

MAMEY SAPOTE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose Algal Leaf Spot	6.0 – 8.4	14	Apply when conditions favor disease development. Repeat on 14-30 day schedule as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.
RESTRICTIONS Maximum single application rate is 8.4 pt/A (1.05 lbs metallic copper equivalent) Maximum annual application rate is 67.2 pt/A (8.4 lbs metallic copper equivalent)			

MANGO			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	4.8 – 25.6	7	Apply weekly after fruit set until harvest.
RESTRICTIONS Maximum single application rate is 25.6 pt/A (3.2 lbs metallic copper equivalent) Maximum annual application rate is 145.6 pt/A (18.2 lbs metallic copper equivalent)			

OLIVES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Peacock Spot Olive Knot	8.4 – 48.0	30	Apply before winter rains fall. A second application in early spring should be made if disease is severe.
RESTRICTIONS Maximum single application rate is 48 pt/A (6.0 lbs metallic copper equivalent) Maximum annual application rate is 144 pt/A (18.0 lbs metallic copper equivalent)			

ONION & GARLIC			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Purple Blotch Downy Mildew Bacterial Blight	1.8 – 8.0	7	Apply when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 48 pt/A (6.0 lbs metallic copper equivalent)			

PAPAYA			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthrachnose	4.2 – 21.0	7	Begin application before disease is expected to appear. Repeat at 7 - 14 day intervals. Use the higher rates when conditions favor disease. The addition of a suitable spreader-sticker, such as Kinetic®, may be desirable especially during periods of heavy rains.
RESTRICTIONS Maximum single application rate is 21 pt/A (2.625 lbs metallic copper equivalent) Maximum annual application rate is 168 pt/A (21.0 lbs metallic copper equivalent)			

PARSLEY			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight (Pseudomonas sp.)	3.0 – 8.0	10	Begin applications when plants are first established in the field and repeat at 10 day intervals depending upon disease severity and environmental conditions.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 16 pt/A (2.0 lbs metallic copper equivalent)			

PASSION FRUIT			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	6.0 – 18.8	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
RESTRICTIONS Maximum single application rate is 18.8 pt/A (2.36 lbs metallic copper equivalent) Maximum annual application rate is 75.2 pts/A (9.44 lbs metallic copper equivalent)			

PEACHES & NECTARINES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Dormant: Leaf Curl Coryneum Blight (Shot Hole) Bacterial Spot	8.4 – 64.0	7	Apply leaf fall as dormant application. Use the higher rate when rainfall is very heavy and disease pressure is high. May be used with an agricultural spray oil.
Bloom & Growing Season: Brown Rot Blossom Blight (California)	8.4 – 12.0	5	Apply as a full cover spray at pink bud. (Application at this time also affords some control of Leaf Curl and Coryneum Blight). NOTE: Do not spray later than three weeks prior to harvest. Do not use at rates above those recommended.
RESTRICTIONS Maximum single dormant season application rate is 64 pt/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 12 pt/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 144 pt/A (18.0 metallic copper equivalent)			

PEANUTS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	1.8 – 6.3	7	<p>Begin spraying 35-40 days after planting or when disease symptoms appear.</p> <p>Use sufficient water to get adequate coverage.</p> <p>Continue applications at 7 to 14 day intervals.</p> <p>Reduce spray interval to 7 days during humid weather.</p> <p>Use the higher rates when conditions favor disease.</p>
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs metallic copper equivalent) Maximum annual application rate is 37.8 pt/A (4.74 metallic copper equivalent)			

PEARS, QUINCE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bloom & Growing Season:	1.2 – 12.0	5	Apply at 5 day intervals throughout bloom period. Excessive dosages may cause fruit russet.
Fireblight			
Fall & Late Dormant Season: Pseudomonas blight	8.4 – 48.0	Only one dormant application allowed per season	Apply before fall rain begins. NOTE: Higher rates may cause fruit russet.
RESTRICTIONS Maximum single dormant season application rate is 48 pt/A (6.0 lbs. metallic copper equivalent) Maximum single growing season application rate is 12 pt/A (1.5 lbs. metallic copper equivalent) Maximum annual application rate is 128 pt/A (16.0 lbs. metallic copper equivalent)			

PEAS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Powdery Mildew	1.2 – 6.3	7	<p>Begin spray treatment when disease symptoms first appear.</p> <p>Repeat applications at weekly intervals.</p>
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs metallic copper equivalent) Maximum annual application rate is 31.5 pt/A (3.95 lbs metallic copper equivalent)			

PECANS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Shuck and Kernel rot (Phytophthora cactorum)	1.8 – 16.8	14	Apply in sufficient water for good coverage at 2-4 week intervals starting at kernel growth and continuing until shucks open.
Zonate leaf spot (Cristulariella pyramidalis)			Use the higher rate and shorter intervals if frequent rainfall occurs.
*Mosses *Algae *Lichen	See Comment*	Make only one application per year	Mix 6 - 10 pints per 100 gallons spray plus spreader-sticker, such as Kinetic®, on a dilute spray basis and apply in dormant season before buds swell, thoroughly wetting limbs and mosses. Do not exceed the 16.8 pints of product per acre limit.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 50.4 pt/A (6.3 lbs metallic copper equivalent)			

*Not Registered for Use in California

PEPPERS (bell, chili)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Spot	1.8 – 6.3	3	Apply, when disease threatens, in sufficient water to provide adequate coverage. Use at 3 to 10 day intervals depending on disease severity.
RESTRICTIONS Maximum single application rate is 6.3 pt/A (0.79 lbs metallic copper equivalent) Maximum annual application rate is 94.5 pt/A (11.85 lbs metallic copper equivalent)			

PISTACHIOS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Botrytis Blight Botryosphaeria Panicle Shoot Blight Septoria Leaf Blight Late Blight (Alternaria)	4.2 – 16.8	14	Make initial application at bud swell and repeat on a 14-28 day schedule. Use the higher rates when conditions favor disease.
RESTRICTIONS Maximum single application rate is 16.8 pt/A (2.1 lbs metallic copper equivalent) Maximum annual application rate is 67.2 pt/A (8.4 lbs metallic copper equivalent)			

PLUMS & PRUNES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Dormant Season: Coryneum blight (Shot hole)	8.4 – 64.0	7	Apply as a dormant spray. Use the higher rate when rainfall is heavy and/or disease pressure is high.
Bloom & Growing Season: Brown rot blossom blight	8.4 – 12.0	5	Apply full cover application at pink, red or early white bud stage. Use the higher rate when disease pressure is heavy or conditions favor disease development.
RESTRICTIONS Maximum single dormant season application rate is 64 pt/A (8.0 lbs metallic copper equivalent) Maximum single growing season application rate is 12 pt/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 144 pt/A (18.0 lbs metallic copper equivalent)			

POTATOES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early & Late Blight	1.2 – 20	5	Apply at 5 to 10 day intervals beginning when plants are 6 inches high until two weeks before harvest.
RESTRICTIONS Maximum single application rate is 20 pt/A (2.5 lbs metallic copper equivalent) Maximum annual application rate is 200 pt/A (25 lbs metallic copper equivalent)			

SOYBEANS (Not Registered for Use in California)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Bacterial Blight <i>(Pseudomonas syringae)</i> Bacterial Pustule <i>(Xanthomonas campestris)</i> Brown Spot <i>(Septoria glycines)</i> Pod & Stem Blight <i>(Diaporthe phaseolorum and Phomopsis longicola)</i> Powdery Mildew <i>(Microsphaera manshurica)</i> Downy Mildew <i>(Peronospora manchurica)</i> Frog-eye Leaf Spot <i>(Cercospora sojina)</i> Cercospora Leaf Blight <i>(Cercospora kikuchii)</i>	4.0 - 6.3	7	Begin applications when plants are six inches tall and when conditions are favorable for disease development (high humidity and cool temperatures). Continue on a 7-10 day schedule if conditions continue to favor disease development.
RESTRICTIONS: Maximum single application rate is 6.3 pints of product/Acre (0.79 lbs. metallic copper equivalent) Maximum annual application rate is 37.8 pints of product/Acre (4.74 lbs metallic copper equivalent)			

STRAWBERRIES			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Downy Mildew Leaf Spot Leaf Blight	1.8 – 12.0	7	Begin application when plants are established and continue on a weekly schedule throughout season. Discontinue applications if signs of phytotoxicity appear.
RESTRICTIONS Maximum single application rate is 12 pt/A (1.5 lbs metallic copper equivalent) Maximum annual application rate is 48.0 pt/A (6.0 lbs metallic copper equivalent)			

SUGAR BEETS & TABLE BEETS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	1.8 – 10.4	10	Start spray when disease threatens and continue for 4 to 5 applications. Spray every 10 to 14 days depending on weather conditions.
RESTRICTIONS Maximum single application rate is 10.4 pt/A (1.31lbs metallic copper equivalent) Maximum annual application rate is 62.4 pt/A (7.86 lbs metallic copper equivalent)			

SYCAMORE			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Anthracnose	1.8 – 8.0	7	Make two applications as a full cover spray. Use a minimum of 100 gallons water per acre. Make first application at bud crack and second application 7 to 14 days later at 10% leaf expansion.
RESTRICTIONS Maximum single application rate is 8 pt/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 160 pt/A (20.0 lbs metallic copper equivalent)			

TOMATOES (Processed Market)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	1.8 – 4.2	3	Apply at 3-14 day intervals beginning when the disease threatens. Use more frequent applications when disease pressure is high.
RESTRICTIONS Maximum single application rate is 4.2 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 139.2 pt/A (17.4 lbs metallic copper equivalent)			

TOMATOES (Fresh Market)			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	1.8 – 8.4	3	Apply at 3 - 14 day intervals beginning when the disease threatens. Use more frequent applications when disease pressure is high.
RESTRICTIONS Maximum single application rate is 8.4 pt/A (1.05 lbs metallic copper equivalent) Maximum annual application rate is 64 pt/A (8.0 lbs metallic copper equivalent)			

WALNUTS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Walnut Blight	8.4 – 32.0	7	Apply first spray at early pre-bloom when catkins are partially expanded. Make three additional applications during bloom and early nutlet stages at 7 to 10 day intervals. Additional applications may be necessary when frequent rainfall occurs.
RESTRICTIONS Maximum single application rate is 32 pt/A (4.0 lbs metallic copper equivalent) Maximum annual application rate is 256 pt/A (32.0 lbs metallic copper equivalent)			

WATERCRESS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Cercospora Leaf Spot	1.8 – 4.2	7	Begin application when plants are first established in the field, repeating at 7-14 day intervals depending on disease severity and environmental conditions. Do not exceed 4 applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.
RESTRICTIONS Maximum single application rate is 4.2 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 16.8 pt/A (2.12 lbs metallic copper equivalent) 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.			

WHEAT, BARLEY & OATS			
DISEASE	APPLICATION RATE (pints/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	COMMENT
Septoria Leaf Blotch Helminthosporium Spot Blotch	1.2 – 4.2	10	Make first application at early heading and follow with second application 10 days later.
RESTRICTIONS Maximum single application rate is 4.2 pt/A (0.53 lbs metallic copper equivalent) Maximum annual application rate is 8.5 pt/A (1.06 lbs metallic copper equivalent)			

CONDITIONS OF SALE

LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Albaugh, LLC (the “Company”) or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for

any particular purpose, and no such warranty shall be implied by law.

To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Albaugh's election, one of the following:

1. Refund of the purchase price paid by the buyer or user for product bought, or
2. Replacement of the product used.

To the extent consistent with applicable law, the Company shall not be liable and any claims against the Company are waived for special, indirect, incidental, or consequential damages or expenses of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the forgoing conditions of sale and limitation of warranty, liability and remedies.

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