

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 3, 2023

Keeva Cannavo Authorized Agent Spiess-Urania Chemicals GmbH c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707

Subject: Notification per PRN 98-10 – Adding 2 ABNs

Product Name: SPU-06050-F

EPA Registration Number: 64744-5 Application Date: August 11, 2021

Decision Number: 584227

# Dear Keeva Cannavo:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "NOTIFICATION" and placed in our records.

The alternate brand name, "Kocide 50DF" and "Kocide MAXX" has been added to the product record.

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 (FIFRA) 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) lists 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

Page 2 of 2 EPA Reg. No. 64744-5 Decision No. 584227

approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, please contact Thomas Harty at 202-566-0394 or at harty.thomas@epa.gov.

Sincerely,

Kristy Crews, Ph.D., Product Manager 22

Fungicide Branch, Registration Division (7505T)

Office of Pesticide Programs

Knoty Crews

Spiess-Urania Chemicals GmbH Notif. – Adding ABNs Page 1 of 25

EPA Est. No. \_\_\_\_\_

# [MASTER LABEL]

# NOTIFICATION

64744-5

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

10/03/2023

COPPER GROUP M01 FUNGICIDE

# SPU-06050-F

ABN: Kocide 50DF ABN: Kocide MAXX

FOR USE IN: LISTED CITRUS, LISTED VEGETABLES, LISTED TREE CROPS, LISTED SMALL FRUITS, LISTED VINES, LISTED FIELD CROPS, LISTED GREENHOUSES, LISTED TURF AND ORNAMENTALS

Active Ingredient:		
Copper Hydroxide*†		76.8%
Other Ingredients:		23.2%
Total:		100.0%
*Metallic Copper (Cu <sup>2+</sup> ) Equivalent. 50.0% by weight	†CAS No. 20427-59-2	
KEEP OUT OF 1	REACH OF CHILDREN	

# DANGER - PELIGRO

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

	FIRST AID
If In Eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If Swallowed	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If On Skin Or Clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If Inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call poison control center or doctor for treatment advice.</li> </ul>
	HOTLINE NUMBER
treatment.	ontainer or label with you when calling a poison control center or doctor or going for et CHEMTEL (800) 255-3924 (24 hours) for emergency medical treatment information.
Note to Physician: Pr	robable mucosal damage may contraindicate the use of gastric lavage.
See side/back panels f	for additional precautionary statements.

Nonrefillable Container Net Contents: \_\_\_\_\_

**Manufactured For:** 

EPA Reg. No. 64744-5

Spiess-Urania Chemicals GmbH Frankenstrasse 18 B 20097 Hamburg

# Germany

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER-PELIGRO

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Do not get in eyes, on skin or clothing. Avoid contact with skin. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical resistant gloves made of any waterproof material including Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Natural Rubber ≥14 mils, Polyethylene Polyvinyl Chloride (PVC) ≥14 mils, or Viton ≥14 mils
- Protective eyewear

Remove and wash contaminated clothing before reuse.

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

#### ENGINEERING CONTROLS

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

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR Part 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**

**Fish Advisory Statement:** This copper product is toxic to fish and aquatic organisms and may contaminate water through runoff. 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.

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

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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

# 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, greenhouses, and handlers of agricultural insecticides. 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 without required PPE.

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 including Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Natural Rubber ≥14 mils, Polyethylene Polyvinyl Chloride (PVC) ≥14 mils, or Viton ≥14 mils
- Shoes plus socks
- Protective eyewear

## For Greenhouse Uses ONLY:

The 48 hour restricted-entry interval (REI) may be reduced to 24 hours, provided that the following conditions are met:

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 or eye flush station that is located with the decontamination supplies, and
  - how to operate the eye flush container or eye flush station.

## NON-AGRICULTURAL USE REQUIREMENTS

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

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

# PRODUCT INSTRUCTIONS

SPU-06050-F may be applied as an aerial, ground dilute or ground concentrate spray unless specifically directed otherwise in the specific crop use directions.

The per acre use rate of SPU-06050-F is applicable for both dilute and concentrate spraying. Depending upon the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to Minimum Spray Volume Table. Complete spray coverage is essential to assure optimum performance from SPU-06050-F. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult the SPU-06050-F label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 4 to 12 pounds and 7 to 10 days), use the higher rates and shorter spray intervals when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops.

The Pre-Harvest Interval (PHI) for SPU-06050-F is 0-days unless noted.

## **RESTRICTIONS:**

- Do not tank mix SPU-06050-F with any product containing aluminum tris (O-ethyl phosphonate) fungicide for use on any registered crops unless appropriate precautions have been taken to buffer the spray solution because severe phytotoxicity may result.
- Use in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Not for residential use.
- Pilots must use an enclosed cab that meets the definition listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.305].

# **SPECIAL PRECAUTIONS:**

- If SPU-06050-F is applied in a spray solution having a pH of less than 6.5, phytotoxicity may occur.
- Environmental conditions such as extended periods of wet weather, acid rain, etc. which alter the pH of the leaf surface may affect the performance of SPU-06050-F resulting in possible phytotoxicity or loss of effectiveness.
- Agricultural chemicals may perform in an unpredictable manner when tank mixed, especially where several
  products are involved. Reduced effect on pests or crop injury may occur. Unless recommended on this label or

by a State/local expert, it is advisable to test for compatibility and potential crop injury prior to commercial use of a new tank mix.

- It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber, and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.
- Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set systems. Do not apply this product through any other type of irrigation system. In California, do not apply in systems which contain aluminum parts or components.
- While volume is important in obtaining full spray coverage, often factors such as foliage density, environmental
  conditions and sprayer calibration have a greater impact. Always be sure that sprayers are calibrated to spray
  equipment manufacturer's specifications and environmental conditions are within those recommended by State
  and local regulatory authorities.
- When mixing, fill the spray tank one-half full with water. Add SPU-06050-F slowly to tank while hydraulic or
  mechanical agitation is operating and continue filling with water. Spreaders, stickers, insecticides, nutrients, etc.
  should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank
  or contact your chemical supplier. Observe all precautions and limitations on the labels of all products used in
  mixtures.
- 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 M01 FUNGICIDE

For resistance management, SPU-06050-F contains a Group M01 fungicide. Any fungal population may contain individuals naturally resistant to SPU-06050-F and other Group M01 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

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

- Rotate the use of SPU-06050-F or other Group M01 fungicides within a growing season sequence with different groups that control the same pathogens.
- Avoiding the consecutive use of SPU-06050-F or other target site of action Group M01 fungicides/bactericides that might have a similar target site of action, on the same fungal pathogen species.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide 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 applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal 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 Spiess-Urania Chemicals GmbH
  representative. You can also contact your pesticide distributor or university extension specialist to report
  resistance.

#### SPRAY DRIFT

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

#### **Aerial Applications:**

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

#### **Ground Boom Applications:**

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

#### SPRAY DRIFT ADVISORIES

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

## IMPORTANCE OF DROPLET SIZE

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

#### **Controlling Droplet Size – Ground Boom**

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

#### **Controlling Droplet Size – Aircraft**

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

#### **BOOM HEIGHT – Ground Boom**

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

## **RELEASE HEIGHT – Aircraft**

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

# SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

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

# TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# Other State and Local Requirements:

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

## **CHEMIGATION INSTRUCTIONS**

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

Apply this product only through one or more of the following types of systems: sprinkler, including center pivot, lateral move, traveler, big gun, or plastic pipe solid set system(s) which contain no aluminum parts or components. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from nonuniform distribution of

Spiess-Urania Chemicals GmbH Notif. – Adding ABNs Page 6 of 25

treated water.

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

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

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

Shut off injection equipment after treatment and continue to operate irrigation system until SPU-06050-F has been cleared from the last sprinkler head.

Posting of areas to be chemigated is required when 1) 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 2)when the 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 area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations 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 materials to event 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.

\_\_\_\_\_

# CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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

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

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

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

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

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

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

**IMPORTANT:** It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use.

When mixing, fill the nurse tank half full with water. Add SPU-06050-F slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of

all products used in mixtures. Agitate the mixture in the nurse tank.

SPU-06050-F should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until SPU-06050-F has been cleared from the last sprinkler head.

\_\_\_\_\_\_

# SPRINKLER CHEMIGATION

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

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

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

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

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

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

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

**NOTE:** It must be determined if proper application equipment is available and if waste associated with its use can be properly handled. Agricultural chemicals are often reactive with the materials used in the construction of application equipment, such as aluminum, rubber and some synthetic materials. This factor should be taken into consideration when selecting proper application equipment. It is necessary that all application equipment be thoroughly flushed with clean water after each day's use. When mixing, fill the nurse tank half full with water. Add SPU-06050-F slowly to tank while hydraulic or mechanical agitation is operating and continue filling with water. Stickers, spreaders, insecticides, nutrients, etc. should be added last. If compatibility is in question, use the Compatibility Jar Test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all precautions and limitations on the labels of all products used in mixtures.

Agitate the mixture in the nurse tank.

SPU-06050-F should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set irrigation systems. Shut off injection equipment after treatment and continue to operate irrigation system until SPU-06050-F has been cleared from the last sprinkler head.

# APPLICATION INSTRUCTIONS

Minimum Recommended Spray Volume (Gallons Per Acre) When Applying SPU-06050-F

	Aerial	Grou	and
	Aeriai	Dilute	Concentrate
Citrus	10	800	100**
Conifers	10	100	30
Field Crops	3	20	3
Ornamentals	10	100	50
Small Fruits	5	150	50
Tree Crops	10	400	50
Vegetables	3	20	3
Vines	5	150	50
Miscellaneous	10	150	50

<sup>\*\*</sup>Pesticide application equipment such as "Curtec" or other similar sprayers which are capable of obtaining thorough coverage at low volumes may be used at as low as 20 gallons per acre of spray volume.

The recommendations of State Agricultural Extension Services should be closely followed as to timing, frequency, and number of sprays per year.

# FROST INJURY PROTECTION BACTERIAL ICE NUCLEATION INHIBITOR

Application of SPU-06050-F made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (Pseudomonas syringae, Erwinia herbicola, and Pseudomonas fluorescens) and may therefore provide some protection against light

frost. Do not use SPU-06050-F for those geographical areas where weather conditions favor severe frost.

# **CITRUS**

Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Tangelo and Tangerine

SPU-06050-F may be mixed with dry foliar nutritionals (micronutrients) to create "Shot Bag" mixes to meet the various nutritional requirements of citrus and provide disease protection as described on this label. SPU-06050-F per acre rates in these mixes must not exceed the maximum labeled rates for disease control.

Adding foliar nutritionals or other products to spray mixtures containing SPU-06050-F and applying to citrus

during the post-bloom period when young fruit are present may result in spray burn.

during the post-	olooni perioa wher		are present may result in spray burn.
Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Algal Spot, Melanose, Scab	3 – 6.3 lbs. (1.5-3.15 lbs. metallic copper)	25.1 lbs. (12.6 lbs. metallic	Apply as pre-bloom and post-bloom sprays. Use the higher rates when conditions favor disease. Minimum retreatment interval is 7 days.
Greasy Spot, Pink Pitting	3 – 6.3 lbs. (1.5-3.15 lbs. metallic copper)	copper)	Apply in summer on expanded new flush. Repeat on subsequent flushes where disease pressure is severe. Use the higher rates when conditions favor disease. Minimum retreatment interval is 7 days.
Alternaria Brown Spot	4 – 6.3 lbs. (2-3.15 lbs. metallic copper)		On susceptible varieties apply when the first spring flush appears and each flush thereafter. Application to fruit should start after two thirds of the petals have fallen and be repeated on a 7- to 21-day schedule if needed. Use the higher rates when conditions favor disease. Minimum retreatment interval is 7 days.
Phytophthora Brown Rot, Septoria Spot			Begin application in fall before or just after the first rain and continue if needed. For Brown Rot only, apply to skirts of trees to a height of at least 4 feet. For control of Septoria Spot or where fruit have already been infected with Brown Rot, apply to entire tree. Apply also to bare ground one foot beyond skirt. Use the higher rates when conditions favor disease. Minimum retreatment interval is 7 days.
			<b>IMPORTANT:</b> In California, in areas subject to copper injury, add 0.25 to 0.5 pound of high-quality lime per pound of SPU-06050-F.
Phytophthora Foot Rot	1 lbs. (0.5 lbs. metallic copper)		Mix at a 1 pound to 0.5 to 1 gallon of water ratio, "Tre-Hold" or latex paint. Paint trunks of trees from the soil surface to the lowest scaffold limbs. Apply in May prior to summer rains and/or in the fall prior to wrapping trees for freeze protection. Treatment serves as protection for up to 1 year, but does not cure existing infections.
			<b>IMPORTANT:</b> Areas where microjet or low volume irrigation hit the tree trunk may require retreatment due to wash off.
Citrus Canker (suppression)	6.3 lbs. (3.15 lbs. metallic copper)		Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, spray each flush of new growth. Minimum retreatment interval is 7 days.
Black Spot*	3.5 – 6.3 lbs. (1.75-3.15 lbs. metallic copper)		Begin treatment prior to or when disease first appears and repeat every 7 to 21 days if needed. Use the higher rates and shorter spray intervals when conditions favor disease. Minimum retreatment interval is 7 days.

**NOTE:** Phytotoxicity may occur on young tender flush when SPU-06050-F is applied to citrus seedlings grown in greenhouses or shadehouses.

# Restriction:

Minimum retreatment interval is 7 days.

\*Not registered for use in California.

# **CITRUS**

## Field Nursery Grown

To control Melanose, Scab, Pink Pitting, Greasy Spot, Brown Rot and for suppression of Citrus Canker, apply 4 to 6.3 pounds of SPU-06050-F per acre. Apply SPU-06050-F at 28-day intervals if needed depending on disease severity. Minimum retreatment interval is 7 days. Maximum Annual Rate/Acre is 25.1 lbs.

FIELD CROPS						
Crop	Crop Disease Application Rate/Acre Rate/Acre Use Instructions					
Alfalfa	Cercospora Leaf	1 lbs.	2 lbs.	Apply 10 to 14 days before each harvest or		

				Page 9 of 25
	Spot, Leptosphaerulin a Leaf Spot	(0.5 lbs. metallic copper)	(1.0 lbs. metallic copper)	earlier if disease threatens. Minimum retreatment interval is 30 days.  IMPORTANT: Spray injury may occur with sensitive varieties such as Lahontan.
Restrictions:				schsitive varieties such as Laholitan.
	reatment interval is 3	0 days.		
	within 9 days of harv			
<ul> <li>Do not make</li> </ul>	more than 2 applicat	ions per year.		
Corn (Field	Bacterial Stalk	1 - 2.1 lbs.	8.4 lbs.	Begin treatment when disease first appears and
Corn, Popcorn,	Rot, Goss's wilt	(0.5-1.05	(4.2 lbs.	repeat every 7- to 10-days if needed. Use the
Seed Corn,		lbs. metallic	metallic	higher rates and shorter spray intervals when
Sweet Corn) Restrictions:		copper)	copper)	conditions favor disease.
	reatment interval is 7	dove		
			t the movimu	ım single application rate.
Peanut	Cercospora Leaf	1.5 lbs.	9 lbs.	Begin spraying at 35 to 40 days after planting
1 Canat	Spot	(0.75 lbs.	(4.5 lbs.	or when disease symptoms first appear and
	Spor	metallic	metallic	repeat at 7- to 14-day intervals if needed.
		copper)	copper)	Reduce sprays to 7-day intervals during humid
		copper)	**	weather. Flowable sulfur may be added.
<b>Restrictions:</b>				
	reatment interval is 7			
	more than 6 applicat	ions per year.		1
Potato	Early Blight, Late Blight	1 – 4 lbs. (0.5-2 lbs. metallic copper)	50 lbs. (25 lbs. metallic copper)	Apply 1 to 2 pounds at 5- to 10-day intervals if needed starting when plants are 2 to 6 inches high in locations where disease is light. Apply up to 4 pounds per acre when disease is more severe. Under conditions of severe disease, control with SPU-06050-F 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.
Restriction:				· •
	reatment interval is 5			
Sugar Beet	Cercospora Leaf Spot	2 – 2.6 lbs. (1-1.3 lbs. metallic copper)	15.6 lbs. (7.8 lbs. metallic copper)	Begin applications when conditions first favor disease development and repeat at 10- to 14-day intervals if needed. Use the higher rates when conditions favor disease.
Restrictions:	1	соррегу	copper)	men conditions favor discusc.
	reatment interval is 1	0 days.		
			t the maximu	ım single application rate.
Wheat, Barley,	Fusarium Head	1 lbs.	2 lbs.	Make applications for early season disease
Oats	Blight	(0.5 lbs.	(1 lbs.	control through heading. Use higher rates
	Suppression*,	metallic	metallic	when conditions favor disease. Add an
	Helminthosporium	copper)	copper)	adjuvant.
	Spot Blotch,			
	Powdery Mildew			
	Suppression,			
	Stagonospora Leaf			

# **Restrictions:**

- Minimum retreatment interval is 10 days.
- Do not make more than 2 applications per year. \*Not registered for use in California.

and Glume Blotch, Stem Rust\*

SMALL FRUITS Blackberry, Blueberry, Cranberry, Currant, Gooseberry, Raspberry and Strawberry							
Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions			
Blackberry	Anthracnose, Cane	4 lbs.	20 lbs.	Make fall application after harvest. Apply			
(Aurora,	Spot, Leaf Spot,	(2 lbs.	(10 lbs.	delayed dormant spray after pruning/training in			
Boysen,	Pseudomonas	metallic	metallic	the spring. If needed, agricultural-type spray oil			
Cascade,	Blight, Purple	copper)	copper)	may be added.			
Chehalem,	Blotch, Yellow		- FPC.)				

• Minimum retreatment interval is 7 days.

Logan, Marion,	Rust			
Santiam,	Anthracnose, Cane	2 lbs.	1	Apply when leaf buds begin to open and repea
Γhornless	Spot, Leaf Spot,	(1 lbs.		when flower buds show white. Repeat on a 7
Evergreen)	Purple Blotch,	metallic		day interval if needed. If needed, agricultural
avergreen)	Yellow Rust	copper)		type spray oil may be added.
	1 chow Rust	copper)		type spray on may be added.
				IMPORTANT: Crop injury may occur i
				applied to foliage under certain environmenta
				conditions such as hot or prolonged mois
				periods. Discontinue applications if signs o
D / ! /!				crop injury appear.
<b>Restrictions:</b>				
	reatment interval is 7		.1	
		ons per year at		single application rate.
Blueberry	Bacterial Canker	3-4 lbs.	16.8 lbs.	Make first application before fall rains and
		(1.5-2 lbs.	(8.4 lbs.	second application 4 weeks later. Use th
		metallic	metallic	higher rates when conditions favor disease.
		copper)	copper)	
	Fruit Rot,	3 - 4.2  lbs.	соррегу	Dormant Application: Begin applications whe
	Phomopsis Twig	(1.5-2.1 lbs.		bloom buds begin to swell. Make additiona
	Blight	metallic		applications at 7- to 14-day intervals if neede
	Blight			before blooms open.
Restrictions:		copper)		perore blooms open.
	maatmant intomval is 7	dorra		
	reatment interval is 7		4	
				single application rate.
Cranberry	Fruit Rot	4.2 lbs.	25.2 lbs.	Make first application in late bloom. Apply on
		(2.1 lbs.	(12.6 lbs.	or two additional applications at 7- to 14-da
		metallic	metallic	intervals if needed depending on diseas
		copper)	copper)	severity.
	Rose Bloom	1.	соррегу	Apply three sprays on 7- to 14-day schedule
				needed as soon as symptoms are observed.
	Bacterial Stem			Apply post-harvest and again in spring at bu
	Canker			swell. Apply one or two additional application
	Calikei			
				at 7- to 14-day intervals if needed depending o
				disease severity.
	Leaf Blight, Red			Apply delayed dormant spray in the spring
	Leaf Spot, Stem			Repeat at 7- to 14-day intervals if neede
	Leaf Spot, Stem Blight, Tip Blight			Repeat at 7- to 14-day intervals if neede through pre-bloom.
				Repeat at 7- to 14-day intervals if neede
Restrictions:	Blight, Tip Blight			Repeat at 7- to 14-day intervals if neede
	Blight, Tip Blight (Monilinia)	days.		Repeat at 7- to 14-day intervals if neede
• Minimum ret	Blight, Tip Blight (Monilinia) reatment interval is 7			Repeat at 7- to 14-day intervals if neede
<ul><li> Minimum ret</li><li> Do not make</li></ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application	ons per year.	20 - 32 lbs.	Repeat at 7- to 14-day intervals if neede through pre-bloom.
<ul><li>Minimum ret</li><li>Do not make</li><li>Currant,</li></ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf	ons per year. 5 – 8 lbs.	20 - 32 lbs.	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have
<ul><li>Minimum ret</li><li>Do not make</li><li>Currant,</li></ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application	5 – 8 lbs. (2.5 – 4 lbs.	(10 - 16 lbs.	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have expanded. Continue on a 10- to 14-day.
<ul><li>Minimum ret</li><li>Do not make</li><li>Currant,</li></ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf	ons per year. $5-8$ lbs. $(2.5-4$ lbs. $metallic$	(10 - 16 lbs. metallic	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have xpanded. Continue on a 10- to 14-da schedule if needed during wet conditions in the
<ul><li>Minimum ret</li><li>Do not make</li><li>Currant,</li></ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf	5 – 8 lbs. (2.5 – 4 lbs.	(10 - 16 lbs.	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have expanded. Continue on a 10- to 14-da schedule if needed during wet conditions in the spring. Make an additional application after the spring of
Minimum ret     Do not make Currant, Gooseberry	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf	ons per year. $5-8$ lbs. $(2.5-4$ lbs. $metallic$	(10 - 16 lbs. metallic	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the
Minimum ret     Do not make Currant, Gooseberry  Restrictions:	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot	5 – 8 lbs. (2.5 – 4 lbs. metallic copper)	(10 - 16 lbs. metallic	Repeat at 7- to 14-day intervals if neede through pre-bloom.  Make initial application after first leaves have expanded. Continue on a 10- to 14-da schedule if needed during wet conditions in the spring. Make an additional application after the spring of
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot	5 - 8 lbs. (2.5 - 4 lbs. metallic copper)	(10 - 16 lbs. metallic copper)	Make initial application after first leaves have expanded. Continue on a 10- to 14-da schedule if needed during wet conditions in the spring. Make an additional application after harvest.
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application	5 – 8 lbs. (2.5 – 4 lbs. metallic copper)  days. ons per year at	(10 - 16 lbs. metallic copper)	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application	5 - 8 lbs. (2.5 - 4 lbs. metallic copper)	(10 - 16 lbs. metallic copper)	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane	5 - 8 lbs. (2.5 - 4 lbs. metallic copper)  days. ons per year at 4 lbs.	(10 - 16 lbs. metallic copper)  the maximum 20 lbs.	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  single application rate.  Make fall application after harvest. Application after harvest.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot,	ons per year.  5 - 8 lbs.  (2.5 - 4 lbs.  metallic  copper)  days.  ons per year at  4 lbs.  (2 lbs.	(10 - 16 lbs. metallic copper)  the maximum 20 lbs. (10 lbs.	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  single application rate.  Make fall application after harvest. Application delayed dormant spray after training in the
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas	ons per year.  5 - 8 lbs.  (2.5 - 4 lbs.  metallic  copper)  days.  ons per year at  4 lbs.  (2 lbs.  metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest. Application after training in the spring. If needed, agricultural-type spray of
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple	ons per year.  5 - 8 lbs.  (2.5 - 4 lbs.  metallic  copper)  days.  ons per year at  4 lbs.  (2 lbs.	(10 - 16 lbs. metallic copper)  the maximum 20 lbs. (10 lbs.	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  single application rate.  Make fall application after harvest. Application after training in the spring in the spring in the spring application rate.
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow	ons per year.  5 - 8 lbs.  (2.5 - 4 lbs.  metallic  copper)  days.  ons per year at  4 lbs.  (2 lbs.  metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest. Application after training in the spring. If needed, agricultural-type spray of
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	ons per year.  5 - 8 lbs.  (2.5 - 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Applied delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeated.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs.	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7-delayed form.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7-day interval if needed. If needed, agricultural
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia)  reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a faday interval if needed. If needed, agricultural
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs.	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7-delayed on a 7-delayed flower buds show white.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a 7-day interval if needed. If needed, agricultural type spray oil may be added.
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest.  Make fall application after harvest. Application after harvest application rate.  Make fall application after harvest. Application after harvest application after harvest.  Apply when leaded, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a faday interval if needed. If needed, agricultural type spray oil may be added.  IMPORTANT: Crop injury may occur
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest.  Make fall application after harvest. Application after harvest application after harvest.  Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repeat when flower buds show white. Repeat on a day interval if needed. If needed, agricultural type spray oil may be added.  IMPORTANT: Crop injury may occur applied to foliage under certain environmental
<ul> <li>Minimum ret</li> <li>Do not make</li> <li>Currant,</li> <li>Gooseberry</li> </ul> Restrictions: <ul> <li>Minimum ret</li> <li>Do not make</li> </ul>	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest.  Make fall application after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repet when flower buds show white. Repeat on a day interval if needed. If needed, agricultural type spray oil may be added.  IMPORTANT: Crop injury may occur applied to foliage under certain environments conditions such as hot or prolonged moi
Minimum ret     Do not make Currant, Gooseberry  Restrictions:     Minimum ret     Do not make	Blight, Tip Blight (Monilinia) reatment interval is 7 more than 6 application Anthracnose, Leaf Spot  reatment interval is 10 more than 4 application Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Purple Blotch, Purple Blotch,	ons per year.  5 – 8 lbs.  (2.5 – 4 lbs.  metallic copper)  days. ons per year at 4 lbs. (2 lbs. metallic copper)  2 lbs. (1 lbs. metallic	the maximum 20 lbs. (10 lbs. metallic	Make initial application after first leaves have expanded. Continue on a 10- to 14-day schedule if needed during wet conditions in the spring. Make an additional application after harvest.  Single application rate.  Make fall application after harvest. Application after harvest.  Make fall application after harvest. Application after harvest application after harvest.  Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray of may be added.  Apply when leaf buds begin to open and repe when flower buds show white. Repeat on a day interval if needed. If needed, agricultural type spray oil may be added.  IMPORTANT: Crop injury may occur applied to foliage under certain environment.

<ul> <li>Do not mal</li> </ul>	te more than 5 application	ons per year at	t the maximum s	single application rate.
Strawberry	Angular Leaf Spot	2-3 lbs.	12 lbs.	Begin application when plants are established
	(Xanthomonas),	(1-1.5 lbs.	(6 lbs. metallic	and continue on a weekly schedule throughout
	Leaf Blight, Leaf	metallic	copper)	the season. Apply in at least 20 gallons of
	Scorch, Leaf Spot	copper)		water. Use the higher rates when conditions
				favor disease.
				<b>IMPORTANT:</b> Discontinue applications if
				signs of crop injury appear.

# **Restrictions:**

- Minimum retreatment interval is 7 days.
  Do not make more than 4 applications per year at the maximum single application rate.

# TREE CROPS

Almond, Apple, Apricot, Avocado, Banana/Plantain, Cacao, Cherry, Coffee, Filbert, Mango, Nectarine, Olive, Peach, Pear, Pecan, Pistachio, Plum, Prune, Quince and Walnut

	Peacn,	Pear, Pecan, 1	Pistacnio, Piu	im, Prune, Quince and Walnut
Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Almond	Bacterial Blast  Bacterial Spot (Xanthomonas arboricola pv. Pruni)	1 – 3 lbs. (0.5-1.5 lbs. metallic copper)  8 – 16 lbs. (4-8 lbs. metallic copper)  0.5 – 2 lbs. (0.25-1 lbs. metallic copper)	35.9 lbs. (18 lbs. metallic copper)	For bacterial blast control in sprinkler irrigated orchards or where disease is severe, apply 1.0 to 3.0 pounds of product per acre post-bloom at 2-week intervals if needed or just before sprinkling. Do not exceed the maximum annual rate.  Dormant: Make first application at late dormant. Use the higher rates when conditions favor disease.  Pink through Full Bloom: Maximum use rate is 2.0 pounds of product per acre.  Petal Fall: Maximum use rate is 1.0 pound of product per acre.  Post-Petal Fall: Maximum use rate is 0.5 pound of product per acre.  Time sprays around rain events and temperature. Make a minimum of one application to prevent new infections. IMPORTANT: Copper applied after bloom can be potentially phytotoxic. Leaf spotting and premature leaf fall can occur if rates are extended.
Doctrictions	Blossom Brown Rot, Coryneum Blight (Shot Hole)	3 lbs. (1.5 lbs. metallic copper)		Apply during early bloom. Do not apply after full bloom or injury may occur.

# Restrictions:

Restrictions	•					
<ul> <li>Minimum</li> </ul>	• Minimum Dormant, late dormant retreatment interval is 7 days.					
<ul> <li>Minimum</li> </ul>	bloom/growing se	ason retreatme	ent interval is	s 5 days.		
Almond,	Bacterial Blast	8 - 16  lbs.	35.9 lbs.	Make first application before fall rains and a second at		
Apricot,	(Pseudomonas),	(4-8 lbs.	(18 lbs.	late dormant. Use the higher rates when conditions favor		
Cherry,	Bacterial	metallic	metallic	disease. If needed, agricultural-type spray oil may be		
Plum, Prune		copper)	copper)	added. Minimum retreatment interval is 7 days.		
	Coryneum					
	Blight (Shot			For Cherries: Where disease is severe, an additional		
	Hole)			application shortly after harvest may be required.		
				IMPODITANTE Estimates		
				<b>IMPORTANT:</b> Foliar injury may occur from post-		
				bloom sprays on almonds, especially on NePlus varieties.		
	Blossom Brown	2-3 lbs.		Apply during early bloom. Do not apply after full bloom		
	Rot, Coryneum	(1-1.5 lbs.		or injury may occur. Use the higher rates when rainfall		
	Blight (Shot	metallic		is heavy and disease pressure is high.		
	Hole)	copper)		is neavy and disease pressure is ingn.		
	Black Knot	2-3 lbs.		Make an application at bud swell up to early bloom for		
	(Plum)	(1-1.5 lbs.		early season disease suppression. Apply before full		
	(1 10111)	metallic		bloom. Minimum retreatment interval is 5 days. Use the		
		copper)		higher rates when rainfall is heavy and disease pressure		
		T.F.		is high.		
				_		

Page 12 of 25

	Cherry Leaf Spot (Sour Cherries Only)  s: n Dormant, late dorn n bloom/growing se Anthracnose			
		metatiic copper)	copper)	
Restrictions	S:	соррег)	соррег)	1
	n dormant, late dorn	nant retreatme	ent interval is	7 days.
<ul> <li>Minimun</li> </ul>	n bloom/growing se	ason retreatme	ent interval is	s 5 days.
Apple	Anthracnose, Blossom Blast, European Canker (Nectria), Shoot Blast (Pseudomonas) Apple Scab, Fire Blight  Apple Scab	12 lbs. (6 lbs. metallic copper)  4 – 12 lbs. (2-6 lbs. metallic copper)  1 lbs. (0.5 lbs. metallic copper)	31.9 lbs. (16 lbs. metallic copper)	Apply before fall rains.  IMPORTANT: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.  Only one dormant application allowed per year.  Make application between silver-tip and green-tip. Apply as a full cover spray for early season disease suppression.  RESTRICTION: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches 1/2 inch.  Only one application allowed per year between silver-tip and green-tip.  Extended spray schedule where fruit finish is not a concern: Continued applications may be made at 5- to 7-day intervals if needed between 1/2 inch green-tip and first cover spray.
Restrictions	Fire Blight  Collar Rot, Crown Rot	1.3 lbs. (0.65 lbs. metallic copper)  4 lbs. (2 lbs. metallic copper)		RESTRICTION: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting. The addition of 1 to 3 pounds of hydrated lime per pound of SPU-06050-F may reduce crop injury. Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for best results. Do not apply to foliage or fruit. This rate cannot be used during bloom or growing season.  RESTRICTION: Do not use if soil pH is below 5.5 since copper toxicity may result.

- Do not make more than one application between silver-tip and green-tip per year.
  Minimum bloom and growing season retreatment interval is 5 days.
  Do not use if soil pH is below 5.5, copper toxicity may result.

Avocado	Anthracnose,	4 - 6.2  lbs.		Apply when bloom buds begin to swell and continue			
	Blotch, Scab	(2-3.1 lbs.	(18.6 lbs.	application at 14- to 30-day intervals for five to six			
		metallic	metallic	applications. Use the higher rates when conditions favor			
		copper)	copper)	disease.			
Postriction	Pactrictions:						

# **Restrictions:**

• Minimum retreatment interval is 14 days.

				single application rate.
Banana,	Sigatoka (Black	2.1 lbs.	37.7 lbs.	Apply by air in 3 gallons of water. Apply at 7- to 14-
Plantain	and Yellow)	(1.05 lbs.	(18.9 lbs.	day intervals if needed. If needed, agricultural-type
		metallic	metallic	spray oil may be added. Apply at 21-day intervals
	Dla als Ditting	copper)	copper)	during dry periods.
	Black Pitting			Mix in 100 gallons of water. Apply to the fruit stem and
				the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Restriction	ns:	I		prior wild second weeks area mark among another
	m retreatment interv			
	exceed 17 application		04.511	
Cacao	Black Pod	2 - 4.5  lbs.	31.5 lbs.	Begin applications at the start of the rainy season and
		(1-2.25 lbs.	(15.75 lbs.	continue while infection conditions persist. Apply at 14-
		metallic copper)	metallic copper)	to 21-day intervals if needed depending on disease severity. For drier areas, make two to four applications
		copper)	copper)	using 2 to 4 pounds of product per acre according to
				disease incidence and planting density.
Restriction	ns:			
	m retreatment interv			
				single application rate.
Coffee	Coffee Berry	4.2 lbs.	25.1 lbs.	Apply first spray after flowering and before onset of
	Disease	(2.1 lbs.	(12.6 lbs.	long rains and then at 14- to 28-day intervals if needed
	(Colletotrichum	metallic	metallic	until picking.
	coffeanum) Bacterial Blight	copper)	copper)	Begin spray program before the onset of long rainy
	(Pseudomonas			periods and continue throughout the rainy season at 14-
	syringae)			to 21-day intervals if needed. The critical time for
	,,,,,,,,			spraying to control this disease is just before, during and
				after flowering(s), especially when coinciding with wet
				weather.
	Leaf Rust	3 - 4.2  lbs.		Apply before the onset of rain and then at 14- to 21-day
	(Hemileia	(1.5-2.1 lbs.		intervals if needed while the rains continue. Use the
	vastatrix)	metallic		higher rates when rainfall is heavy and disease pressure
	T 0	copper)		is high.
	Iron Spot	2 lbs.		Use concentrate or dilute spray. Begin treatment at the
	(Cercospora coffeicola),	(1 lbs. metallic		start of wet season and continue at 14 – 28 days intervals
	Pink Disease	copper)		for three applications.
	(Corticium	copper)		
	Conticiunt			
1	salmonicolor)			
Restriction	salmonicolor)			
• Minimur	ns: m retreatment interv	2		
Minimur     Do not e	ns: m retreatment intervexceed 5 application	s per year at th		single application rate.
• Minimur	ns: m retreatment interv	s per year at th 8 – 12 lbs.	36 lbs.	Apply as a post-harvest spray. In seasons of heavy
• Minimur • Do not e Filbert	m retreatment interv exceed 5 application Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs.	36 lbs. (18 lbs.	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the
Minimur     Do not e  Filbert  (only for use)	m retreatment interv exceed 5 application Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall
• Minimur • Do not e Filbert (only for use in	m retreatment intervexceed 5 applications Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs.	36 lbs. (18 lbs.	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed,
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum
• Minimur • Do not e Filbert (only for use in	m retreatment intervexceed 5 applications Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight Eastern Filbert	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight Eastern Filbert	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight Eastern Filbert	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight Eastern Filbert	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure
• Minimur • Do not e Filbert (only for use in Washington	m retreatment intervexceed 5 applications Bacterial Blight Eastern Filbert	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is
• Minimur • Do not e Filbert (only for use in Washington & Oregon)	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking
• Minimur • Do not e Filbert (only for use in Washington & Oregon)	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight	s per year at th 8 – 12 lbs. (4-6 lbs. metallic copper)	36 lbs. (18 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is
• Minimur • Do not e Filbert (only for use in Washington & Oregon)	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight  mretreatment intervexceed 5 applications	s per year at th 8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days.	36 lbs. (18 lbs. metallic copper)	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.
• Minimur • Do not e Filbert  (only for use in Washington & Oregon)  Restriction • Minimur • Do not e	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 application	s per year at th  8 – 12 lbs.  (4-6 lbs.  metallic  copper)  al is 14 days.  s per year at th	36 lbs. (18 lbs. metallic copper)	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.
• Minimur • Do not e Filbert (only for use in Washington & Oregon)	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight  mretreatment intervexceed 5 applications	s per year at th  8 – 12 lbs.  (4-6 lbs.  metallic  copper)  al is 14 days.  s per year at th  4 – 6.4 lbs.	36 lbs. (18 lbs. metallic copper)  e maximum 95.8 lbs.	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until
• Minimur • Do not e Filbert  (only for use in Washington & Oregon)  Restriction • Minimur • Do not e	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 application	al is 14 days. s per year at th 8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days. s per year at th 4 – 6.4 lbs. (2-3.2 lbs.	e maximum 95.8 lbs. (48 lbs.)	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and
• Minimur • Do not e Filbert  (only for use in Washington & Oregon)  Restriction • Minimur • Do not e	m retreatment intervexceed 5 application Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 application	al is 14 days. s per year at th 8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days. s per year at th 4 – 6.4 lbs. (2-3.2 lbs. metallic	36 lbs. (18 lbs. metallic copper)  e maximum 95.8 lbs. (48 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until
• Minimur • Do not e Filbert  (only for use in Washington & Oregon)  Restriction • Minimur • Do not e	m retreatment intervexceed 5 applications Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 applications Anthracnose	al is 14 days. s per year at th 8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days. s per year at th 4 – 6.4 lbs. (2-3.2 lbs.	e maximum 95.8 lbs. (48 lbs.)	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and
• Minimur • Do not e Filbert (only for use in Washington & Oregon)  Restriction • Minimur • Do not e Mango	m retreatment intervexceed 5 applications Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 applications Anthracnose	al is 14 days. s per year at th  8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days. s per year at th  4 – 6.4 lbs. (2-3.2 lbs. metallic copper)	36 lbs. (18 lbs. metallic copper)  e maximum 95.8 lbs. (48 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and
• Minimur • Do not e Filbert (only for use in Washington & Oregon)  Restriction • Minimur • Do not e Mango	m retreatment intervexceed 5 applications Bacterial Blight  Eastern Filbert Blight  m retreatment intervexceed 3 applications Anthracnose	al is 14 days. s per year at th  8 – 12 lbs. (4-6 lbs. metallic copper)  al is 14 days. s per year at th  4 – 6.4 lbs. (2-3.2 lbs. metallic copper)	36 lbs. (18 lbs. metallic copper)  e maximum 95.8 lbs. (48 lbs. metallic	Apply as a post-harvest spray. In seasons of heavy rainfall, apply a second spray when three-fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 14 days.  Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 14-day intervals if needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil or sticking agent may be added. Minimum retreatment interval is 14 days.  Single application rate.  Apply at 7- to 30-day intervals after fruit set until harvest. Use the higher rates when rainfall is heavy and

Restrictions:   **National Properties   Copper   Section     **Minimum retreatment interval is 30 days.					1 age 14 01 22
Restrictions:  Minimum retreatment interval is 30 days.  Do not exceed 3 applications per year. Peach, Peac					disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Pear Particulus  Restriction:  Dormant up to pink bud - Minimum application interval is 7 days.  Pear Fire Blight   1 b.	Restriction	ns:	I.		development
Restrictions:  Pear    Bacterial Blast   S-16   bs.   As   bs.   Bacterial   Blast   Canker,   Bacterial Spot   Xanthomonas   Coryneum   Blight (Shot Hole), Leaf Curl   Blosom Brown   3-6   bs.   Blosom Brown   Blight (Shot Hole), Leaf Curl   Blosom Brown   Blight (Blosom Brown   Blight					
Pseudomonas   (4-8 lbs metallic Canker, copper)					
Restriction:  Blossom Blast (A-6 lbs. metallic copper)  Blossom Blast (Pseudomonas)  Blossom Blast (Pseudomonas)  Blossom Blast (Pseudomonas)  Blossom Blast (Pseudomonas)  Blossom Blast (A-6 lbs. metallic copper)  Blossom Blast (A-6 lbs. me		(Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	(4-8 lbs. metallic copper)	(18 lbs. metallic	late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added. Minimum retreatment interval is 7 days.
Copper     Copper     Copper		Rot, Coryneum Blight (Shot Hole), Leaf Curl	(1.5-6 lbs. metallic copper)		conditions favor disease. Do not apply at this rate past pink bud. After pink bud, the maximum use rate is 3 pounds of product (1.5 pounds of metallic copper) throughout bloom and growing season.
Restriction:  Dormant up to pink bud - Minimum application interval is 7 days.  Bloom and growing season - Minimum retreatment interval is 5 days.  Pear Fire Blight   1 lb.   32 lbs.   (0.5 lb.   (16 lbs. metallic copper)   (0.5 lb. metallic copper)		Bacteriai Spot			
Restriction:  Dormant up to pink bud - Minimum application interval is 7 days. Bloom and growing season - Minimum retreatment interval is 5 days.  Pear  Fire Blight  I Ib. (0.5 lb. (16 lbs. metallic copper)  Copper)  Blossom Blast (Pseudomonas)  Restrictions:  Minimum retreatment interval is 5 days.  Pecan  Kernel Rot, Shuck Rot (1-2 lbs. Shuck Rot (1-2 lbs. (1-2					<b>RESTRICTION:</b> Do not spray three weeks prior to harvest. <b>Spotting of leaves and defoliation may occur from use in cover sprays. Discontinue use if injury occurs.</b>
Dormant up to pink bud - Minimum application interval is 7 days.     Bloom and growing season - Minimum retreatment interval is 5 days.  Pear Fire Blight	Doctriction				*Maximum single bloom and growing season application is 3.0 pounds (1.5 lbs. metallic copper) per acre.
Pear Fire Blight			d - Minimum a	application in	nterval is 7 days.
Copper   C					
Blossom Blast (Pseudomonas) (4-6 lbs. (Pseudomonas) (4-6 lbs. metallic copper) (4-6 lbs. Minimum retreatment interval is 5 days. (4-2 lbs. (6-3 lbs. (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis) (4-6 lbs. Spanish Moss) (4-2 lbs. Spanish Moss) (4-2 lbs. (6-3 lbs. Spanish Moss) (4-2 lbs. (6	Pear	Fire Blight	(0.5 lb. metallic	(16 lbs. metallic	
(Pseudomonas)  (Pseudomonas  (Pseudomonas)  (Pseudomonas  (Pseudomonas)  (Pseudomonas  (Pseudomonas)  (Pseudomonas  (Pseudomonas  (Pseudomonas  (I-2.1 lbs.				copper)	sensitive varieties. Excessive dosages may cause fruit russet on any variety.
Minimum retreatment interval is 5 days.			(4-6 lbs. metallic		before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development. Only one application is allowed
Restrictions:   Restrictions:   Restrictions:   Pecan   Kernel Rot, Shuck Rot (1-2.1 lbs. Shuck Rot (1-2.1 lbs.	Restrictions	s:			
Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis) Ball Moss, Spanish Moss  Metallic copper)  Ball Moss Spanish Moss  Minimum retreatment interval is 14 days.  Most Boryosphaeria Panicle and Shoot Blight, Make initial application at bud swell and repeat on a 1-to 28-day schedule if needed. If disease conditions a severe, use the higher rates and shorter spray coverage at 2- to 4-week intervals needed, starting at kernel growth and continue unshucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.  Apply in 100 gallons of water in the spring when bar moss is actively growing, using 1.5 gallons of spray p foot of tree height. Make sure to wet ball moss tuft thoroughly. The addition of a non-ionic surfactant with improve control. A second application may be required after 12 months.  Make initial application at bud swell and repeat on a 1-to 28-day schedule if needed. If disease conditions a severe, use the higher rates and shorter spray intervals shorter spray intervals.  Make initial application at bud swell and repeat on a 1-to 28-day schedule if needed. If disease conditions a severe, use the higher rates and shorter spray intervals.	Minimum				
Apply in 100 gallons of water in the spring when base moss is actively growing, using 1.5 gallons of spray proposed foot of tree height. Make sure to wet ball moss tust thoroughly. The addition of a non-ionic surfactant with improve control. A second application may be required after 12 months.    Minimum retreatment interval is 14 days.	'ecan	Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella	(1-2.1 lbs. metallic	(6.3 lbs. metallic	complete spray coverage at 2- to 4-week intervals if needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray
<ul> <li>Minimum retreatment interval is 14 days.</li> <li>Do not exceed 3 applications per year at the maximum single application rate.</li> <li>Pistachio Botryosphaeria Panicle and Panicle and Shoot Blight, Shoot Blight, Metallic M</li></ul>		Ball Moss, Spanish Moss			Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1.5 gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.
<ul> <li>Do not exceed 3 applications per year at the maximum single application rate.</li> <li>Pistachio</li> <li>Botryosphaeria Panicle and Shoot Blight, Shoot Blight, Shoot Blight, Shoot Blight, Brack Blight, Shoot Blight, Sh</li></ul>			1 . 4 4 4		
Pistachio Botryosphaeria Panicle and Panicle and Shoot Blight, Shoot Bli				o movimus	single application rate
Panicle and Shoot Blight, metallic metallic to 28-day schedule if needed. If disease conditions a severe, use the higher rates and shorter spray intervals		Botryosphaeria			
Rotritic Right   conner)	. Istaciii0	Panicle and Shoot Blight,	(1.5-2.1 lbs. metallic	(8.4 lbs. metallic	to 28-day schedule if needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Bottytis Bright,   Copper)		Botrytis Blight,	copper)	copper)	

	n retreatment interv			
Quince	Fire Blight	1 lb. (0.5 lbs. metallic copper)	31.9 lbs. (16 lbs. metallic copper)	Apply at 5 day intervals if needed throughout the bloom period. Apply in adequate water for thorough coverage.
Restriction:  • Minimun	n retreatment interv			
Walnut	Walnut Blight	5 – 8 lbs. (2.5-4 lbs. metallic copper)	63.9 lbs. (32 lbs. metallic copper)	Apply first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage on a 7 day interval if needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control.
				<b>IMPORTANT:</b> Adequate control may not be obtained when copper tolerant species of Xanthomonas bacteria are present.
• Minimun	: n retreatment interv	ral is 7 days.		

#### VEGETABLES

Bean, Beet, Beet Greens, Broccoli, Brussels Sprout, Cabbage, Chinese Cabbage, Cantaloupe, Carrot, Cauliflower, Celeriac, Celery, Cucumber, Eggplant, Greens (Collard, Mustard and Turnip), Honeydew, Kale, Kohlrabi, Lettuce, Muskmelon, Okra, Onion/Garlic/Leek, Pea, Pepper, Pumpkin, Spinach, Squash, Tomato, Watercress and Watermelon

Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions
Green)	Brown Spot, Common Blight, Halo Blight	1 – 1.5 lbs. (0.5-0.75 lbs. metallic copper)	(4.5 lbs. metallic	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14-day schedule if needed depending on environmental conditions. Use the higher rates for more severe disease.

# **Restrictions:**

- Minimum retreatment interval is 7 days.
- Do not exceed 6 applications per acre per year at the maximum single application rate.

Beet (Table	Cercospora Leaf	2 - 2.5 lbs.	15 lbs.	Begin applications when conditions first favor disease
Beet, Beet	Spot	(1-1.25 lbs.	(7.5 lbs.	development and repeat at 10- to 14-day intervals if
Greens)		metallic	metallic	needed. Use the higher rates when conditions favor
		copper)	copper)	disease.

# **Restrictions:**

- Minimum retreatment interval is 10 days.
- Do not exceed 6 applications per year at the maximum single application rate.

Carrot	Alternaria Leaf	2 lbs.	10 lbs.	Begin applications when disease first threatens and
	Spot,	(1 lbs.	(5 lbs.	repeat at 7- to 14-day intervals if needed depending on
	Cercospora Leaf	metallic	metallic	disease severity.
	Spot	copper)	copper)	
D44'4'				

# **Restrictions:**

- Minimum retreatment interval is 7 days.
- Do not exceed 5 applications per year.

- Do not c	neced 5 applications	oci year.		
Celery,	Bacterial Blight,	2 lbs.	10 lbs.	Begin applications as soon as plants are first
Celeriac	Cercospora	(1 lbs.	(5 lbs.	established in the field, repeating at 7-day intervals if
	Early Blight,	metallic	metallic	needed depending on disease severity and
	Septoria Late	copper)	copper)	environmental conditions.
	Blight	'		

#### **Restrictions:**

- Minimum retreatment interval is 7 days.
- Do not exceed 5 applications per year.

	Crucifers	Black Leaf Spot	1 lbs.	5 lbs.	Begin application after transp	plants are set in the field,
--	-----------	-----------------	--------	--------	--------------------------------	------------------------------

(Broccoli; (Alternari Brussels Black Rot			
Sprout; (Xanthom Cabbage; Downy M	metallic copper)	(2.5 lbs. metallic copper)	or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7- to 10-day intervals if needed.
Cabbage, Chinese; Cauliflower;	mucw		<b>IMPORTANT:</b> Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Greens, Collard; Greens, Mustard;			
Greens, Turnip; Kale; Kohlrabi)			
Restrictions:  • Minimum retreatment			
● Do not exceed 5 applied Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon, Casaba, Chayote, Citron melon, Gourd, Applied Applied Spot, Angle Leaf Spot Anthracad Downy M Gummy Squash, Blight, Powatermelon, Casaba, Watermel Bacterial Blotch Gourd, (suppressi	t Leaf gular (0.75-1 lbs. metallic copper) Gildew, Stem owdery on Fruit	10 lbs. (5 lbs. metallic copper)	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5- to 7-day intervals if needed. Use the higher rates when conditions favor disease.  IMPORTANT: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Waxgourd) Restrictions:			
<ul><li>Minimum retreatment</li><li>Do not exceed 5 applie</li></ul>		e maximum si	ngle application rate
Eggplant Alternaria Blight, Anthracno	1.5 lbs. (0.75 lbs. pse, metallic	15 lbs. (7.5 lbs. metallic	Begin applications prior to development of disease symptoms. Repeat sprays at 7- to 10-day intervals if needed depending on disease severity.
Restrictions:  • Minimum retreatment  • Do not exceed 10 appl	interval is 7 days.	copper)	
Lettuce Downy M including Endive, Escarole	fildew 1 – 2 lbs. (0.5-1 lbs. metallic copper)	16 lbs. (8 lbs. metallic copper)	Begin applications when disease symptoms first appear or when conditions favor disease development. Repeat at 5- to 10-day intervals if needed depending on disease severity.
			<b>IMPORTANT:</b> Determine if there is varietal sensitivity prior to use. Injury may occur to sensitive lettuce varieties and under adverse weather conditions. Discontinue use if injury occurs.
Restrictions:  • Minimum retreatment			
Okra Anthracno Bacterial Spot, Leaf	ose, $1-2$ lbs. Leaf $(0.5-1 \text{ lbs}.$	10 lbs. (5 lbs. metallic	Begin treatment when disease first threatens and repeat every 5 to 10 days if needed depending on disease severity. Use the higher rates and shorter spray
Spots, Poo Powdery		copper)	intervals when conditions favor disease.
Mildew			
Restrictions:			
Restrictions: • Minimum retreatment		e maximum si	ngle application rate.
Restrictions:	cations per year at th	12 lbs. (6 <i>lbs</i> .	Begin when plants are 4 to 6 inches high and repeat at 7- to 10-day intervals if needed depending on disease severity. Can cause phytotoxicity to leaves.

				<u> </u>
	Purple Blotch	(1 lbs.		
		metallic		
		copper)		
<b>Restrictions:</b>				
	etreatment interval			
				ngle application rate.
Pea	Powdery	1.5 lbs.	7.5 lbs.	Begin applications when disease symptoms first
	Mildew	(0.75 lbs.	(3.8 lbs.	appear and repeat at weekly intervals if needed.
		metallic	metallic	
T		copper)	copper)	
<b>Restrictions:</b>				
	etreatment interval			
	eed 5 applications 1		T	
Pepper (bell,	Anthracnose,	1.5 lbs.	22.5lbs.	Begin applications when conditions first favor disease
chili)	Bacterial Spot,	(0.75 lbs.	(11.3 lbs.	development and repeat at 3- to 10-day intervals if
	Cercospora Leaf	metallic	metallic	needed depending on disease severity.
D 4 1 41	Spot	copper)	copper)	
<b>Restrictions:</b>		1		
	etreatment interval			
	ed 15 applications		7.5.11	Design and the discussion of the second seco
Spinach	Anthracnose,	1.5 lbs.	7.5 lbs.	Begin application when disease first appears or when
	Blue Mold,	(0.75 lbs.	(3.8 lbs.	conditions favor disease development. Repeat at 7- to
	Cercospora Leaf	metallic	metallic	10-day intervals if needed.
	Spot, Downy Mildew*, White	copper)	copper)	IMPORTANT. Fleeling may occur on spinesh
	Rust disease			<b>IMPORTANT:</b> Flecking may occur on spinach leaves.
<b>Restrictions:</b>	Rust disease			icaves.
	etreatment interval	ic 7 days		
	eed 5 applications 1			
	ered for use in Cali			
Tomato	Anthracnose,	1 lbs.	34.7 lbs.	Begin applications when disease first threatens and
(processing)	Bacterial Speck,	(0.5 lbs.	(17.4 lbs.	repeat at 3- to 10-day intervals if needed depending on
(processing)	Bacterial Spot,	metallic	metallic	disease severity. Use the higher rates when conditions
	Early Blight,	copper)		favor disease.
Tomata	Gray Leaf Mold,	2-3 lbs.	copper) 16 lbs.	- lavor disease.
Tomato (fresh market)	Grey Leaf Spot,	2 - 3 10s. (1-1.5 lbs.	(8 lbs.	For fresh market tomatoes, use the higher rate when
(Hesii iliaiket)	Late Blight,	metallic	metallic	conditions favor disease.
	Septoria Leaf	copper)	copper)	conditions ravor disease.
	Spot	copper)	copper)	
<b>Restriction:</b>	• •		•	
• Minimum r	etreatment interval	is 3 days.		
Watercress	Cercospora Leaf	1 lbs.	4 lbs.	For applications made to watercress, production fields
	Spot	(0.5 lbs.	(2 lbs.	must be drained of water at least 24 hours prior to each
		metallic	metallic	application and water must not be reapplied to the field
		copper)	copper)	for a minimum of 24 hours following each application.
				Copper must not to be applied to watercress during the
				aquatic production phase. Begin applications when
				plants are first established in the field, repeating at 7-
				to 14-day intervals if needed depending on disease
				severity. Apply using ground spray equipment at no
				less than 50 gallons of spray solution per acre. Do not
D 4 1 11	1			exceed four applications per crop.
<b>Restrictions:</b>				
	etreatment interval			
. D	eed 4 applications 1	or woor		

	VINES Grape, Hops and Kiwi								
Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions					
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	2 – 6 lbs. (1-3 lbs. metallic copper)	36 lbs. (18 lbs. metallic copper)	Begin applications at late dormant with subsequent applications throughout the season depending on disease severity. Repeat at 3-day intervals if needed. Use the higher rates when conditions favor disease. Minimum retreatment interval is 3 days.  IMPORTANT: Foliage injury may occur on					

				copper sensitive varieties such as Concord, Delaware, Niagara and Rosette. Either test for sensitivity or add 1 to 3 pounds of hydrated lime per pound of SPU-06050-F.
Restriction	ns:			
	ım retreatment interv			
• Do not e	exceed 6 application	s per year at the ma	ximum single app	plication rate.
Hops	Downy Mildew	1 lbs.		Make crown treatment after pruning, but before
		(0.5 lbs. metallic		training. After training, apply at 10-day
		copper)	copper)	intervals if needed.
Restriction	ns:			
<ul> <li>Minimu</li> </ul>	ım retreatment interv	al is 10 days.		
	exceed 5 applications			
• Do not	use within 2 weeks o	f harvest		
Kiwi	Erwinia	4.2 lbs.	12.6 lbs.	Apply in 200 gallons of water per acre. Make
	herbicola,	(2.1 lbs. metallic	(6.3 lbs. metallic	applications on a monthly basis. Do not exceed
	Pseudomonas	copper)	copper)	three applications per year.
	fluorescens,			
	Pseudomonas			
	syringae			
Restriction				
<ul> <li>Minimu</li> </ul>	ım retreatment interv	al is 30 days.		
• Do not	exceed 3 applications	s per year.		

• Do not exceed 3 applications per year.					
Atomova	Canambola Chiv		MISCELLANI Cugua Litobi		
Atemoya, Carambola, Chives, Dill, Ginseng, Guava, Litchi, Live Oak*, Macadamia, Mamey Sapote, Papaya, Parsley, Passion Fruit, Sugar Apple, and Sycamore					
Crop	Disease	Application Rate/Acre	Maximum Annual Rate/Acre	Use Instructions	
Atemoya	Anthracnose	4 – 6.3 lbs. (2-3.15 lbs. metallic copper)	25.2 lbs. (12.6 lbs. metallic copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.	
	: retreatment interva ceed 4 applications		maximum sino	ele application rate	
Carambola	Anthracnose	4.2 lbs. (2.1 lbs. metallic copper)	21 lbs. (10.5 lbs. metallic copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.	
	retreatment interval ceed 5 applications	l is 7 days.			
Chives	Downy Mildew	1 lbs. (0.5 lbs. metallic copper)	5 lbs. (2.5 lbs. metallic copper)	Begin applications when plants are established in the field. Repeat applications every 7 to 10 days if needed depending on disease conditions.	
	retreatment intervaceed 5 applications	l is 7 days.	соррегу		
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	1.5 lbs. (0.75 lbs. metallic copper)	7.5 lbs. (3.8 lbs. metallic copper)	Begin applications when plants are first established in the field and repeat at 7- to 10-day intervals if needed depending upon disease severity and environmental conditions.	
	retreatment interva ceed 5 applications				
Ginseng	Alternaria Leaf Blight, Stem Blight	2.1 lbs. (1.05 lbs. metallic copper)	10.5 lbs. (5.25 lbs. metallic copper)	Use as a tank mix with the appropriate amount of a product containing the active ingredient iprodione in 100 gallons of water. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates are to be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Begin SPU-06050-F "iprodione" applications as soon as plants have emerged in spring. Applications can be repeated every 7 days if needed until plants	

				become dormant in fall. Apply fungicides at least 8 hours before rain. Use of a spreader-sticker or sticker is advised.
				<b>IMPORTANT:</b> Alternaria Leaf and Stem Blight is most severe in humid conditions such as those found in the dense canopies of 2- to 4-year-old Ginseng. It is very important that the stems be thoroughly covered with fungicide; therefore, use a spray apparatus which distributes the fungicide throughout the canopy.
	retreatment interva	•		
Guava	Anthracnose, Red Algae	2.4 lbs. (1.2 lbs. metallic copper)	9.6 lbs. (4.8 lbs. metallic copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Restrictions: • Minimum	retreatment interva		соррегу	
• Do not exc	ceed 4 applications	per year.		
Litchi	Anthracnose	2.4 lbs. (1.2 lbs. metallic copper)	9.6 lbs. (4.8 lbs. metallic copper)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
Restrictions				
	retreatment interva			
● Do not exc Live Oak*	Ball Moss,	per year. 4 lbs.	4 lbs.	Mix 4 lbs. of product per 100 gallons of water. Apply
Live Oak	Spanish Moss	(2 lbs. metallic copper)		in the spring when ball moss is actively growing, using 1.5 gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.
Restrictions	<u> </u>			T I MONUMAN
<ul><li>Make only</li><li>Do not spr Oaks. This with metal</li></ul>	s product may be re I surfaces.	ear. lawn furniture eactive on met	, etc. This produ	ct may be injurious to ornamentals grown under Live surfaces such as galvanized roofing. Avoid contact
Macadamia	ered for use in Califor	nia.		
Macadallila	Anthroonogo		10 0 1hc	Initiate enrove at first sign of flowering and repeat on
	Anthracnose	4.7 lbs. (2.35 lbs. metallic copper)	18.8 lbs. (9.4 lbs. metallic copper)	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	4.7 lbs. (2.35 lbs. metallic	(9.4 lbs.	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) : retreatment interva	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)	(9.4 lbs. metallic copper)	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.
<ul><li>Minimum</li><li>Do not exc</li></ul>	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)	(9.4 lbs. metallic copper)	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.
<ul><li>Minimum</li><li>Do not exc</li></ul>	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) : retreatment interva	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)	(9.4 lbs. metallic copper)  maximum singl	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.  de application rate.  Apply when conditions favor disease development. Repeat on 14- to 30-day schedule if needed as disease severity and environmental conditions
Minimum     Do not exc Mamey Sapot  Restrictions:	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) : retreatment interva ceed 4 applications te Algal Leaf Spot, Anthracnose	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)  l is 7 days. per year at the 3 – 4.2 lbs. (1.5-2.1 lbs. metallic copper)	maximum singl 16.8 lbs. (8.4 lbs. metallic	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.  Le application rate.  Apply when conditions favor disease development. Repeat on 14- to 30-day schedule if needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor
• Minimum • Do not exc Mamey Sapot  Restrictions: • Minimum	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) : retreatment interva ceed 4 applications te Algal Leaf Spot, Anthracnose	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)  l is 7 days. per year at the 3 – 4.2 lbs. (1.5-2.1 lbs. metallic copper)	maximum singl 16.8 lbs. (8.4 lbs. metallic copper)	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.  Le application rate.  Apply when conditions favor disease development. Repeat on 14- to 30-day schedule if needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.
• Minimum • Do not exc Mamey Sapot  Restrictions: • Minimum • Do not exc	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) : retreatment interva ceed 4 applications te Algal Leaf Spot, Anthracnose	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)  l is 7 days. per year at the 3 – 4.2 lbs. (1.5-2.1 lbs. metallic copper)	maximum singl 16.8 lbs. (8.4 lbs. metallic copper)	a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.  Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.  Le application rate.  Apply when conditions favor disease development. Repeat on 14- to 30-day schedule if needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.  Le application rate.
• Minimum • Do not exc Mamey Sapot  Restrictions • Minimum	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)  retreatment interva ceed 4 applications Anthracnose  Anthracnose	4.7 lbs. (2.35 lbs. metallic copper) 3 – 4 lbs. (1.5-2 lbs. metallic copper)  l is 7 days. per year at the 3 – 4.2 lbs. (1.5-2.1 lbs. metallic copper)	maximum singl 16.8 lbs. (8.4 lbs. metallic copper)	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.  Le application rate.  Apply when conditions favor disease development. Repeat on 14- to 30-day schedule if needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.

Minimum r	etreatment interval	is 7 days.		
	eed 8 applications		maximum sing	le application rate.
Parsley	Bacterial Blight	2 lbs.	4 lbs.	Begin applications when plants are first established
	(Pseudomonas	(1 lbs.	(2 lbs. metallic	in the field and repeat again at 10 days if needed
	(sp.)	metallic	copper)	depending on disease severity and environmental
	1 /	copper)	11 /	conditions.
D 4 1 41				
<b>Restrictions:</b>		. 10.1		
	etreatment interval			
	eed 2 applications		10.011	h ( 1
Passion Fruit	Anthracnose	4.7 lbs.	18.8 lbs.	Make initial application just before flowering and
		(2.35 lbs.	(9.4 lbs.	repeat on a weekly schedule until just before harvest.
		metallic	metallic	Apply in sufficient water for thorough coverage.
Restrictions:		copper)	copper)	
		. 7.1		
	etreatment interval			
	eed 4 applications 1			h
Sugar Apple	Anthracnose	6.3 lbs.	25.2 lbs.	Make initial application just before flowering and
(Annona)		(3.15 lbs.	(12.6 lbs.	repeat on a weekly schedule until just before harvest.
		metallic	metallic	Apply in sufficient water for thorough coverage.
75		copper)	copper)	
<b>Restrictions:</b>				
	etreatment interval			
	eed 4 applications		T	1
Sycamore	Anthracnose	2 - 4  lbs.	40 lbs.	Apply as a full cover spray in 100 gallons of water
		(1-2 lbs.	(20 lbs.	or sufficient volume for thorough coverage. Make
		metallic	metallic	first application at bud crack and second application
		copper)	copper)	7 to 10 days later at 10% leaf expansion. Use the
TD ( ) ()				higher rates when conditions favor disease.
<b>Restriction:</b>				
Minimum r	etreatment interval	is 7 days.		

#### **CONIFERS**

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

For control of foliar diseases, apply SPU-06050-F as a thorough cover spray at rates ranging from 1.5 to 4 pounds (0.75-2 lbs. metallic copper) per acre. Begin applications in the spring at the initiation of new growth and repeat at 7- to 30-day intervals if needed. Use the higher rates when disease pressure is severe or when environmental conditions favor disease development. Maximum annual rate per acre is 40 pounds of product (20 pounds metallic copper).

SPU-06050-F is registered for use on the listed conifers for control of the following diseases.

of C 00050 I is registered for use on the fisted conficts for control of the following discuses:					
Crop	Scientific Name	Disease			
Douglas Fir	Pseudotsuga menziesii	Rhabdocline Needlecast			
Fir	Abies spp.	Needlecasts			
Juniper	Juniperus spp.	Anthracnose, Phomopsis Twig Dieback			
Leyland Cypress	X Cupressocyparis leylandii	Cercospora Needle Blight			
Pine	Pinus spp.	Needlecasts			
Spruce	Picea spp.	Needlecasts			

**Lichens:** To control lichens on any of the conifers above, apply 3 to 4 pounds of SPU-06050-F per acre as a dormant application before new growth emerges in the spring. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

**RESTRICTION:** Do not buffer or combine with emulsifiable concentrate insecticides. Minimum retreatment interval is 7 days.

#### GREENHOUSE AND SHADEHOUSE CROPS

**Notice to User:** SPU-06050-F may be used in greenhouses and shadehouses to control diseases on crops which appear on this label, and specific instructions have been developed for the crops listed. The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor seller has determined whether or not SPU-06050-F can be used safely on all greenhouse and shadehouse grown crops. The user must determine if SPU-06050-F can be used safely prior to commercial use. In a small area, apply the specified rates to the plants in question, e.g., foliage, fruit, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use. Consequently, injuries arising from the use of SPU-06050-F on these types of greenhouse and shadehouse crops are the responsibility of the user.

Apply SPU-06050-F according to specific rates given for those crops in pounds per acre. **Two level tablespoons of SPU-06050-F per 1,000 square feet is equivalent to 1.56 pounds of product per acre.** Apply SPU-06050-F in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat if needed;

use shorter spray intervals during periods when severe disease conditions persist. For maximum annual rates per acre, refer to the crop specific directions.

**IMPORTANT:** Phytotoxicity may occur on young tender flush when SPU-06050-F is applied to citrus seedlings grown in greenhouses or shadehouses.

Crop	Disease	Rate per 1,000 Sq. Ft.	Use Instructions
Citrus (Non-Bearing	Brown Rot, Citrus Canker,	8 TBSP.	Begin applications when disease first threatens.
Nursery)	Greasy Spot, Melanose,	(3.12 lbs.	Repeat at 7- to 30-day intervals if needed
• .	Pink Pitting, Scab	metallic copper	depending on disease severity.
		per acre)	
Cucumber	Angular Leaf Spot, Downy	2.5 TBSP.	Apply at 5- to 7-day intervals when plants
	Mildew	(1.05 lbs.	begin to vine.
		metallic copper	
		per acre)	
Eggplant	Alternaria Blight,	2 TBSP.	Begin applications prior to development of
	Anthracnose, Phomopsis	(0.78 lbs.	disease symptoms. Repeat sprays at 7- to 10-
		metallic copper	day intervals if needed depending on disease
		per acre)	severity.
Pepper	Bacterial Spot	2 TBSP.	Begin applications when conditions first favor
		(0.78 lbs.	disease development and repeat at 3- to 10-day
		metallic copper	intervals if needed depending on disease
		per acre)	severity.
Tomato (fresh	Anthracnose, Bacterial	1.25 TBSP.	Begin applications when disease first threatens
market)	Speck, Bacterial Spot,	(0.53 lbs.	and repeat at 3- to 10-day intervals if needed
	Early Blight, Gray Leaf	metallic copper	depending on disease severity.
	Mold, Late Blight, Septoria	per acre)	•
	Leaf Spot	-	

#### **ORNAMENTALS**

Use SPU-06050-F for control of bacterial and fungal diseases of foliage, flowers and stems on ornamentals in greenhouses, shade houses, outdoor nurseries and outdoor landscape plantings.

For ornamental crops in dormancy, apply as a thorough cover spray at rates ranging from 1.0 to 4.0 pounds (0.5-2 lbs. metallic copper) per acre of SPU-06050-F. When new growth is present, apply as a thorough cover spray at rates ranging from 1.0 to 2.0 pounds (0.5-1 lbs. metallic copper) per acre of SPU-06050-F. **Two level tablespoons of SPU-06050-F per 1,000 square feet is equivalent to 1.56 pounds of product per acre.** Begin application at first sign of disease and repeat at 7- to 14-day intervals if needed; use the higher rates and shorter spray intervals during periods of frequent rains or when severe disease conditions persist. Maximum annual rate per acre is 40 pounds (20 lbs. metallic copper).

SPU-06050-F may be used alone or in combination with other fungicides registered for use on ornamentals as a maintenance spray. Use in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

**Notice to User:** Plant sensitivities to SPU-06050-F have been found to be acceptable for the specific genera and species listed on this label under the conditions tested. However, phytotoxicity may occur. Due to the large number of species and varieties of ornamental and nursery plants, and the wide range of growing conditions, it is impossible to test every one for sensitivity to SPU-06050-F. Neither the manufacturer nor seller has determined whether or not SPU-06050-F can be safely used on ornamental or nursery plants not listed on this label. The user must determine if SPU-06050-F can be used safely prior to commercial use. In a small area, apply the specified rates to the plants in question, i.e., bedding plants, foliage, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

#### **Restrictions:**

- Minimum retreatment interval is 7 days.
- Maximum annual rate for Easter Lilies is 75 lbs. metallic copper. If used at this rate for Easter Lilies, do not add any additional copper pesticides to this land for 36 months.
- Maximum annual rate for Ornamentals (except Easter Lilies) is 20 lbs. metallic copper.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.

Crop	Scientific Name	Disease	
Aglaonema*	Aglaonema spp.	Bacterial Leaf Spot	
Althea (Rose of Sharon)	Hibiscus syriacus	Bacterial Leaf Spot	
Andromeda, Japanese*	Pieris japonica	Leaf Spots, Twig Blight	
Aralia	Dizygotheca elegantissima	Alternaria, Cercospora Leaf Spot, Xanthomonas Leaf Spot	
Arborvitae	Thuja spp.	Alternaria Twig Blight, Cercospora Leaf Blight	
Aster*	Aster spp.	Downy Mildew, Leaf Spots	
Azalea <sup>1</sup>	Rhododendron spp.	Botrytis Blight, Cercospora Leaf Spot, Phytophthora	

		D: 1 1 D 1 M:11
D1- *	F	Dieback, Powdery Mildew
Beech*	Fagus spp.	Leaf Spots  Pactorial Leaf Spot (Empirica spp. Pactorianae spp.
Begonia	Begonia semperflorens	Bacterial Leaf Spot (Erwinia spp., Pseudomonas spp., Xanthomonas spp.)
Bougainvillea	Bougainvillea spectabilis	Anthracnose, Bacterial Leaf Spot
Boxwood*	Buxus spp.	Leaf Spots
Camellia	Camellia japonica, C. sasanqua	Anthracnose, Bacterial Leaf Spot
Camphor Tree	Cinnamomum camphora	Pseudomonas Leaf Spot
Canna	Canna spp.	Pseudomonas Leaf Spot
Carnation <sup>1</sup>	Dianthus spp.	Alternaria Blight, Botrytis Blight, Pseudomonas Leaf Spot
Cedar*	Cedrus spp.	Tip Blight
Cherry, Nanking*	Prunus tomentosa	Bacterial Leaf Spot
Chinese Tallow Tree	Sapium sebiferum	Bacterial Leaf Spot ( <i>Pseudomonas</i> spp., <i>Xanthomonas</i> spp.)
Chrysanthemum <sup>1</sup>	Chrysanthemum morifolium	Botrytis Blight, Pseudomonas Leaf Spot, Septoria Leaf Spot
Cotoneaster	Cotoneaster spp.	Botrytis Blight
Crabapple*	Malus spp.	Fire Blight
Cypress*	Cupressus spp.	Twig Blight
Dahlia	Dahlia pinnata	Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora Leaf Spot
Delphinium*	Delphinium spp.	Leaf Spots
Dianthus	Dianthus spp.	Bacterial Soft Rot, Bacterial Spot
Dogwood, Flowering	Cornus florida	Anthracnose
Dogwood, Kousa*	Cornus kousa	Fungal Leaf Spots
Douglas Fir	Pseudotsuga menziesii	Rhabdocline Needlecast
Dracaena*	Dracaena marginata	Bacterial Leaf Spot
Dumb Cane*	Dieffenbachia spp.	Bacterial Leaf Spot
Dusty Miller	Senecio cineraria	Bacterial Leaf Spot (Pseudomonas cichorii)
Echinacea	Echinacea spp.	Bacterial Leaf Spot ( <i>Pseudomonas cichorii</i> )
Elm, Chinese	Ulmus parvifolia	Xanthomonas Leaf Spot
Euonymus	Euonymus spp.	Anthracnose, Botrytis Blight
Fern Boston*	Nephrolepis exaltata	Bacterial Leaf Spot
Fern, Holly	Cyrtomium falcatum	Pseudomonas Leaf Spot
Fig, Weeping*	Ficus benjamina	Bacterial Leaf Spot
Filbert (Ornamental)*	Corylus spp.	Filbert Blight
Fir*	Abies spp.	Needlecasts
	**	Alternaria Leaf Spot, Botrytis Bud Rot, Cercospora Leaf
Gardenia	Gardenia jasminoides	Spot Alternaria Leaf Spot, Botrytis Gray Mold, Cercospora
Geranium	Pelargonium spp.	Leaf Spot
Gladiola	Gladiolus spp.	Alternaria Leaf Spot, Anthracnose, Bacterial Leaf Blight, Botrytis Gray Mold
Golden Rain Tree	Koelreuteria paniculata	Bacterial Leaf Spot
Grape Ivy*	Cissus spp.	Bacterial Leaf Spot
Hawthorn*	Crataegus spp.	Fire Blight
Hibiscus <sup>2</sup>	Hibiscus spp.	Bacterial Leaf Spot
Holly*	Ilex spp.	Bacterial Blight, Leaf Spots
Honeylocust*	Gleditsia triacanthos	Bacterial Leaf Spot
Honeysuckle, Tatarian*	Lonicera tatarica	Bacterial Leaf Spot
Impatiens	Impatiens sallerana	Bacterial Leaf Spot
Indian Hawthorn <sup>3</sup>	Raphiolepis indica	Anthracnose, Entomosporium Leaf Spot
Iris <sup>4</sup> *	Iris spp.	Bacterial Leaf Spot
Ivy (English, Algerian) <sup>1</sup>	Hedera helix, H. canariensis	Xanthomonas Leaf Spot
Ixora	Ixora coccinea	Xanthomonas Leaf Spot
Juniper	Juniperus spp.	Anthracnose, Phomopsis Twig Dieback*
Lantana	Lantana camera	Bacterial Leaf Spot
Leyland Cypress*	X Cupressocyparis leylandii	Cercospora Needle Blight
Lilac	Syringa spp.	Cercospora Leaf Spot, Pseudomonas Blight*
Lily, Easter <sup>5</sup>	Lilium longiflorum	Botrytis Blight
Linden*	Tilia spp.	Anthracnose, Leaf Blight
Loblolly Bay	Gordonia lasianthus	Anthracnose
Loquat Magnalia (Southern)	Eriobotrya japonica	Colletotrichum spp., Entomosporium maculata
Magnolia (Southern)	Magnolia grandiflora	Algal Leaf Spot, Anthracnose, Bacterial Leaf Spot
Magnolia (Sweet Bay)	Magnolia virginiana	Anthracnose

Magnolia (Oriental)	Magnolia soulangiana	Bacterial Leaf Spot
Mandevilla	Mandevilla spp.	Anthracnose
Maple*	Acer spp.	Pseudomonas Leaf Blight
	Acer spp.	Alternaria Leaf Spot, Botrytis Leaf Rot, Cercospora
Marigold	Tagetes spp.	Leaf Spot, Flower Rot
Mountain-Ash*	Sorbus spp.	Fire Blight
Mulberry, Contorted*	Morus bombycis	Bacterial Leaf Spot
Mulberry, Weeping	Morus alba	Bacterial Leaf Spot
Narcissus*	Narcissus spp.	Leaf Blight
Nephthytis*	Syngonium podophyllum	Bacterial Leaf Spot
Oak*	Quercus spp.	Leaf Spots
Oak, Laurel	Quercus spp. Quercus laurifolia	Algal Leaf Spot (Cephaleuros virescens)
Oleander	Nerium oleander	Bacterial Leaf Spot, Fungal Leaf Spot
Oregon Grapeholly*	Mahonia aquifolium	Leaf Spots
Pachysandra	Pachysandra procumbens	Volutella Leaf Blight
Palm, Date	Phoenix canariensis	Pestalotia Leaf Spot
Palm, European Fan	Chamaerops humilis	Pestalotia Leaf Spot
Palm, Parlor*	Chamaedorea elegans	Bacterial Leaf Spot
Palm, Queen	Arecastrum romanzoffianum	Exosporium Leaf Spot, Phytophthora Bud Rot
Palm, Washingtonia	Washingtonia robusta	Pestalotia Leaf Spot
Peach (Flowering) <sup>6</sup> *	Prunus spp.	Bacterial Blast, Brown Rot, Fire Blight
Pear (Flowering)	Pyrus calleryana	Fire Blight, Leaf Spots
		Bacterial Leaf Spot ( <i>Pseudomonas</i> spp.*, <i>Xanthomonas</i>
Pentas (Egyptian Star)		spp.)
Peony	Paeonia spp.	Botrytis Blight
Periwinkle		Phomopsis Stem Blight
Philodendron	Philodendron selloum	Bacterial Leaf Spot
Phlox	Phlox spp.	Alternaria Leaf Spot
Photinia (Red Tip)	Photinia x fraseri, P. glabra	Anthracnose, Entomosporium Leaf Spot
Pine*	Pinus spp.	Needlecasts
Pistachio	Pistacia chinensis	Anthracnose
Plantain Lily <sup>4</sup>	Hosta spp.	Bacterial Leaf Spot
Plum (Flowering) <sup>6</sup> *	Prunus spp.	Bacterial Blast, Brown Rot, Fire Blight
Pothos*	Scindapsus spp.	Bacterial Leaf Spot
Powder Puff Plant	Calliandra spp.	Bacterial Leaf Spot
Pyracantha	Pyracantha spp.	Fire Blight, Scab
Rhododendron	Rhododendron spp.	Alternaria Flower Spot
Rose <sup>1</sup>	Rosa spp.	Black Spot, Powdery Mildew
Snapdragon	Antirrhinum majus	Anthracnose, Dieback, Downy Mildew
Spathe Flower*	Spathiphyllum spp.	Bacterial Leaf Spot
Spirea*	Spiraea spp.	Fire Blight
Spruce*	Picea spp.	Needlecasts
Sycamore	Platanus spp.	Anthracnose, Leaf Spots*
Tulip	Tulipa spp.	Anthracnose, Botrytis Blight
Umbrella Tree*	Schefflera spp.	Bacterial Leaf Spot
Verbena Tree	Verbena spp.	Xanthomonas Leaf Spot
	Viburnum odoratissimum, V.	•
Viburnum	plicatum, V. suspensum	Anthracnose
Viola (Pansy, Violet)	Viola spp.	Downy Mildew
Willow	Salix spp.	Anthracnose
Yew*	Taxus spp.	Needle Blight
Yucca (Adam's Needle)	Yucca spp.	Cercospora Leaf Spot, Septoria Leaf Spot
Zinnia*		Leaf Spots
	Zinnia spp.	in the second se

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

<sup>2</sup>Hibiscus - Do not apply to plants in flower. <sup>3</sup>For Indian Hawthorn use 2 to 3 pounds per acre. <sup>4</sup>Some cultivars may be sensitive to SPU-06050-F.

Apply SPU-06050-F at 3.0 – 5.0 pounds per acre (1.5-2.5 pounds metallic copper). Maximum annual rate per acre is 150 pounds (75 lbs. metallic copper). Do not apply any additional copper pesticide to this land for 36 months. Minimum retreatment interval is 7 days.

<sup>6</sup>Apply dormant through bloom only.

IMPORTANT: Phytotoxicity may depend on varietal differences. If unfamiliar with the use of SPU-06050-F, apply the specified rate to a few plants and observe after 7 to 10 days for symptoms of phytotoxicity.

Control of Ball Moss\*, Spanish Moss\* and Lichens\* on Ornamental and Shade Trees: Apply SPU-06050-F in early spring when the trees are dormant. Apply 3 to 4 pounds of SPU-06050-F in 100 gallons of water, using 1.5 gallons of spray per foot of tree height. Be sure to thoroughly wet ball moss tufts, Spanish moss or lichens. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

**IMPORTANT:** SPU-06050-F may be injurious to some ornamental plants growing beneath the trees.

**Cold Storage Protection for Dormant Rootstock\*:** To protect bare-root nursery trees from Phytophthora Crown Rot and Botrytis, use 1.5 to 2 pounds of SPU-06050-F per 100 gallons of water. Apply as a dip or spray to the roots and lower stems of dormant rootstock prior to placing in cold storage. Do not apply to rootstock less than 2 years old. \*Not registered for use in California.

#### TURF

For control of algae in turfgrasses on sod farms, golf courses, cemeteries, and industrial turf areas. Apply 3 to 6 pounds (1.5-3 lbs. metallic copper) per acre (1.1 to 2.2 oz. per 1,000 square feet). Apply in sufficient water to provide adequate coverage. SPU-06050-F may be used alone or in combination with other registered turf fungicides as a maintenance spray. Observe all precautions and limitations on the label of each product used in tank mixes.

#### **Restrictions:**

- Minimum retreatment interval is 10 days.
- Maximum single application rate is 6 pounds per acre (3 pounds metallic copper equivalent).
- Maximum annual application rate is 42 pounds per acre (21 pounds metallic copper equivalent).

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

# STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE**: Store in a cool, dry place in original 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 Disposal: (Paper Bag or Plastic Bag)

Nonrefillable container. Do not reuse or refill this container.

Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. When completely empty, offer for recycling if available, or dispose of bag in a sanitary landfill or by incineration.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

SPU-06050-F is a registered trademark of Spiess-Urania Chemicals GmbH.

"Curtec" is a registered trademark of Bei Incorporated.

"Tre-Hold" is a registered trademark of Amvac Chemical Corporation.

## LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Spiess-Urania Chemicals GmbH. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.

Spiess-Urania Chemicals GmbH warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SPIESS-URANIA CHEMICALS GMBH MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL SPIESS-URANIA CHEMICALS GMBH OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY

OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF SPIESS-URANIA CHEMICALS GMBH OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF SPIESS-URANIA CHEMICALS GMBH OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent consistent with applicable law that allows such requirement, Spiess-Urania Chemicals GmbH or your Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify Spiess-Urania Chemicals GmbH or your Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.