NU-COP® 50 WP

SPECIMEN LABEL

ACTIVE INGREDIENT:	
Copper Hydroxide*	77.0%
OTHER INGREDIENTS:	
TOTAL:	100.0%
(*Metallic copper equivalent 50%)	
CAS No. 20427-59-2	

KEEP OUT OF REACH OF CHILDREN / MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS **DANGER/PELIGRO**

(If you do not understand the label, find someone to explain it to you in detail).

FIRST AID / DRIMEDOC AUVILIOS

	TIKST AID / TRIMEROS AUXIEIOS
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.
SI ENTRA EN CONTACTO CON LOS OJOS	 Mantenga los ojos abiertos y enjuáguelos lenta y cuidadosamente con agua, durante 15 a 20 minutos. Si utiliza lentes de contacto, retírelos después de los primeros 5 minutos, luego continúe enjuagando los ojos. Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento
IF	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 by mouth to an unconscious person.
SWALLOWED / SI SE INGIERE	Llame de inmediato a un centro de control de envenenamientos o a un médico para consejo de tratamiento. Si la persona puede tragar, haga que beba un vaso de agua lentamente. No induzca el vómito a menos que así se lo indique un centro de control de envenenamientos o un médico. No administre nada por boca a una persona que haya perdido el conocimiento.
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.
SI CAE EN LA PIEL O ROPA	 Quitese la ropa contaminada. Enjuague la piel nimediatamente con bastante agua por 15-20 minutos. Liame al centro de control de envenenamientos o a un médico para consejo de tratamiento
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.
SI ES INHALADO	Traslade a la persona al aire fresco. Si la persona no está respirando llame al 911 o a una ambulancia, luego dé respiración artificial, preferiblemente de boca a boca, si es posible. Llame al centro de control de envenenamientos o a un médico para consejo de tratamiento

HOTLINE NUMBER: For non-emergency questions regarding exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr/day). For medical emergencies, call the poison control center at 1-800-222-1222. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NÚMERO DE LÍNEA DIRECTA: Para preguntas que no sean de emergencia sobre la exposición a este producto, llame al 1-888-347-6732 (los 7 días de la semana, las 24 horas del día). Para emergencias médicas, llame al centro de control de intoxicaciones al 1-800-222-1222. Tenga consigo el envase o la etiqueta del producto cuando llame a un centro de control de intoxicaciones o a un médico, o cuando vaya a recibir tratamiento.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage

NOTA PARA EL MÉDICO: El daño probable de la mucosa puede contraindicar el uso de lavado gástrico

See inside booklet for additional Precautionary Statements, Directions For Use, Storage and Disposal, and Conditions of Sale and Warranty.

For 24-hour chemical spill, leak, fire, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

Para obtener información sobre respuesta a derrames, fugas, incendios o accidentes químicos las 24 horas, llame a CHEMTREC al número gratuito 1-800-424-9300.

AGRICULTURAL FUNGICIDE/ BACTERICIDE





Manufactured For: ALBAUGH, LLC 1525 NE 36th Street, Ankeny, IA 50021





PRECAUTIONARY STATEMENTS **DANGER**

Hazards To Humans And Domestic Animals

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through the skin. Harmful if inhaled. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing dust.

PERSONAL PROTECTIVE EQUIPMENT

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

- 1. Long-sleeved shirt and long pants
- 2. Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber ≥14 mil, nitrile rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or viton ≥14 mils.
- 3. Shoes plus socks
- 4. Protective eyewear, goggles or faceshield

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.

DECLARACIONES PREVENTIVAS PELIGRO

Riesgos Para Los Seres Humanos Y Animals Domésticos

Corrosivo. Causa daño ocular irreversible. Puede ser letal si se ingiere. Dañino si se absorbe por la piel. Dañino si se inhala. No permita que caiga en los ojos, la piel o la ropa. Evite respirar polyo o particulado.

EQUIPO DE PROTECCIÓN PERSONAL (PPE, por sus siglas en inglés)

Los aplicadores, mezcladores, cargadores y otros manipuladores de pesticidas (plaquicidas) deben usar:

- 1. Camisa de manga larga y pantalones largos
- 2. Guantes resistentes a productos químicos fabricados con cualquier material impermeable, como barrera laminada, caucho de butilo ≥14 mils, caucho de nitrilo ≥14 mils, cloruro de polivinilo (PVC) ≥14 mils o vitón ≥14 mils.
- 3. Zapatos más calcetines
- Gafas protectoras, gafas o careta

Siga las instrucciones del fabricante para limpiar/mantener el EPP. Si no existen instrucciones para los productos lavables, utilice detergente y agua caliente. Mantenga y lave el EPP por separado del resto de la ropa. Deseche la ropa y otros materiales absorbentes que hayan sido empapados o muy contaminados con el concentrado de este producto. No los reutilices.

ENGINEERING CONTROLS

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

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

CONTROLES DE INGENIERÍA

Cuando los manipuladores utilizan sistemas cerrados, cabinas cerradas o aeronaves de una manera que cumpla con los requisitos enumerados en la Norma de Protección al Trabaiador (WPS) para pesticidas agrícolas [40 CFR 170,240(d)(4-6)], los requisitos del PPE del manipulador pueden ser reducido o modificado según lo especificado en la WPS.

Los pilotos deben utilizar una cabina cerrada que cumpla con la definición del WPS para pesticidas agrícolas [40 CFR 170.305].

USER SAFETY RECOMMENDATIONS

Users should:

- the toilet
- 2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and change into clean clothing.
- 3. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.
- 4. Wash the outside of gloves before removing.

RECOMENDACIONES DE SEGURIDAD PARA EL USUARIO

Los usuarios deben-

- 1. Wash hands before eating, drinking, chewing gum, using tobacco or using 1. Lávese las manos antes de comer, beber, mascar chicle, consumir tabaco o ir al baño
 - 2. Quítese la ropa/PPE inmediatamente si entra pesticida. Luego lávese bien y póngase ropa limpia. 3 Quítese el EPP inmediatamente después de manipular este producto. Tan pronto
 - como sea posible, lávese bien y póngase ropa limpia. 4. Lave el exterior de los guantes antes de quitárselos.

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. Do not apply directly to water, or 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 washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Certain water conditions including low pH (<6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e., alkalinity less than 50 mg/L), increases the potential acute toxicity to non-target aquatic organisms.

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.

DIRECCIONES DE USO

Es una violación de la ley federal utilizar este producto de manera inconsistente con su etiqueta. No aplique este producto de manera que entre en contacto con trabajadores u otras personas, ya sea directamente o por deriva. Sólo los manipuladores protegidos pueden estar en el área durante la aplicación. Para cualquier requisito específico de su estado o tribu, consulte a la agencia responsable de la regulación de pesticidas.

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 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 (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 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 any waterproof material such as barrier laminate, butyl rubber ≥14 mil, nitrile rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or viton >14 mils
- · Shoes plus socks
- 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 that is located with the decontamination supplies and how to operate the eye flush container or eye flush station.

REQUISITOS DE USO AGRÍCOLA

Utilice este producto solo de acuerdo con su etiqueta y el Estándar para la Protección del Trabajador Agrícola (WPS, por sus siglas en inglés), 40 CFR Parte 170. Esta ley contiene los requisitos para la protección de los trabajadores agrícolas en granjas, bosques, viveros e invernaderos, y para las personas que manipulan pesticidas agrícolas. Contiene requisitos para la capacitación, descontaminación, notificación y asistencia de emergencia. También contiene instrucciones específicas y excepciones relacionadas con las indicaciones en esta etiqueta acerca del equipo de protección personal (PPE, por sus siglas en inglés), y el intervalo de ingreso restringido. Los requisitos en esta sección de la etiqueta (requisitos para uso agrícola) aplican únicamente a los usos de este producto que están cubiertos por el Estándar para la Protección del Trabajador Agrícola.

No ingrese ni permita la entrada de trabajadores a las áreas tratadas durante el intervalo de entradar estringida (REI) de 48 horas, siempre que se sigan las siguientes instrucciones.

El EPP requerido para el ingreso temprano a áreas tratadas que está permitido según el Estándar de Protección al Trabajador y que involucra contacto con cualquier cosa que haya sido tratada, como plantas, tierra o agua, es:

- Monos
- Guantes resistentes a productos químicos fabricados con cualquier material impermeable, como barrera laminada, caucho de butilo ≥14 mils, caucho de nitrilo ≥14 mils, cloruro de polivinilo (PVC) ≥14 mils o vitón ≥14 mils.
- Zapatos más calcetines
- · Gafas protectoras

Durante al menos siete días después de la aplicación de productos que contienen cobre en invernaderos: al menos un contenedor o estación diseñado específicamente para lavar los ojos está disponible en condiciones operativas con los suministros de descontaminación requeridos por WPS para los trabajadores que ingresan al área tratada con productos que contienen cobre. , se informa a los trabajadores oralmente, de manera que puedan comprender: que los residuos en la zona tratada pueden ser muy irritantes para los ojos, que deben tomar precauciones, como abstenerse de frotarse los ojos, para mantener los residuos fuera de sus ojos, que si les entran residuos en los ojos, deben enjuagarse los ojos immediatamente con el recipiente de lavado de ojos que se encuentra con los suministros de descontaminación y cómo operar el recipiente de lavado de ojos o la estación de lavado de ojos.

NON-AGRICULTURAL USE REQUIREMENTS

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

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

REQUISITOS PARA USO NO AGRÍCOLA

Los requisitos de este recuadro se aplican a los usos de este producto que NO están dentro del alcance de la Norma de protección del trabajador para pesticidas agrícolas (40 CFR Parte 170). La WPS se aplica cuando este producto se utiliza para producir plantas agrícolas en granjas, bosques, viveros o invernaderos.

No entre ni permita que otros entren hasta que los aerosoles se hayan secado.

MANDATORY SPRAY DRIFT

AERIAL APPLICATIONS:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1)
- 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.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- If the wind speed is greater than 10 mph, the boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade 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 field.
- · 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 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.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, secure, dry area in original containers.

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

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping the sides and bottom to loosen clinging particles. Empty residues into application equipment. Then offer for recycling if available. If not, dispose of the liner in a sanitary landfill, or incineration if permitted by state and local authorities. If burned, stay out of smoke.

ALMACENAMIENTO Y DESECHO

No contamine agua, comida ni forrajes mediante el almacenamiento y desecho.

ALMACENAMIENTO DEL PESTICIDA: Almacenar en un lugar fresco, seguro y seco en los contenedores originales.

ELIMINACIÓN DE PESTICIDA: Los desechos de pesticidas son extremadamente peligrosos. La eliminación inadecuada del exceso de pesticida, mezcla de aspersión o enjuague es una violación de la ley federal. Si estos desechos no se pueden eliminar según las instrucciones de la etiqueta, comuníquese con la Agencia Estatal de Control Ambiental o de Pesticidas, o con el representante de Residuos Peligrosos de la Oficina Regional de la EPA más cercana para obtener orientación.

ELIMINACIÓN DEL ENVASE: Envase no recargable. No reutilice ni rellene este recipiente. Completamente vacío revestimiento agitando y golpeando los lados y el fondo para aflojar las partículas adheridas. Vacíar los residuos en el equipo de aplicación. Luego ofrézcalo para reciclarlo si está disponible. De lo contrario, deseche el revestimiento en un vertedero sanitario o incinere si lo permiten las autoridades estatales y locales. Si se quema, manténgase alejado del humo.

PESTICIDE INSTRUCTIONS

NU-COP® 50 WP may be applied by Aerial, or by Dilute or Concentrated Ground Sprayers, or Chemigation on crops and at rates given on this label unless specifically prohibited for that crop use. Sufficient spray volume and spray pressure is essential to thoroughly penetrate the plant canopy and give thorough spray coverage and at the times indicated. On crops sensitive to copper fungicides use the higher volumes of spray water per acre. Use the higher dosage of **NU-COP® 50 WP** on mature trees, or when disease pressure is severe or weather conditions warrant.

When using adjuvants or other pesticides in combination with this product, always observe the most restrictive statements on the product's label and required days before harvest. Sprays of **NU-COP® 50 WP** may be applied up to 24 hours pre-harvest. Before mixing with other products in spray tank, be sure that products are compatible. If compatibility is in question, use the compatibility jar test before mixing a whole tank. **NU-COP® 50 WP** should not be applied in spray water having a pH of less than 6.5 as phytotoxicity may result. Use a buffering agent to increase the pH to 6.5-7.0 if your water source is below 6.5. Also avoid using water having a pH of greater than 9.0 as effectiveness may be reduced.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

RESISTANCE MANAGEMENT

COPPER GROUP M1 FUNGICIDE

For resistance management, **NU-COP® 50 WP** contains copper hydroxide, a Group M01 fungicide with a multi-site contact activity. Any fungal/bacterial population may contain individuals naturally resistant to **NU-COP® 50 WP** and other Group M01 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. Copper hydroxide is an inorganic non-systemic protectant compound which are generally considered as a low-risk of developing resistance.

Because **NU-COP®** 50 **WP** 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.

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

- Rotate the use of NU-COP® 50 WP 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 1PM 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.

MIXING INSTRUCTIONS FOR SPRAY APPLICATION

Fill the spray tank one-fourth to one-third full with clean water. Start agitation (NOTE: Proper agitation creates a rippling or rolling action on the liquid surface). Add NU-COP® 50 WP at the recommended rate.

Mix thoroughly and then add enough water to fill spray tank. Maintain sufficient agitation during mixing and during application of sprays to ensure a uniform spray mixture. When tank mixing with other products, follow the mixing sequence below: (1) micronutrients and fertilizers, (2) wettable powders, dry flowables, and water dispersible granules, (3) liquid flowables, (4) emulsifiable concentrates, and (5) adjuvants. Before adding the second pesticide, be sure that the prior product is well mixed and suspended.

MINIMUM RECOMMENDED SPRAY VOLUME IN GALLONS PER ACRE (GPA)

If a crop is sensitive to copper sprays, higher volumes of spray water will decrease potential injury. A full dilute spray on tree crops means the maximum amount of spray when uniformly applied that an acre of such trees will hold to the point that excess spray begins to drip off. Thus the dilute spray volume per acre will depend on tree size and leaf surface per acre. The following listed dilute spray volumes is the volume that will generally provide such coverage on average size of full leafed trees. A concentrate spray is a spray applied in less volumes than a dilute. The extent of the concentration varies by equipment used. Thus the following spray volumes for a concentrated spray are the minimum volumes recommended per acre.

Use **NU-COP® 50 WP** as noted below unless indicated otherwise in the specific crop directions. **NU-COP® 50 WP** is adaptable to spraying from aircraft and ground spraying equipment. Depending on the equipment used and the specific crop, the volume applied per acre will differ. Refer to recommended volumes below:

	Aerial	Ground	
		Dilute	Concentrate
Vegetables and Field Crops	3	20	-
Small Fruits	5	150	50
Vines	5	150	50
Fruit and Nut Trees*	10	400	50
Citrus	10	800	100 (20 FL)**

^{*}On young fruit trees, use a minimum of 1 gallon spray per acre.

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, traveling 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 device for public water systems is 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 insure 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.
- (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 system means a system for the provision to the public of piped water for human consumption if such a 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 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.

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

POSTING INSTRUCTIONS

Posting of areas to be chemigated is required when any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or when chemigated area is open to the public, such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. This sign is in addition to any sign posted to comply with the Worker Protection Standard. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of material to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words **KEEP OUT**, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word **STOP**. Below the symbol shall be the words **PESTICIDES IN IRRIGATION WATER**.

FROST INJURY PROTECTION

Bacterial ice nucleation inhibitor - Application of **NU-COP® 50 WP** 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 flourescens) may thereby provide some protection against light frost. Frost egree of frost protection will vary with weather conditions and other factors. Not recommended for those geographical areas where weather conditions favor severe frost.

CDODS

ALFALFA				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Cercospora & Leptosphaerulina Leaf Spots	1.0 (0.5 lbs Cu/A)	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 1.0 lb/A (0.5 lbs metallic copper equivalent) Maximum annual application rate is 2.0 lb/A (1.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year

Preharvest Interval (PHI): 0 days

	ALMONDS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Dormant to Pink Bud Season:	8.0 – 16.0	7	Use at dormant to early pink bud.		
Bacterial Blast (Pseudomonas) Coryneum Blight (Shot hole)	(4.0 – 8.0 lbs Cu/A)		For blast control in sprinkler irrigated orchards or where disease is severe, apply 2-4 sprays or as many as required at 1.0 – 3.0 lbs per acre at 2 week post-bloom intervals or just before sprinkling.		
			Slight leaf injury may occur from post-bloom spray.		
Bloom/Growing Season:	3.0	5	Use during the early bloom stage (popcorn).		
Coryneum Blight Blossom Brown Rot	(1.5 lbs Cu/A)		A second application in late dormant before foliage buds swell may be necessary when frequent rainfall occurs.		
			To avoid plant injury, do not use after full bloom.		

RESTRICTIONS

Maximum single dormant application rate is 16.0 lbs/A (8.0 lbs. metallic copper equivalent)

Maximum single bloom/growing application rate is 3.0 lbs/A (1.5 lbs. metallic copper equivalent)

Maximum annual application rate is 36.0 lbs/A (18.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

APPLES Not Registered for Use By California				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Fall & Late Dormant:			Apply before fall rains.	
Anthracnose European Canker Pseudomonas Syringae	12.0 – 16.0 (6.0 - 8.0 lbs Cu/A)	Only one dormant application	Use on yellow varieties may cause discoloration. To avoid, pick before spraying	
Fireblight	10.0	allowed per year	Make application between silver-tip and green-tip.	
	12.0 (6.0 lbs Cu/A)		ATTENTION: Phytotoxicity may occur from late application (Discontinue use when green-tip is 1/2 inch.)	
Bloom & Growing Season: Fireblight	1.0 – 3.0 (0.5 -1.5 lbs Cu/A)	5	Extended spray schedule where fruit finish is not a concern. Continued applications may be made at 5 – 7 day intervals.	
T II OSIIGITE			NOTE: Crop injury may occur from extended spray schedule. Not intended for fresh market apples due to possible russeting. The addition of 1 – 3 lbs of lime per pound of NU-COP® 50 WP may reduce injury.	
Crown or Collar Rot	See Application		Apply either in early spring or in fall after harvest each year.	
(Phytophthora cactorum)	Instructions		Do not use if soil pH is below 5.5 or copper toxicity may result.	
			Mix 4 lbs (2 lbs Cu) in 100 gallon of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree.	

RESTRICTIONS

Maximum single dormant season application rate is 16.0 lbs/A (8.0 lbs. metallic copper equivalent)

Maximum single silver-tip to green-tip growing season is 12.0 lbs/A (6.0 lbs. metallic copper equivalent

Maximum single growing season application rate is 3.0 lbs/A (1.5 lbs. metallic copper equivalent)

Maximum annual application rate is 32.0 lbs/A (16.0 lbs. metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

APRICOTS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Fall & Late Dormant:	12.0 – 16.0	Only one dormant application	Apply before fall rains.	
Anthracnose	(6.0 - 8.0 lbs Cu/A)	allowed per year	Use the higher rates when conditions favor disease.	
European Canker Pseudomonas Syringae			Use on yellow varieties may cause discoloration. To avoid, pick before spraying.	
Bloom/Growing Season:	2.0 - 3.0	5	Apply at popcorn to full bloom as a full cover spray.	
Coryneum Blight (Shot Hole) Blossom Brown Rot	(1.0 - 1.5 lbs Cu/A)		To avoid spray injury, do not apply after full bloom.	

Maximum single dormant application rate is 16.0 lbs/A (8.0 lbs. metallic copper equivalent)

Maximum single bloom/growing application rate is 3.0 lbs/A (1.5 lbs. metallic copper equivalent)

Maximum annual application rate is 36.0 lbs/A (18.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

ATEMOYA, SUGAR APPLE (Annona)			
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS
Anthracnose	6.3 (3.15 lbs Cu/A)		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 6.3 lbs/A (3.15 lbs metallic copper equivalent)

Maximum annual application rate is 25.2 lbs/A (12.6 lbs metallic copper equivalent)

Do not make more than 4 applications per year

Preharvest Interval (PHI): 0 days

AVOCADOS			
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS
Anthracnose, Blotch,	4.0 - 6.3 (2.0 - 3.15 lbs Cu/A)		Apply when bloom buds begin to swell. Continue application at 14 – 28 day intervals for 5 to 6 applications.
Scab			Use higher rate when conditions favor disease.

RESTRICTIONS

Maximum single application rate is 6.3 lbs/A (3.15 lbs metallic copper equivalent)

Maximum annual application rate is 37.8 lbs/A (18.9 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	BANANAS			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Sigatoka (black and yellow)	2.1 (1.05 lbs Cu/A)	7	Apply by air at 2.1 lbs. per acre in 3 gallons of water containing 0.5 gallon agricultural oil. Apply on a 7 - 14 day schedule throughout the wet season.	
			Apply at 14 - 21 day intervals during dry periods.	
Black Pitting	2.1 (1.05 lbs Cu/A)	7	Dilute in $50 - 100$ galloons of water and 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 2.1 lbs/A (1.05 lbs metallic copper equivalent)

Maximum annual application rate is 37.8 lbs/A (18.9 lbs metallic copper equivalent)

Do not make more than 18 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	BEANS (Dry, Green)				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Bacterial Blight	1.0 - 1.5	7	For protective sprays apply first application when plants are five to six inches high.		
(Halo & Common)	(0.5 - 0.75 lbs Cu/A)		Apply on 7 - 14 day schedule depending on local conditions.		
Brown spot			Use higher rate for more severe disease pressure.		

RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs. metallic copper equivalent)

Maximum annual application rate is 9.0 lbs/A (4.5 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

BRAMBLES (Blackberry, Santiams, Logans, Boysens, Marions, Auroras, Cascades, Chehalems, Raspberry & Thornless Evergreens)			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Anthracnose,	4.0	7	Make fall spray application after harvest.
Leaf & Cane Spot, Purple Blotch.	(2.0 lbs Cu/A)		Apply delayed dormant spray after pruning/training in spring.
Yellow Rust	2.0	7	Apply when leaf buds begin to open and repeat when flower buds show white.
Tollow Flags	(1.0 lbs Cu/A)		NOTE: Crop injury may occur if applied to foliage under hot or moist environmental conditions. Discontinue applications if injury noted.

Maximum single application rate is 4.0/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 20.0 lbs/A (10.0 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

BLUEBERRIES			
DISEASE APPLICATION RATE (Ibs/Acre) MINIMUM DAYS RETREATMENT INTERVAL APPLICATION INSTRUCTIONS			APPLICATION INSTRUCTIONS
Bacterial Canker	3.0 – 4.2 (1.5 - 2.1 lbs Cu/A)		Make first application before the fall rains, preferably the first week in October and a second application 4 weeks later.
			Use higher rate when conditions favor disease.

RESTRICTIONS

Maximum single application rate is 4.2/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 16.8/A (8.4 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CRUCIFERS (Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collard Greens, Mustard Greens, & Turnip Greens)				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Downy Mildew Black Rot (Xanthomonas)	1.0 (0.5 lbs Cu/A)	7	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development.	
Black Leaf Spot (Alternaria)			(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 1.0 lbs/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 5.0 lbs/A (2.5 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CACAO			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Black Pod	3.0 – 4.5 (1.5 - 2.25 lbs Cu/A)	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Sprays should be made as often as 14 - 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 – 4 lbs per acre, according to disease incidence and planting density.

RESTRICTIONS

Maximum single application rate is 4.5 lbs/A (2.25 lbs metallic copper equivalent)

Maximum annual application rate is 31.5 lbs/A (15.75 lbs metallic copper equivalent)

Do not make more than 7 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CARAMBOLA			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Anthracnose	4.2 (2.1 lbs Cu/A)		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 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 21.0 lbs/A (10.5 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CARROTS			
DISEASE	APPLICATION INSTRUCTIONS		
Carrot Blight (Cercospora)	2.0 (1.0 lbs Cu/A)	7	Begin application when disease first threatens and repeat at 7 to 14 day intervals as needed depending on disease severity.

RESTRICTIONS

Maximum single application rate is 2.0 lbs/A (1.0 lbs metallic copper equivalent)

Maximum annual application rate is 10.0/A (5.0 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

CELERY & CELERIAC			
DISEASE	APPLICATION INSTRUCTIONS		
Early, Late & Bacterial	2.0	7	Apply as soon as plants are first established in the field, then every 7 days
Blights	(1.0 lbs Cu/A)		depending on severity and weather.

Maximum single application rate is 2.0 lbs/A (1.0 lbs metallic copper equivalent) Maximum annual application rate is 10.0 lbs/A (5.0 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	CHERRY				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Dormant & Late Bloom Season:	8.0 - 16.0	7	In orchards where the disease is severe a spray should also be		
Dead Bud (Pseudomonas syringae) Coryneum Blight	(4.0 - 8.0 lbs Cu/A)		applied shortly after harvest.		
Bloom & Growing Season:	2.0 – 3.0	5	Apply at popcorn and full bloom.		
Brown Rot Blossom	(1.0 - 1.5 lbs Cu/A)				

RESTRICTIONS

Maximum single dormant season application rate is 16.0 lbs/A (8.0 lbs metallic copper equivalent)

Maximum single growing season application rate is 3.0 lbs/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 36.0/A (18.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	CHIVES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Downy Mildew	1.0 (0.5 lbs Cu/A)		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 1.0 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 5.0 lbs/A (2.5 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	CITRUS (Grapefrui	t, Kumquat, Lemon, Orange,	Pummelo, Tangelo, Tangerine & Lime)
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Melanose, Scab, Pink Pitting, Greasy Spot,	4.0 – 6.3 (2.0 - 3.15 lbs Cu/A)	7	Apply as pre-bloom and post-bloom sprays. Use higher rates when conditions favor disease.
Brown Rot, Septoria Spot	4.0 – 6.3 (2.0 - 3.15 lbs Cu/A)	7	Apply beginning in the fall and continuing as needed. For Brown Rot, apply to skirts of trees to a height of at least 4 feet. Apply also to bare ground one foot beyond skirt. Use higher rates when conditions favor disease.
Citrus Canker (SUPPRESSION ONLY)	6.3 (3.15 lbs Cu/A)	7	NOTE: In California, in areas subject to copper injury, add 1/4 lb. of high quality lime per lb of NU-COP® 50 WP. Spraying flushes 7-14 days after shoots begin to grow. Young fruit may need additional application. Number of applications widepend on disease pressure. Under heavy disease pressure, each flush of new growth should be sprayed.
Phytophthora Foot Rot	See Application Instructions	7	Mix 1.0 lb (0.5 lbs Cu) 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.
Field Nursery Grown To control melanose, scab, pink pitting, greasy spot, brown rot and for citrus canker (suppression).	4.0 – 6.3 (2.0 - 3.15 lbs Cu/A)	7	Apply 2.0 pounds of NU-COP® 50 WP per 100 gallons of water. Repeat application may be necessary if humid conditions conducive to disease pressure persist.

RESTRICTIONS

Maximum single application rate is 6.3 lbs/A (3.15 lbs metallic copper equivalent)

Maximum annual application rate is 25.2 lbs/A (12.6 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

	COFFEE				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Coffee Berry Disease (Collectotrichum coffeanum)		14	Apply after flowering and before the start of long rains and then at 14-28 day intervals until picking.		
Bacterial Blight (Pseudomonas syringae)	4.2 (2.1 lbs Cu/A)	14	Begin spray program before the start of long rains and continue 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.		
Iron Spot (Cercospora coffeicola) & Pink Disease (Corticium salmonicolor)	2.0 (1.0 lbs Cu/A)	14	Begin treatment at start of wet season and continue for three applications.		
Leaf Rust	3.0 – 4.2 (1.5 - 2.1 lbs Cu/A)	14	Apply before the onset of rain and then at 14 - 21 day intervals while rains continue.		

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 25.2 lbs/A (12.6 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	CRANBERRY				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Fruit Rot			One or two additional applications made at 7 to 14 day intervals may be required, depending on disease pressure.		
Rose Bloom			Apply three sprays on a 10 - 14 day schedule as soon as symptoms are observed.		
Bacterial Stem Canker	4.2 (2.1 lbs Cu/A)	7	Apply postharvest and again in spring before bud burst. One or two additional applications at 10 to 14 day intervals may be required depending upon disease severity.		
Tip Blight (Monolinia), Stem and Leaf Blight, Red Leaf Spot			Apply delayed dormant spray in the Spring. Repeat at 10 - 14 day intervals as needed through pre-bloom.		

RESTRICTIONS

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 12.6 lbs/A (6.3 lb metallic copper equivalent)

Do not make more than 3 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CUC	CUCURBITS (Cucumbers, Cantaloupes, Honeydews, Muskmelons, Pumpkins, Squash & Watermelons)			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Alternaria Leaf Spot	1.5 – 2.0	5	Begin application when conditions are favorable for disease development.	
Angular Leaf Spot	(0.75 - 1.0 lbs Cu/A)		Repeat at 5-10 day intervals.	
Anthracnose			Use higher rates when conditions favor disease.	
Downy Mildew			NOTE: Crop injury may occur from application at higher rates and shorter intervals.	
Powdery Mildew			Discontinue use if injury occurs.	
Gummy Stem Blight			Discontinue use it injury occurs.	
Watermelon Bacterial Fruit				
Blotch (suppression)				

RESTRICTIONS

Maximum single application rate is 2.0 lbs/A (1.0 lb metallic copper equivalent)

Maximum annual application rate is 10.5 lbs/A (5.25 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

CURRANTS & GOOSEBERRY					
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS		
Anthracnose Leaf Spot	5.0 - 8.0 (2.5 - 4.0 lbs Cu/A)	10	Make initial application after first leaves have expanded. Continue on a 10 - 14 day schedule during wet conditions in the Spring. Make an additional application after harvest.		

RESTRICTIONS

Maximum single application rate is 8.0 lbs/A (4.0 lbs metallic copper equivalent)

Maximum annual application rate is 20.0 lbs/A (10.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

DILL				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Phoma Leaf Spot,	1.5		Begin applications when plants are first established in the field and repeat at 7-10	
Rhizoctonia Foliage Blight	(0.75 lbs Cu/A)		day intervals depending upon disease severity and environmental conditions.	

RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 7.5 lbs/A (3.75 lbs. metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

DOUGLAS FIR (Non-Forestry)			
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS
Rhabdocline needlecast	2.0 – 4.0 (1.0 - 2.0 lbs Cu/A)		Begin applications at bud break and repeat at 7 – 28 day intervals. Use higher rates when conditions favor disease.

Maximum single application rate is 4.0 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 40.0 lbs/A (20.0 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	EGGPLANT				
DISEASE	APPLICATION RATE (Ibs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Alternaria Blight Anthracnose Phomopsis	1.5 (0.75 lbs Cu/A)		Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals depending on disease severity.		
DECEMBER					

RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 15.0 lbs/A (7.5 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

FILBERTS (Permitted only in WA and OR)			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Bacterial Blight (Post Harvest application)			Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-quarters of leaves have dropped. Add 1 pint of superior-type oil per 100 gallons of water.
Eastern Filbert Blight	8.0 – 12.0 4.0 - 6.0 lbs Cu/A)	14	Apply as a dilute spray in adequate water for thorough coverage. Make initial application after harvest in October before heavy winter rains begin. The next application should be made in late February to early March followed by another application 1 month later. If desired, add 1 pint of a sticking agent or superior-type oil per 100 gallons of water.

RESTRICTIONS

Maximum single application rate is 12.0 lbs/A (6.0 lbs metallic copper equivalent)

Maximum annual application rate is 36.0 lbs/A (18.0 lbs metallic copper equivalent)

Do not make more than 3 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	GINSENG				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Alternaria Leaf Stem Blight	2.1 (1.05 lbs Cu/A)	7	Begin applications 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 2.1 lbs/A (1.05 lbs metallic copper equivalent)

Maximum annual application rate is 10.5 lbs/A (5.25 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	GRAPES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Black Rot Powdery Mildew	2.0 - 6.0 (1.0 - 3.0 lbs Cu/A)	3	Begin applications at late dormant up to bud break with subsequent applications throughout the season depending upon disease severity.		
Downy Mildew Phomopsis			NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara, and Rosettes. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of NU-COP® 50 WP .		

RESTRICTIONS

Maximum single application rate is 6.0 lbs/A (3.0 lbs metallic copper equivalent)

Maximum annual application rate is 40.0 lbs/A (20.0 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

GUAVA			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Anthracnose	2.46	7	Make initial application just before flowering and repeat on a weekly
Red Algae	(1.23 lbs Cu/A)		schedule until just before harvest.
			Apply in sufficient water for thorough coverage.

Maximum single application rate is 2.46 lbs/A (1.23 lbs metallic copper equivalent)

Maximum annual application rate is 9.84 lbs/A (4.92 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate. Preharvest Interval (PHI): 0 days

	HOPS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Downy Mildew	1.0	10	Apply as a fungicide crown treatment (after pruning, but before training).		
	(0.5 lbs Cu/A)		After training, additional fungicide treatments are needed at 10 day intervals.		
			Discontinue use 2 weeks before harvest.		

RESTRICTIONS

Maximum single application rate is 1.0 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 5.0 lbs/A (2.5 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

KIWI				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Pseudomonas syringae Erwinia herbicola Pseudomonas fluorescens	4.2 (2.1 lbs Cu/A)	30	Make applications on a monthly basis. A maximum of 3 applications may be made.	

RESTRICTIONS

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 12.6 lbs/A (6.3 lbs metallic copper equivalent)

Do not make more than 3 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

LETTUCE, ENDIVE & ESCAROLE			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Downy Mildew	1.0 – 2.0 0.5 - 1.0 lbs Cu/A)		Begin treatment when disease first appears and repeat every 5 - 10 days as needed to suppress disease.

NOTE: Flecking and/or yellowing of leaves will occur under certain environmental conditions such as extended periods of moist weather, acid rains, or other conditions favoring reduced pH on leaf surfaces. Injury may be severe enough to reduce crop value. Increasing the volume of spray water may decrease phytotoxicity potential.

RESTRICTIONS

Maximum single application rate is 2.0 lbs/A (1.0 lb metallic copper equivalent)

Maximum annual application rate is 16.0 lbs/A (8.0 lbs metallic copper equivalent)

Do not make more than 8 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	LITCHI			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Anthracnose	2.4 (2.2 lbs Cu/A)		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 2.4 lbs/A (1.2 lbs metallic copper equivalent)

Maximum annual application rate is 9.6 lbs/A (4.8 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

LIVE OAK (Non-Forestry) Not For Use in California Unless Accompanied by a Supplemental Label					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Ball Moss	Application Instructions *	required after 12 months	* Mix 4 – 6 lbs (2.0 - 3.0 lbs Cu) per 100 gallons of water. Apply in spring after heavy rain, using 1.5 gallons of spray per foot of tree height. Make sure to set tufts thoroughly. (NOTE: NU-COP® 50 WP may be injurious to some ornamentals grown under live oaks).		

RESTRICTIONS

Maximum single application rate is 4.0 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 40.0 lbs/A (20.0 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

	MACADAMIA NUTS				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Anthracnose	4.7 (2.35 lbs Cu/A)	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 – 4.0 (1.5 - 2.0 lbs Cu/A)	7	Apply during peak raceme development and bloom period. Use higher rates when conditions favor disease.		

Maximum single application rate is 4.7 lbs/A (2.35 lbs metallic copper equivalent) Maximum annual application rate is 18.8 lbs/A (9.44 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	MAMEY SAPOTE					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS			
Anthracnose	3.0 – 4.2	14	Use the higher rates when conditions favor disease development.			
Algal Leaf Spot	(1.5 - 2.1 lbs Cu/A)		Repeat on 14-30 day schedule as disease severity and environmental conditions dictate.			

RESTRICTIONS

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 16.8 lbs/A (8.4 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

MANGO					
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS		
Anthracnose	4.0 - 6.4 (2.0 - 3.2 lbs Cu/A)	30	Apply monthly after fruit set until harvest.		

RESTRICTIONS

Maximum single application rate is 6.4 lbs/A (3.2 lbs metallic copper equivalent)

Maximum annual application rate is 36.4 lbs/A (18.2 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

OLIVES					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Peacock Spot	5.0 - 12.0	30	Apply before winter rains fall.		
Olive Knot	(2.5 - 6.0 lbs Cu/A)		A second application in early spring should be made if disease is severe.		
			Use higher rates when conditions favor disease.		

RESTRICTIONS

Maximum single application rate is 12.0 lbs/A (6.0 lbs metallic copper equivalent)

Maximum annual application rate is 12.6 lbs/A (6.3 lbs metallic copper equivalent)

Do not make more than 1 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

ONION & GARLIC					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Purple Blotch Downy Mildew	2.0 (1.0 lbs Cu/A)	7	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals as needed depending upon disease pressure. Can cause phytotoxicity to leaves.		
Bacterial Blight	1.0 – 1.5 (0.5 - 0.75 lbs Cu/A)				

RESTRICTIONS

Maximum single application rate is 2.0 lbs/A (1.0 lb metallic copper equivalent)

Maximum annual application rate is 12.0 lbs/A (6.0 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PAPAYA				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Anthracnose	4.0 – 5.26 (2.0 - 2.63 lbs Cu/A)	14	Begin application before disease is expected to appear. Repeat at 14 day intervals. Use the higher rates when conditions favor disease. The addition of a suitable spreader-sticker may be desirable especially during periods of heavy rains.	

RESTRICTIONS

Maximum single application rate is 5.26 lbs/A (2.65 lbs metallic copper equivalent)

Maximum annual application rate is 42.4 lbs/A (21.2 lbs metallic copper equivalent)

Do not make more than 8 applications per year at the maximum single application rate.

PARSLEY					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Bacterial Blight (Pseudomonas sp.)	2.0 (1.0 lbs Cu/A)		Begin applications when plants are first established in the field and repeat at 10 day intervals.		

Maximum single application rate is 2.0 lbs/A (1.0 lbs metallic copper equivalent)
Maximum annual application rate is 4.0 lbs/A (2.0 lbs metallic copper equivalent)
Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PASSION FRUIT				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Anthracnose	4.7 (2.35 lbs Cu/A)		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 4.7 lbs/A (2.35 lbs metallic copper equivalent)

Maximum annual application rate is 18.8/A (9.44 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

DEVCHES	0	NECTABINES

	F EAGINES & NEG TARRINES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Dormant & late dormant:	8.0 – 16.0	7	Apply at leaf fall as dormant application.		
Bacterial Spot Leaf Curl Coryneum Blight (Shot Hole)	(4.0 - 8.0 lbs Cu/A)		Use the higher rate when rainfall is very heavy and disease pressure is high. May be used with an agricultural spray oil.		
Brown Rot Blossom Blight	8.0 – 12.0	7	Apply as a full cover spray at pink bud.		
	(4.0 - 6.0 lbs Cu/A)		(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 labeled.		
Bloom & Growing Season:	1.0 – 3.0	5	Post-bloom application applied at first and second cover sprays.		
Bacterial Spot	(0.5 - 1.5 lbs Cu/A)		NOTE: do not spray 3 weeks prior to harvest. Spotting of leaves and some		

RESTRICTIONS

Maximum single dormant season application rate is 16.0 lbs/A (8.0 lbs metallic copper equivalent)

Maximum single growing season application rate is 3.0 lbs/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 36.0 lbs/A (18.0 metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PEANUTS					
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Cercospora Leaf Spot	1.5	7	Begin spraying 25-40 days after planting or when disease symptoms appear.		
	(0.75 lbs Cu/A)		Use sufficient water to get adequate coverage.		
			Continue applications at 7 to 14 day intervals. Reduce spray interval to 7 days during humid weather.		

RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 9.0 lbs/A (4.5 metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PEARS, QUINCE Not Registered for Use By California						
DISEASE APPLICATION RATE (Ibs/Acre) MINIMUM DAYS APPLICATION INSTRUCTIONS RETREATMENT INTERVAL						
Bloom & Growing Season:	1.0 – 3.0	5	Apply at 5 day intervals throughout bloom period. Excessive dosages may			
Fireblight	ireblight (0.5 - 1.5 lbs Cu/A) cause fruit russet.					
Fall & Late Dormant Season:		Only one dormant application	Apply before fall rain begins.			
Pseudomonas blight	(6.0 - 8.0 lbs Cu/A)	allowed per season				

RESTRICTIONS

Maximum single dormant season application rate is 16.0 lbs/A (8.0 lbs metallic copper equivalent)

Maximum single growing season application rate is 3.0 lb/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 32.0 lbs/A (16.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

PEAS			
DISEASE APPLICATION RATE (Ibs/Acre) MINIMUM DAYS RETREATMENT INTERVAL APPLICATION INSTRUCTIONS			
Powdery Mildew	1.5 (0.75 lbs Cu/A)		Begin spray treatment when disease symptoms first appear. Repeat applications at weekly intervals.

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 7.5 lbs/A (3.75 lbs metallic copper equivalent)

Do not make more than 5 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PECANS Not For Use in California Unless Accompanied by a Supplemental Label				
DISEASE APPLICATION RATE (Ibs/Acre) MINIMUM DAYS RETREATMENT INTERVAL APPLICATION INSTRUCTIONS				
Shuck and Kernel rot (Phytophthora cactorum)	2.0 - 4.2 (1.0 - 2.1 lbs Cu/A)	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 Application Instructions	Make only one application per year	Mix 2 lbs per 100 gallons spray plus spreader-sticker on a dilute spray basis and apply in dormant season before buds swell, thoroughly wetting limbs and mosses.	

RESTRICTIONS

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 12.6/A (6.3 lbs metallic copper equivalent)

Do not make more than 3 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PEPPERS				
DISEASE APPLICATION RATE MINIMUM DAYS (lbs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS	
Bacterial Spot	1.5 (0.75 lbs Cu/A)		Apply, when disease threatens, in sufficient water to provide adequate coverage. Use at 3 to 14 day intervals depending on disease severity.	

RESTRICTIONS

Maximum single application rate is 1.5 lbs/A (0.75 lbs metallic copper equivalent)

Maximum annual application rate is 23.5 lbs/A (11.75 lbs metallic copper equivalent)

Do not make more than 15 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PISTACHIOS			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Botrytis Blight, Botryosphaeria Panicle, Shoot Blight, Septoria Leaf Blight, Late Blight (Alternaria)	3.0 – 4.2 (1.5 - 2.1 lbs Cu/A)	14	Make initial application at bud swell and repeat on a 14 - 28 day schedule. Use higher rates when conditions favor disease.

RESTRICTIONS

Maximum single application rate is 4.2 lbs/A (2.1 lbs metallic copper equivalent)

Maximum annual application rate is 16.8 lbs/A (8.4 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

PLUMS & PRUNES				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Dormant Season: Coryneum blight (Shot hole)	8.0 – 16.0 (4.0 - 8.0 lbs Cu/A)	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, Black Knot	3.0 (1.5 lbs Cu/A)	5	Apply full cover application at pink, red or early white bud stage.	

RESTRICTIONS

Maximum single dormant season application rate is 16.0 lbs/A (8.0 lbs metallic copper equivalent)

Maximum single growing season application rate is 3.0 lbs/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 36.0 lbs/A (18.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

	POTATOES			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Early & Late Blight	1.0 – 5.0 (0.5 - 2.5 lbs Cu/A)	5	Apply 1.0 - 1.5 pounds at 5 to 10 day intervals starting when plants are 2 - 6 inches high until 2 weeks before harvest in locations where disease is light and up to 3 to 5 pounds per acre where disease is more severe.	
			Under conditions of severe disease, control with NU-COP® 50 WP will be improved by tank mixing with other compatible fungicides registered for use on potatoes. Read and follow all label instructions of tank mix partners.	

Maximum single application rate is 5.0 lbs/A (2.5 lbs metallic copper equivalent)

Maximum annual application rate is 50.0 lbs/A (25.0 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

	STRAWBERRIES				
DISEASE APPLICATION RATE MINIMUM DAYS RETREATMENT INTERVAL		MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS		
Downy Mildew Leaf Spot Leaf Blight	2.0 - 3.0 (1.0 - 1.5 lbs Cu/A)	7	Begin application when plants are established and continue on a weekly schedule throughout season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease.		
			NOTE: Discontinue applications if signs of phytotoxicity appear.		

RESTRICTIONS

Maximum single application rate is 3.0 lbs/A (1.5 lbs metallic copper equivalent)

Maximum annual application rate is 12.0 lbs/A (6.0 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

SUGAR BEETS & TABLE BEETS			
DISEASE APPLICATION RATE MINIMUM DAYS (Ibs/Acre) RETREATMENT INTERVAL			APPLICATION INSTRUCTIONS
Cercospora Leaf Spot	2.0 - 2.5 (1.0 - 1.25 lbs Cu/A)		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.

RESTRICTIONS

Maximum single application rate is 2.5 lbs/A (1.25 lbs metallic copper equivalent)

Maximum annual application rate is 15.0 lbs/A (7.5 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

SYCAMORE (Non-Forestry)				
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Anthracnose	2.0 - 4.0	7	Make two applications as a full cover spray.	
	(1.0 - 2.0 lbs Cu/A)		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 4.0 lbs/A (2.0 lbs metallic copper equivalent)

Maximum annual application rate is 40.0 lbs/A (20.0 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

TOMATOES (Processing Market)			
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	1.0 (0.5 lbs Cu/A)	3	When disease threatens, apply at 3 - 10 day intervals, more frequently when disease is severe.

RESTRICTIONS

Maximum single application rate is 1.0 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 34.5 lbs/A (17.25 lbs metallic copper equivalent)

Do not make more than 34 applications per year at the maximum single application rate.

TOMATOES (Fresh Market)				
DISEASE	APPLICATION RATE (lbs product/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS	
Early Blight Bacterial Speck Bacterial Spot Anthracnose Gray Leaf Mold Gray Leaf Spot Septoria Leaf Spot Late Blight	3.2 (1.6 lbs Cu/A)	3	When disease threatens, apply at 3 - 10 day intervals, more frequently when disease is severe.	

Maximum single application rate is 3.2 lbs/A (1.6 lbs metallic copper equivalent)

Maximum annual application rate is 34.5 lbs/A (17.25 lbs metallic copper equivalent)

Do not make more than 10 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

TURFGRASS (Sod Farms and other non-residential sites only)								
DISEASE APPLICATION RATE (Ibs Product/Acre) MINIMUM DAYS RETREATMENT INTERVAL APPLICATION INSTRUCTIONS		APPLICATION INSTRUCTIONS						
Algae	4.0 - 6.0 (2.0 - 3.0 lbs Cu/A)	10	May be used as a maintenance spray as needed. May be used alone or in combination with fungicides such as synthetic conventional fungicides.					
			Use a minimum of 100 gallons of water per acre.					
			Phytotoxicity may depend on varietal differences. Apply the directed rate to a small area and observe 7 - 10 days for phytotoxicity. If phytotoxicity occurs, discontinue use.					

RESTRICTIONS

Maximum single application rate is 6.0 lbs/A (3.0 lbs metallic copper equivalent)

Maximum annual application rate is 42.0 lbs/A (21.0 lbs metallic copper equivalent)

Do not make more than 7 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

WALNUTS							
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS				
Walnut Blight	4.0 – 8.0 (2.0 - 4.0 lbs Cu/A)	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.				
			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 of spray.				
			NOTE: Adequate control may not be obtained when copper tolerant species of				

RESTRICTIONS

Maximum single application rate is 8.0 lbs/A (4.0 lbs metallic copper equivalent)

Maximum annual application rate is 50.4 lbs/A (25.2 lbs metallic copper equivalent)

Do not make more than 6 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

WATERCRESS								
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS					
Cercospora Leaf Spot	1.0 (0.5 lbs Cu/A)	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.					
			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 to be applied to watercress during the aquatic production phase.					

RESTRICTIONS

Maximum single application rate is 1.0 lb/A (0.5 lbs metallic copper equivalent)

Maximum annual application rate is 4.0 lbs/A (2.0 lbs metallic copper equivalent)

Do not make more than 4 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

WHEAT, BARLEY & OATS								
DISEASE	APPLICATION RATE (lbs/Acre)	MINIMUM DAYS RETREATMENT INTERVAL	APPLICATION INSTRUCTIONS					
Septoria Leaf Blotch Helminthosporium Spot Blotch	1.0 (0.5 lbs Cu/A)		Make first application at early heading and follow with second application 10 days later.					

RESTRICTIONS

Maximum single application rate is 1.0 lb/A (0.50 lbs metallic copper equivalent)

Maximum annual application rate is 2.0 lbs/A (1.0 lbs metallic copper equivalent)

Do not make more than 2 applications per year at the maximum single application rate.

ORNAMENTALS

Not For Use in California Unless Accompanied by a Supplemental Label

Notice to User: Plant sensitivities to NU-COP® 50 WP 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 and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to NU-COP® 50 WP. Neither the manufacturer nor seller has determined whether or not NU-COP® 50 WP can be safely used on ornamental or nursery plants not listed on this label. The user should determine if NU-COP® 50 WP can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e., bedding plants, foliage, etc., and observe for 7-10 days for symptoms of phytotoxicity prior to commercial use.

Use NU-COP® 50 WP on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, for professional use on ornamentals grown for indoor and outdoor landscaping, and for control of bacterial and fungal diseases of foliage, flowers and stems.

Apply 1.0 – 2.0 lbs per acre (0.5 - 1.0 lbs Cu/A) as a thorough coverage spray using 0.5 lbs, NU-COP® 50 WP per 100 gallons of water. Begin applications at first sign of disease and repeat at 7-14 day intervals as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist.

NU-COP® 50 WP may be used as a maintenance spray alone or in combination with other synthetic conventional fungicides.

Maximum single application rate is 4.0 lbs/A (2.0 lbs metallic copper equivalent) Maximum annual application rate is 40.0 lbs/A (20 lbs metallic copper equivalent)

ORNAMENTAL/DISEASES:

Althea (Rose of Sharon)/Bacterial Leaf Spot

Aralia/Xanthomonas & Cercospora Leaf Spots, Alternaria

Arborvitae/Alternaria Twig Blight, Cercospora Leaf Blight

Azalea*/Cercospora Leaf Spot, Botrytis Blight, Phytophthora Dieback & Powdery Mildew

Begonia/Xanthomonas Leaf Spot, Anthracnose

Bougainvillea/Anthracnose, Bacterial Leaf Spot

Bulbs (Easter Lily**, Tulip, Gladiolus)/Anthracnose, Botrytis Blight

Camellia/Anthracnose, Bacterial Leaf Spot Camphor Tree/Pseudomonas Leaf Spot

Canna/Pseudomonas Leaf Spot

Carnation*/Alternaria Blight, Pseudomonas Leaf Spot, & Botrytis Blight

Chinese Tallow Tree/Bacterial Leaf Spot (Xanthomonas sp., Pseudomonas sp.)

Chrysanthemum*/Septoria Leaf Spot & Botrytis Blight

Cotoneaster/Botrytis Blight

Dahlia/Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot

Date Palm/Pestalotia Leaf Spot

Dianthus/Bacterial Spot, Bacterial Soft Rot

Dogwood/Anthracnose

Dusty Miller/Bacterial Leaf Spot (Pseudomonas cichorii)

Echinacea/Bacterial Leaf Spot (Pseudomonas cichorii)

Elm "Drake"/Xanthomonas Leaf Spot

Euonymus/Botrytis Blight & Anthracnose

European Fan Palm/Pestalotia Leaf Spot

Gardenia/Alternaria Leaf Spot, Botrytis Bud Rot, Cercospora Leaf Spot

Geranium/Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot

Gladiolus/Alternaria Leaf Spot, Botrytis Gray Mold, Bacterial Leaf Blight Golden Rain Tree/Bacterial Leaf Spot

Hibiscus/Bacterial Leaf Spot

Holly Fern/Pseudomonas Leaf Spot

Impatiens/Bacterial Leaf Spot

India hawthorn (greenhouse)/Entomosporium Leaf Spot

Ivv*/Xanthomonas Leaf Spot

Ixora/Xanthomonas Leaf Spot

Juniper (Eastern Red Cedar)/Anthracnose

Lantana/Bacterial Leaf Spot

Lilac/Cercospora Leaf Spot

Loblolly Bay/Anthracnose

Loquat/Entomosporium maculata, Colletotrichum sp.

Magnolia (Southern)/Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot

Mandevillas/Anthracnose

Marigold/Alternaria Leaf Spot, Botrytis Leaf and Flower Rot,

Cercospora Leaf Spot

Mulberry, Weeping/Bacterial Leaf Spot

Oak, Laurel/Algal Leaf Spot (Cephaleuros virescens)

Oleander/Bacterial Leaf Spot, Fungal Leaf Spot

Pachysandra/Volutella Leaf Blight

Pansy/Downy Mildew

Pear (Flowering)/Fireblight, Leaf Spot

Pentas (Egyptian Star)/Bacterial Leaf Spot (Xanthomonas sp.)

Peony/Botrytis Blight

Periwinkle/Phomopsis Stem Blight

Philodendron/Bacterial Leaf Spot

Phlox/Alternaria Leaf Spot

Photinia (Red Tip)/Anthracnose, Entomosporium Leaf Spot

Pistachio/Anthracnose

Plantain Lily/Bacterial Leaf Spot

Powder Puff Plant/Bacterial Leaf Spot

Pyracantha/Fireblight & Scab

Queen Palm/Exosporium Leaf Spot, Phytophthora Bud Rot

Rhododendron/Alternaria Flower Spot

Rose*/Powdery Mildew, Black Spot

Verbena/Xanthomonas Leaf Spot

Viburnum/Anthracnose

Washingtonia Palm/Pestalotia Leaf Spot

Weeping Willow/Anthracnose

Yucca (Adams Needle)/Cercospora & Septoria Leaf Spot

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

^{**}For Easter Lily, use 2.0 - 5.0 lbs (1.0 - 2.5 lbs Cu) per 100 gallons.

Restrictions (Easter Lilv):

Do not apply any additional copper pesticide to this land for 36 months.

Maximum single application rate is 5.0 lbs/A (2.5 lbs metallic copper equivalent)

Maximum annual application rate is 150 lbs/A (75 lbs metallic copper equivalent)

Do not make more than 30 applications per year at the maximum single application rate.

Preharvest Interval (PHI): 0 days

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 should 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.