

# Copper-Count<sup>®</sup>-N

## Liquid Fungicide Spray

<b>ACTIVE INGREDIENT:</b>	<b>By Wt.</b>
Copper diammonia diacetate complex* .....	27.15%
[Bis (acetate-O) Diamminocopper]	
CAS No. 13822-80-5	
<b>OTHER INGREDIENTS:</b> .....	72.85%
<b>TOTAL:</b> .....	100.00%

\*Metallic Copper Equivalent, 8.0%  
Contains 0.773 Lbs. Copper per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

See Inside Booklet for Additional Precautionary  
Statements and Complete Directions for Use.

EPA Reg. No. 10465-3

Manufactured by / for:  
**Mineral Research & Development Corp.,**  
Division of Chemical Specialties, Inc.  
5910 Pharr Mill Road  
Harrisburg, NC 28075  
(704) 454-4811

#### FIRST AID

##### IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

##### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

##### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

120612N

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

**CAUTION:** Causes eye and skin irritation. Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with the skin, eyes, or clothing. Avoid breathing vapor or spray mist.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

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

- Long sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate or viton.
- Shoes plus socks.

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

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

### **USER SAFETY RECOMMENDATIONS**

Users should:

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

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce more 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.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### **DIRECTIONS FOR USE**

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

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

Shake well before using.

### **AGRICULTURAL USE REQUIREMENTS**

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, chemical-resistant footwear plus socks, chemical resistant headgear for overhead exposure and protective eyewear.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

For greenhouse use the restricted entry interval (REI) is 24 hours.

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

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

### **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, 40 CFR part 170. The Worker Protection Standard applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

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

### **CHEMIGATION**

Apply this product only through center pivot, motorized lateral move or traveling gun sprinkler irrigation systems that do not contain aluminum components. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments would the need arise.

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

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

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

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

The pesticide injection pipeline must 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.

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

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

When mixing, fill the nurse tank half full with water. Add COPPER-COUNT-N slowly to the tank while hydraulic or mechanical agitation is operating and continue filling the tank with water. Stickers, spreaders, nutrients, insecticides, etc. should be added last. If the compatibility is questionable, use the compatibility jar test before mixing a whole tank. Because of the wide variety of possible combinations that can occur, observe all cautions and limitations on the labels of all the products used in mixtures.

COPPER-COUNT-N should be continuously added through a traveling irrigation system. Agitation is recommended.

## APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

### Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

Operate system and injection equipment at normal pressures recommended by the manufacturer of the injection equipment used. Fill tank of injection equipment with water. Operate system for one complete circle for center pivot or one complete run for motorized lateral move or traveling gun equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of COPPER-COUNT-N for acreage to be covered into the same amount of water used during calibration and inject into system continuously for one revolution or run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until COPPER-COUNT-N has been cleared from the last sprinkler head.

## SPRAY DRIFT MANAGEMENT

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

### Droplet Size

Apply only as a medium or coarser spray (ASE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

### Wind Speed

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

### Temperature Inversions

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

### Other State and Local Requirements

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

### Equipment

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

For aerial application; the boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

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

For ground boom application: Do not apply with a nozzle height greater than 4 feet above the crop canopy.

## INFORMATION

The control of diseases with fungicides is based on PREVENTION: plant surfaces must be completely covered with the fungicide to successfully prevent infection. Copper pesticides are considered preventative, not curative of plant diseases. Use the highest indicated rate per crop when disease incidence is high or expected to be, depending on rainfall and temperature. The lower rate is suitable for general preventive sprays under normal conditions. Since weather conditions and disease incidence vary, consult your Agricultural Extension Service for timing and initial application.

## PRODUCT INSTRUCTIONS

Partially fill the spray tank with water, add the desired amount of COPPER-COUNT-N and continue filling the tank. If applied with other products, add COPPER-COUNT-N last. Use agitation during mixing and application, until tank is empty. Good bypass agitation is adequate. Observe all cautions and limitations on labeling of all products used in mixtures. In common with all good agricultural practice, start with clean equipment; equipment should be flushed well with water after use.

**GROUND APPLICATION: Dilute Spraying:** Apply specified rate in 10 to 100 gallons of water per acre. **Orchard and Grove Spraying:** Apply specified rate in 100 to 800 gallons of water per acre. **Concentrate Spraying:** On vegetable crops, use 5 to 25 gallons of spray mixture per acre; on fruit and nut trees, use 20 to 250 gallons per acre.

**AIR APPLICATION:** Apply specified rate in 3 to 20 gallons of water per acre.

## FRUIT AND NUT CROPS

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
ALMONDS	Brown Rot	8 – 12 qts/A (1.55 – 2.32 lbs. metallic copper/A)	Apply at delayed dormant bud swell stage. Dormant oil may be used. If additional applications are needed, apply at no less than 7 day intervals.
	Shot Hole	8 – 12 qts/A (1.55 – 2.32 lbs. metallic copper/A)	Apply as a dormant spray at leaf fall to protect buds and shoots from infection during rainy periods. Reapply every 3 to 4 weeks up to late bud swell. Do not apply at less than 7 day intervals. Do not apply after full bloom.
NOTE: Do not apply more than 93.2 quarts of Copper-Count-N			(18.0 lbs. of metallic copper) to Almonds per acre per year.
APPLES	Anthrachnose	8 – 10 qts/A (1.55 – 1.93 lbs. metallic copper/A)	Apply as a dormant spray once to foliage after harvest.
	Apple Scab (Black Spot) Bacterial Canker Blossom and Shoot Blast	8 – 12 qts/A (1.55 – 2.32 lbs. metallic copper/A)	Apply as a dormant spray once post-harvest before fall rains.
	Crown or Collar Rot	4 qts/A (0.77 lb. metallic copper/A)	Apply as a dormant application. Mix in 100 gallons of water. Apply 4 gallons of suspension as a drench on the lower trunk area of each tree. Apply once either in early spring or in late fall after harvest. Do not use if soil pH is below 5.5 since copper toxicity may result.
	Fire Blight	1 – 2 qts/A (0.196 – 0.392 lbs. metallic copper/A)	Apply at 10% bloom and repeat at no less than 5 – 7 day intervals during the bloom period. Do not use on copper-sensitive varieties.
8 – 12 qts/A (1.55 – 2.32 lbs. metallic copper/A)		Apply once as a full cover spray between silver-tip and green-tip. Do not apply when green-tip reaches ½ inch as injuries may occur.	
NOTE: Do not apply more than 82.9 quarts of Copper-Count-N			(16.0 lbs. of metallic copper) to Apples per acre per year.
APRICOTS	Brown Rot Blossom Blight Shot Hole	8 – 12 qts/A (1.55 – 2.32 lbs. metallic copper/A)	Apply as a dormant spray at leaf fall to protect buds and shoots from infection during rainy periods. Reapply up to late bud swell at no less than 7 day intervals. Do not apply after full bloom.
	NOTE: Do not apply more than 93.2 quarts of Copper-Count-N (18.0 lbs. of metallic copper) to Apricots per acre per year.		
AVOCADOS	Anthrachnose	8 qts/A (1.55 lbs. metallic copper/A)	Apply when the flower buds begin to swell and monthly intervals until August.
	NOTE: Do not apply more than 97.9 quarts of Copper-Count-N (18.9 lbs. of metallic copper) to Avocados per acre per year.		
BANANAS	Sigatoka	2 – 4 qts/A (0.39 – 0.77 lbs. metallic copper/A)	Apply every 3 to 4 weeks.
	Black Pitting	5 qts/A (0.97 lbs. metallic copper/A)	Mix in 100 gallons of water. Apply directly to the fruit stem and include the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence. Do not apply at less than 7 day intervals.
	NOTE: Do not apply more than 97.9 quarts of Copper-Count-N (18.9 lbs. of metallic copper) to Bananas per acre per year.		
BLUEBERRIES	Bacterial Canker	4- 10 qts/A (0.77 – 1.93 lbs. metallic copper/A)	Apply with a spreader-sticker before fall rains and again 4 weeks later.
	Cane Canker	4 – 10 qts/A (0.77 – 1.93 lbs. metallic copper/A)	Apply with a spreader-sticker before fall rains and again 4 weeks later. In the spring during wet weather, apply at 10-14 day intervals beginning at leaf emergence.
NOTE: Do not apply more than 43.5 quarts of Copper-Count-N			(8.4 lbs. of metallic copper) to Blueberries per acre per year.

Continued

### FRUIT AND NUT CROPS (Continued)

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
CANE BERRIES	Anthraxnose Leaf and Cane Spot Purple Blotch Yellow Rust	2 – 6 qts/A (0.39 – 1.16 lbs. metallic copper/A)	Apply when leaf buds open. Repeat when flower buds show white and continue at 10-14 day intervals.
	Anthraxnose Bacterial Blight Leaf and Cane Spot Purple Blotch Yellow Rust	8 – 10 qts/A (1.55 – 1.93 lbs. metallic copper/A)	Apply once in the fall after harvest.
NOTE: Do not apply more than 51.8 quarts of Copper-Count-N (10.0 lbs. of metallic copper) to Caneberries per acre per year.			
CHERRIES	Deadbud Coryneum Blight	6 qts/100 Gals. (1.16 lbs. metallic copper)	Apply as a dormant spray before heavy fall rains and again in late winter.
	Brown Rot Blossom Blight	2 – 3 qts/100 Gals. (0.39 – 0.58 lbs. metallic copper/A)	Apply as a full cover spray at popcorn stage and at full bloom. If an additional application is needed, do not apply at less than 7 day intervals.
NOTE: Do not apply more than 93.2 quarts of Copper-Count-N (18.0 lbs. of metallic copper) to Cherries per acre per year.			
CITRUS	Greasy Spot Melanose Pink Pitting Scab	3/4 - 2 qts/100 Gals. (0.14 – 0.39 lbs. metallic copper/100 Gals.)	Apply as pre-bloom and post bloom sprays. May be used in concentrate sprays at equivalent rates. For aerial applications, use 6 – 8 qts/10 gallons (1.16 – 1.15 lbs. metallic copper/10 Gals.). Do not apply at less than 7 day intervals.
	Brown Rot	2 – 6 qts/A (0.39 – 1.16 lbs. metallic copper/A)	Apply in the fall before or just after heavy rains. In areas of skirt sprays, apply to a height of at least 4 feet. Do not apply at less than 7 day intervals.
NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Citrus per acre per year.			
COCAO	Black Pod Rot	2 – 4 qts/A (0.39 – 0.77 lbs. metallic copper/A)	Apply on a 14-21 day schedule in high rainfall areas.
NOTE: Do not apply more than 81.6 quarts of Copper-Count-N (15.75 lbs. of metallic copper) to Cocoa per acre per year.			
COFFEE	Iron Spot Pink Disease	2 – 8 qts/A (0.39 – 1.54 lbs. metallic copper/A)	Apply 3 applications at monthly intervals at the beginning of the wet season.
	Bacterial Blight Berry Spot Leaf Spot Leaf Rust	3 – 8 qts/A (0.58 – 1.54 lbs. metallic copper/A)	Apply as locally recommended, usually at 3 – 4 week intervals (but at no less than 14 day intervals) depending upon disease severity and rainfall conditions.
NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Coffee per acre per year.			
CRANBERRIES	Fruit Rot	4 to 8 qts/A (0.77 - 1.54 lbs. metallic copper/A)	Apply beginning in late bloom. One or two additional applications made at 10-14 day intervals may be required depending on disease pressure. Follow the advice of the State Agricultural Extension Service.
	NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Cranberries per acre per year.		
CURRANTS, GOOSEBERRIES	Anthraxnose Leaf Spot (Cane Blight)	5 – 10 qts/A (0.97 – 1.93 lbs. metallic copper/A)	Make 3 applications starting after harvest, before bloom and after petal fall. Do not make applications at less than 10 day intervals.
	NOTE: Do not apply more than 82.9 quarts of Copper-Count-N (16.0 lbs. of metallic copper) to Currants/Gooseberries per acre per year.		
FILBERTS (Permitted only in Washington State and Oregon)	Bacterial Blight	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Apply after harvest. Under severe conditions, apply again when ¾ of the leaves have dropped. Do not apply at less than 14 day intervals.
	Eastern Filbert Blight	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Make initial application after harvest in October before heavy rains begin. The next application should be made in late February to early March, followed by another application 1 month later. If desired, add 1 pint of a sticking agent or superior type oil per 100 gallons of water. Do not apply at less than 14 day intervals. Use higher rate when rainfall is heavy and disease pressure is high.
NOTE: Do not apply more than 124.3 quarts of Copper-Count-N (24.0 lbs. of metallic copper) to Filberts per acre per year.			

Continued

### FRUIT AND NUT CROPS (Continued)

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
GRAPES	Anthraxnose Black Rot Downy Mildew Powdery Mildew	2 qts/A (0.39 lbs. metallic copper/A)	Apply just before bud break when the shoots are 6 – 8 inches long, just after bloom, and every 4 - 10 days throughout the season as needed. Foliar injury may occur on copper sensitive varieties.
	NOTE: Do not apply more than 103.6 quarts of Copper-Count-N (20.0 lbs. of metallic copper) to Grapes per acre per year.		
HOPS	Downy Mildew	2 qts/A (0.39 lbs. metallic copper/A)	Apply as needed at no less than 10 day intervals. Begin with crown treatment (after pruning but before training) and continue until 2 weeks before harvest.
	NOTE: Do not apply more than 13.7 quarts of Copper-Count-N (2.65 lbs. of metallic copper) to Hops per acre per year.		
KIWI	<i>Pseudomonas syringae</i> <i>Erwinia herbicola</i> <i>Pseudomonas fluorescens</i>	8 qts/A (1.54 lbs. metallic copper/A)	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of 3 applications may be made.
	NOTE: Do not apply more than 32.6 quarts of Copper-Count-N (6.3 lbs. of metallic copper) to Kiwi per acre per year.		
LIMES	Greasy Spot	8 qts/A (1.54 lbs. metallic copper/A)	Apply in June and continue at monthly intervals through August.
	NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Limes per acre per year.		
MANGOS (Not for use in California)	Anthraxnose	8 qts/A (1.54 lbs. metallic copper/A)	Apply at 7 day intervals from the time the panicles are 2 inches in length until all fruits are set and monthly thereafter until August.
	NOTE: Do not apply more than 248.7 quarts of Copper-Count-N (48 lbs. of metallic copper) to Mangos per acre per year.		
OLIVES	Peacock Spot	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A) or 2 – 3 qts/100 gals. (0.39 – 0.58 lbs. metallic copper/100 gals.)	Make first application before winter rains fall. A second application should be made in early spring if disease is severe. If additional applications are necessary, apply at no less than 30 day intervals.
	NOTE: Do not apply more than 93.2 quarts of Copper-Count-N (18.0 lbs. of metallic copper) to Olives per acre per year.		
PEACHES NECTARINES	Bacterial Spot	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Apply as a dormant spray at no less than 7 day intervals.
		1 qt/A (0.19 lbs. metallic copper/A)	Post bloom Application: Apply at ½ pint per 100 gallons at first and second cover sprays. Do not apply at less than 5 day intervals. DO NOT spray later than 3 weeks prior to harvest. DO NOT use at rate above that recommended. <b>NOTE:</b> Slight defoliation and spotting of leaves may occur from use in cover sprays.
	Blossom Brown Rot Leaf Curl Shot Hole	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Apply as a dormant and delayed dormant spray. Can use with dormant spray oil. Do not apply at less than 7 day intervals. Do not apply at or after full bloom.
	NOTE: Do not apply more than 93.2 quarts of Copper-Count-N (18.0 lbs. of metallic copper) to Peaches/Nectarines per acre per year.		
PEARS QUINCE	Fire Blight	1 – 2 qts/A (0.19 – 0.39 lbs. metallic copper/A)	Apply at 10% bloom and repeat at 5 – 7 day intervals throughout the bloom period. Do not use on copper sensitive varieties.
	Blossom Blast	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Only one application per year is permitted in fall, late dormant season.
	NOTE: Do not apply more than 82.9 quarts of Copper-Count-N (16.0 lbs. of metallic copper) to Pears/Quince per acre per year.		
PECANS	Shuck and Kernel Rot Zonate Leaf Spot	4 – 10 qts/A (0.77 – 1.93 lbs. metallic copper/A)	For suppression, apply in sufficient water to ensure complete spray coverage at 2 – 4 week intervals (no less than 14 day intervals) starting at kernel growth and continuing until shucks open. Use the higher rate and shorter interval if frequent rainfall occurs.
	NOTE: Do not apply more than 43.5 quarts of Copper-Count-N (8.4 lbs. of metallic copper) to Pecans per acre per year.		

Continued

**FRUIT AND NUT CROPS** (Continued)

<b>CROP</b>	<b>DISEASE CONTROLLED</b>	<b>RATE</b>	<b>INSTRUCTIONS</b>
PISTACHIOS	Alternaria Late Blight	8 – 10 qts/A (1.54 – 1.93 lbs. metallic copper/A)	Apply at 50% and full bloom followed by up to 3 applications at 30 day intervals.
	Botrytis Blight Botryosphaeria Panicle Shoot Blight Septoria Leaf Blight	8 – 10 qts/A (1.54 – 1.93 lbs. metallic copper/A)	Make initial application at bud swell and repeat on a 14–28 day schedule as dictated by disease conditions. If disease conditions are severe, use the higher rate and shorter interval.
	NOTE: Do not apply more than 43.5 quarts of Copper-Count-N		(8.4 lbs. of metallic copper) to Pistachios per acre per year.
PLUMS PRUNES	Bacterial Blast Bacterial Canker Brown Rot Blossom Blight Coryneum Blight (Shot Hole)	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Apply as a dormant spray and at early green bud to full popcorn stages. Do not apply at less than 7 day intervals.
	NOTE: Do not apply more than 93.2 quarts of Copper-Count-N		(18.0 lbs. of metallic copper) to Plums/Prunes per acre per year.
WALNUTS	Walnut Blight	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Make first application at early pre-bloom. Make second application at late pre-bloom. Make additional applications at no less than 7 day intervals if disease conditions persist.
	NOTE: Do not apply more than 165.8 quarts of Copper-Count-N (32 lbs. of metallic copper) to Walnuts per acre per year.		



## FIELD AND VEGETABLE CROPS

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
ALFALFA	Leaf Spot	1 – 2 qts/A (0.19 – 0.39 lbs. metallic copper/A)	Apply by ground or air 10-14 days prior to harvest. If additional applications are necessary, do not apply at less than 30 day intervals. Slight injury may occur to sensitive varieties.
	NOTE: Do not apply more than 5.8 quarts of Copper-Count-N (1.12 lbs. of metallic copper) to Alfalfa per acre per year.		
BEANS, PEAS, LENTILS (Succulent and Dry)	Bacterial Blight (Halo and Common)	1 – 3 qts/A (0.19 – 0.58 lbs. metallic copper/A)	Apply when plants are 3 - 5 inches high and before diseases appear. Repeat at 7-10 day intervals. Apply at 7 day intervals when disease pressure is severe.
	NOTE: Do not apply more than 24.5 quarts of Copper-Count-N (4.74 lbs. of metallic copper) to Beans/Peas/Lentils per acre per year.		
BEETS SUGARBEETS	Cercospora Leaf Spot	1½ - 3 qts/A (0.29 – 0.58 lbs. metallic copper/A)	Apply when disease appears making 3 to 6 sprays at 10-14 day intervals. Apply at 10 day intervals when disease pressure is severe.
	NOTE: Do not apply more than 40.7 quarts of Copper-Count-N (7.86 lbs. of metallic copper) to Beets/Sugarbeets per acre per year.		
CARROTS	Early Blight Late Blight	2 – 3 qts/A (0.39 – 0.58 lbs. metallic copper/A)	Apply when plants are 6" high. Make 3 to 5 applications at 7 - 10 day intervals.
	NOTE: Do not apply more than 25.9 quarts of Copper-Count-N (5.0 lbs. of metallic copper) to Carrots per acre per year.		
CELERY	Bacterial Blight Early Blight Late Blight	2 – 3 qts/A (0.39 – 0.58 lbs. metallic copper/A)	Apply as soon as plants are established in the field and repeat at no less than 7 day intervals.
	NOTE: Do not apply more than 27.4 quarts of Copper-Count-N (5.3 lbs. of metallic copper) to Celery per acre per year.		
CORN (Field, Pop, Sweet)	Bacterial Rot Bacterial Stripe Bacterial Wilt Leaf Blight Stalk Rot	2 qts/A (0.39 lbs. metallic copper/A)	Apply when disease appears and repeat at no less than 7 day intervals.
	NOTE: Do not apply more than 21.7 quarts of Copper-Count-N (4.2 lbs. of metallic copper) to Corn per acre per year.		
CRUCIFERS [Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Greens (Collard, Mustard and Turnip)]	Blackleaf Spot Black Rot	1 – 2 qts/A (0.19 – 0.39 lbs. metallic copper/A)	Apply by ground or air when disease appears and repeat at 7-10 day intervals.
	Downy Mildew	½ - 1 qt/A (0.1 – 0.19 lbs. metallic copper/A)	Apply by ground or air when disease appears and repeat at 7-10 day intervals.
	NOTE: Do not apply more than 13.7 quarts of Copper-Count-N (2.65 lbs. of metallic copper) to Crucifers per acre per year.		
CUCURBITS (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternaria Leaf Spot Angular Leaf Spot Anthracnose Downy Mildew Gummy Stem Blight Powdery Mildew Watermelon Bacterial Fruit Blotch	1½ - 2 qts/A (0.29 – 0.39 lbs. metallic copper/A)	Apply by ground or air when disease appears and repeat at 7-10 day intervals.
	NOTE: Do not apply more than 27.2 quarts of Copper-Count-N (5.25 lbs. of metallic copper) to Cucurbits per acre per year.		
EGGPLANT	Alternaria Blight Anthracnose Phomopsis	2 qts/A (0.39 lbs. metallic copper/A)	Apply before disease appears and repeat at 7-10 day intervals.
	NOTE: Do not apply more than 40.9 quarts of Copper-Count-N (7.9 lbs. of metallic copper) to Eggplant per acre per year.		
ONIONS	Downy Mildew Purple Blotch	2 qts/A (0.39 lb. metallic copper/A)	Apply when plants are 4 – 6 inches high and repeat at 7-10 day intervals.
	NOTE: Do not apply more than 31.0 quarts of Copper-Count-N (6.0 lbs. of metallic copper) to Onions per acre per year.		

Continued

### FIELD AND VEGETABLE CROPS (Continued)

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
PEANUTS	Cercospora Leaf Spot	1½ - 3 qts/A (0.29 - 0.59 lbs. metallic copper/A)	Apply on first appearance of disease and repeat at 10-14 day intervals.
	Pod Rot Complex (Pythium myriotylum, Rhizoctonia solani, and Sclerotium rolfsii)	4 qts/A (0.77 lbs. metallic copper/A)	Apply at pegging in a 12 - 15 inch band over the row. If repeat application is necessary, do not apply at less than 7 day intervals.
NOTE: Do not apply more than 24.6 quarts of Copper-Count-N (4.74 lbs. of metallic copper) to Peanuts per acre per year.			
PEPPERS	Bacterial Spot	1½ - 3 qts/A	Make first application upon emergence of seedlings or immediately after transplanting and repeat at 7-10 day intervals. When disease is severe, apply at 4-5 day intervals. NOTE: Disease control is critical during fruiting.
	Cercospora Leaf Spot	(0.29 - 0.59 lbs. metallic copper/A)	
NOTE: Do not apply more than 61.3 quarts of Copper-Count-N (11.85 lbs. of metallic copper) to Peppers per acre per year.			
POTATOES	Early Blight	1½ - 3 qts/A	Apply on first appearance of disease and repeat at 7-10 day intervals.
	Late Blight	(0.29 - 0.59 lbs. metallic copper/A)	
NOTE: Do not apply more than 129.5 quarts of Copper-Count-N (25.0 lbs. of metallic copper) to Potatoes per acre per year.			
SPINACH	Anthrachnose	1½ qts/A	Apply on first appearance of disease and repeat at 7 - 10 day intervals.
	Cercospora Leaf Spot Downy Mildew	(0.29 lbs. metallic copper/A)	
NOTE: Do not apply more than 20.4 quarts of Copper-Count-N (3.95 lbs. of metallic copper) to Spinach per acre per year.			
STRAWBERRIES	Leaf Spot	1½ - 2 qts/A	Apply at 7 - 10 day intervals from the time new growth starts until harvest.
	Scorch	(0.29 - 0.39 lbs. metallic copper/A)	
NOTE: Do not apply more than 42.4 quarts of Copper-Count-N (8.19 lbs. of metallic copper) to Strawberries per acre per year.			
TOBACCO	Angular Leaf Spot	4 - 5 qts/A (0.77 - 0.97 lbs. metallic copper/A)	Apply at 10 day intervals when disease appears. Destroy all infected plants.
	Blue Mold	2 qts/A (0.39 lbs. metallic copper/A)	Apply at 10 day intervals when disease appears.
	Brown Spot	4 - 5 qts/A 0.77 - 0.97 lbs. metallic copper/A)	Apply at 10 day intervals when disease appears.
	Damping Off Disease	5 - 6 qts/A (0.97 - 1.16 lbs metallic copper/A)	Avoid overwatering. Apply once to the seed bed after planting.
	Frog Eye Disease	4 - 5 qts/A (0.77 - 0.97 lbs. metallic copper/A)	Apply just before transplanting and when topped.
	Wild Fire	2 qts/A (0.39 lbs. metallic copper/A)	Apply at 10 day intervals from seeding to transplanting.
	NOTE: Do not apply more than 41.4 quarts of Copper-Count-N (8.0 lbs. of metallic copper) to Tobacco per acre per year.		
TOMATOES (Processing)	Bacterial Speck Bacterial Spot Early Blight Late Blight	1½ - 2½ qts/A (0.29 - 0.48 lbs. metallic copper/A)	Make first application upon emergence of seedlings or immediately after transplanting and repeat at 7-10 day intervals. Do not apply at less than 3 day intervals. Complete coverage is essential for disease control. NOTE: While the labeled rate is particularly effective against Bacterial Spot, a tank mix with Maneb or Mancozeb used at the labeled rates controls a broad range of diseases.
NOTE: Do not apply more than 90.1 quarts of Copper-Count-N (17.4 lbs. of metallic copper) to Tomatoes (Processing) per acre per year.			

Continued

### FIELD AND VEGETABLE CROPS (Continued)

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
TOMATOES (Fresh Market)	Bacterial Speck Bacterial Spot Early Blight Late Blight	1½ - 3 qts/A (0.29 - 0.58 lbs. metallic copper/A)	Make first application upon emergence of seedlings or immediately after transplanting and repeat at 7-10 day intervals. Do not apply at less than 3 day intervals. Complete coverage is essential for disease control. NOTE: While the labeled rate is particularly effective against Bacterial Spot, a tank mix with Maneb or Mancozeb used at the labeled rates controls a broad range of diseases.
	NOTE: Do not apply more than 41.4 quarts of Copper-Count-N (8 lbs. of metallic copper) to Tomatoes (Fresh Market) per acre per year.		
WHEAT OATS BARLEY	Helminthosporium Spot Blotch Septoria Leaf Blotch	1½ - 2 qts/A (0.29 - 0.48 lbs. metallic copper/A)	Make first application at early heading and follow with a second spray 10 days later. Use the higher rate when conditions favor disease.
	Head Scab Bacterial Wilt	2 qts/A (0.48 lbs. metallic copper/A)	Apply when disease appears and repeat as necessary at 10 day intervals.
NOTE: Do not apply more than 5.4 quarts of Copper-Count-N (1.06 lbs. of metallic copper) to Wheat/Oats/Barley per acre per year.			

### MISCELLANEOUS

CROP	DISEASE CONTROLLED	RATE	INSTRUCTIONS
ATEMOYA	Anthracnose	3 qts/A (0.58 lbs. metallic copper/A)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Atemoya per acre per year.		
CARAMBOLA	Anthracnose	3 qts/A (0.58 lbs. metallic copper/A)	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 54.4 quarts of Copper-Count-N (10.5 lbs. metallic copper) to Carambola per acre per year.		
CHIVES	Downy Mildew	2 qts/A (0.48 lbs. metallic copper/A)	Begin applications when plants are first established in the field. Repeat applications at 7 - 10 day intervals as dictated by disease conditions. If disease pressure is high, use the shorter spray interval.
	NOTE: Do not apply more than 13.7 quarts of Copper-Count-N (2.65 lbs. of metallic copper) to Chives per acre per year.		
DILL	Phoma Leaf Spot Rhizoctonia Foliage Blight	3 qts/A (0.58 lbs. metallic copper/A)	Begin applications when plants are first established in the field and repeat at 7 - 10 day intervals depending upon disease severity and environmental conditions. If disease pressure is high, use the shorter spray interval.
	NOTE: Do not apply more than 20.4 quarts of Copper-Count-N (3.95 lbs. of metallic copper) to Dill per acre per year.		
DOUGLAS FIR	Rhabdocline Needlecast	2 qts/A (0.48 lbs. metallic copper/A)	Begin applications at bud break and repeat at 3 - 4 week intervals. Apply in a tank mix with another registered pesticide if moderate to severe disease pressure is present.
	NOTE: Do not apply more than 103.6 quarts of Copper-Count-N (20.0 lbs. of metallic copper) to Douglas Fir per acre per year.		
GINSENG	Alternaria Leaf and Stem Blight	3½ qts/A (0.68 lbs. metallic copper/A)	Use as a tank mix with 2 pounds Rovral 50W in 100 gallons of water. Begin COPPER-COUNT-N/Rovral applications as soon as plants have emerged in spring. Applications should be repeated every 7 days until plants become dormant in fall. If scheduled application is to be before a rain shower, apply fungicides at least 8 hours before the rain, giving the fungicides time to dry on the plants. Use of a spreader-sticker is advised. NOTE: Alternaria leaf and stem blight is most severe in humid conditions such as those found in the dense canopies of 2-, 3-, and 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.
	NOTE: Do not apply more than 27.2 quarts of Copper-Count-N (5.25 lbs. of metallic copper) to Ginseng per acre per year.		

Continued

**MISCELLANEOUS** (Continued)

<b>CROP</b>	<b>DISEASE CONTROLLED</b>	<b>RATE</b>	<b>INSTRUCTIONS</b>
GUAVA	Anthracnose Red Algae	3 qts/A (0.58 lbs. metallic copper/A)	Make initial application just before flowering and repeat on a 7 day schedule until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 25.4 quarts of Copper-Count-N (4.92 lbs. of metallic copper) to Guava per acre per year.		
LITCHI	Anthracnose	3 qts/A (0.58 lbs. metallic copper/A)	Make initial application just before flowering and repeat on a 7 day schedule until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 25.4 quarts of Copper-Count-N (4.92 lbs. of metallic copper) to Litchi per acre per year.		
LIVE OAK	Ball Moss	6 qts/A (1.16 lbs. metallic copper/A)	Apply in the spring when ball moss is actively growing using 1.5 gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. A second application may be required after 12 months. NOTE: COPPER-COUNT-N may be injurious to ornamentals grown under Live Oaks. This product may be reactive on metal and masonry surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
	NOTE: Do not apply more than 103.6 quarts of Copper-Count-N (20.0 lbs. of metallic copper) to Live Oak per acre per year.		
MACADAMIA	Anthracnose	6 qts/A (1.16 lbs. metallic copper/A)	Initiate sprays at first sign of flowering and repeat on a 7 day schedule until just before harvest. Apply in sufficient water for thorough coverage.
	Phytophthora Blight Raceme Blight	4 – 6 qts/A (0.77 – 1.16 lbs. metallic copper/A)	Apply during raceme development and bloom periods. Do not apply at less than 7 days intervals. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 48.9 quarts of Copper-Count-N (9.44 lbs. of metallic copper) to Macadamia per acre per year.		
MAMEY SAPOTE	Anthracnose Algal Leaf Spot	6 – 8 qts/A (1.16 – 1.54 lbs. metallic copper/A)	Apply when conditions favor disease. Repeat on 14 – 30 day schedule as disease severity and environmental conditions dictate.
	NOTE: Do not apply more than 43.5 quarts of Copper-Count-N (8.4 lbs. of metallic copper) to Mamey Sapote per acre per year.		
PAPAYA	Anthracnose	4 – 10 qts/A (0.77 – 1.93 lbs. metallic copper/A)	Begin applications before disease appears and repeat at 14 day intervals. Apply at no less than 7 day intervals during periods of heavy rain. Use higher rates when conditions favor disease.
	NOTE: Do not apply more than 109.8 quarts of Copper-Count-N (21.2 lbs. of metallic copper) to Papaya per acre per year.		
PARSLEY	Bacterial Blight	3 qts/A (0.58 lbs. metallic copper/A)	Begin applications when plants are first established in the field and repeat at 10 day intervals.
	NOTE: Do not apply more than 10.3 quarts of Copper-Count-N (2.0 lbs. of metallic copper) Parsley per acre per year.		
PASSION FRUIT	Anthracnose	6 qts/A (1.16 lbs. metallic copper/A)	Make initial application just before flowering and repeat at no less than 7 day intervals until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 48.9 quarts of Copper-Count-N (9.44 lbs. of metallic copper) to Passion Fruit per acre per year.		
SUGAR APPLE (Annona)	Anthracnose	8 – 12 qts/A (1.54 – 2.32 lbs. metallic copper/A)	Make initial application just before flowering and repeat on a 7 day schedule until just before harvest. Apply in sufficient water for thorough coverage.
	NOTE: Do not apply more than 65.2 quarts of Copper-Count-N (12.6 lbs. of metallic copper) to Sugar Apple per acre per year.		
SYCAMORE	Anthracnose	2 – 3 qts/A (0.39 – 0.58 lbs. metallic copper/A)	Apply as a full coverage spray. Apply in 100 gallons of water or sufficient volume for thorough coverage. Make first application at bud crack and second application at 7 – 10 days later at 10% leaf expansion.
	NOTE: Do not apply more than 103.6 quarts of Copper-Count-N (20.0 lbs. of metallic copper) to Sycamore per acre per year.		

## TURFGRASS

To control algae in turfgrass, apply 10 fl. oz. (0.06 lbs. metallic copper) of COPPER-COUNT-N per 1,000 square feet in 5 gallons of water. COPPER-COUNT-N may be used alone or in combination with other registered fungicides as a maintenance spray. If additional applications are necessary, apply at no less than 10 day intervals. Observe all precautions and limitations on the label of each product used in tank mixes. Do not apply more than 80.0 fl. oz. of Copper-Count-N (0.48 lbs. metallic copper) per 1,000 sq. ft. per year.

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

## GREENHOUSE AND SHADEHOUSE CROPS

Notice to User: COPPER-COUNT-N may be used in greenhouses and shade houses to control diseases on some crops which appear on this label. The grower should bear in mind that the sensitivity of crops grown in greenhouses and shadehouses differ greatly from crops grown under field conditions. Neither the manufacturer nor the seller has determined whether or not COPPER-COUNT-N can be used safely on all greenhouse- and shadehouse-grown crops. The user should determine if COPPER-COUNT-N can be used safely prior to commercial use. In a small area, apply the directed rates to the plants in question, i.e. foliage, fruit, etc., and observe for 7 – 10 days for symptoms of phytotoxicity prior to commercial use.

CROP	DISEASE CONTROLLED	RATE/1,000 SQ. FT.	INSTRUCTIONS
EGGPLANT	Alternaria Blight Anthracnose Phomopsis	4 Tbsp. (0.012 lbs. metallic copper/1,000 Sq. Ft.)	Begin applications prior to development of disease symptoms. Repeat sprays at no less than 7 day intervals.
	NOTE: Do not apply more than 60 Tbsp. of Copper-Count-N (0.18 lbs. metallic copper) to Eggplant per 1,000 sq. ft. per year.		
PEPPER	Bacterial Spot	4 – 6 Tbsp. (0.012 – 0.018 lbs. metallic copper/1,000 Sq. Ft.)	Begin applications when conditions first favor disease development and repeat at 5–10 day intervals as needed depending on disease severity. Use higher rate for severe disease.
	NOTE: Do not apply more than 90 Tbsp. of Copper-Count-N (0.27 lbs. metallic copper) to Pepper per 1,000 sq. ft. per year.		
TOMATO (Processing)	Early and Late Blight	4 Tbsp. (0.012 lbs. metallic copper/1,000 Sq. Ft.)	Begin when disease first threatens and repeat at 7–10 day intervals as needed depending on disease severity.
	Bacterial Speck	4 Tbsp. (0.012 lbs. metallic copper/1,000 Sq. Ft.)	Begin when disease first threatens and repeat at 7 – 10 day intervals as needed depending on disease severity.
	Anthracnose Bacterial Spot Gray Leaf Mold Septoria Leaf Spot	4 Tbsp. (0.012 lbs. metallic copper/1,000 Sq. Ft.)	Begin applications when disease first threatens and repeat at 7 – 10 day intervals as needed depending on disease severity.
	NOTE: Do not apply more than 133.3 Tbsp. of Copper-Count-N (0.4 lbs. metallic copper) to Tomato (Processing) per 1,000 sq. ft. per year.		
TOMATO (Fresh Market)	Early and Late Blight	4 – 6 Tbsp. (0.012 - 0.018 lbs. metallic copper/1,000 Sq. Ft.)	Begin when disease first threatens and repeat at 7–10 day intervals as needed depending on disease severity.
	Bacterial Speck	4 Tbsp. (0.012 lbs. metallic copper/1,000 Sq. Ft.)	Begin when disease first threatens and repeat at 7 – 10 day intervals as needed depending on disease severity.
	Anthracnose Bacterial Spot Gray Leaf Mold	4 – 8 Tbsp. (0.012 – 0.024 lbs. metallic copper/1,000 Sq. Ft.)	Begin applications when disease first threatens and repeat at 7 – 10 day intervals as needed depending on disease severity.
	NOTE: Do not apply more than 60 Tbsp. of Copper-Count-N (0.18 lbs. metallic copper) to Tomato (Fresh Market) per 1,000 sq. ft. per year.		
CITRUS (Non-bearing Nursery)	Brown Rot Citrus Canker (Suppression only) Greasy Spot Melanose Pink Pitting Scab	6 Tbsp. (0.018 lbs. metallic copper/1,000 Sq. Ft.)	Begin applications when disease threatens. Repeat at 30 day intervals as needed depending on disease severity.
	NOTE: Do not apply more than 96.7 Tbsp. of Copper-Count-N (0.29 lbs. metallic copper) to Citrus (Non-bearing Nursery) per 1,000 sq. ft. per year.		

## ORNAMENTALS

Notice to User: Plant sensitivities to COPPER-COUNT-N have been found to be acceptable in specific genera and species listed on this label; however, it is impossible to know sensitivities under all conditions and phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for sensitivity to COPPER-COUNT-N. Neither the manufacturer nor seller recommends use upon species not listed on the label nor has it been determined that COPPER-COUNT-N can be safely used on ornamental or nursery plants not listed on this label. The user should determine if COPPER-COUNT-N can be used safely prior to commercial use.

Use COPPER-COUNT-N on container, bench, or bed-grown ornamentals in greenhouses, shadehouses or outdoor nurseries for professional use on ornamentals grown in indoor and outdoor landscaping, and for control of bacterial and fungal diseases of foliage, flowers, and stems.

Apply as a thorough coverage spray using 1 quart (0.193 lbs. metallic copper) COPPER-COUNT-N per 100 gallons of water per acre. Begin application at first sign of disease and repeat at 7 – 14 day intervals as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist. Do not apply more than 103 quarts of Copper-Count-N (20.0 lbs. metallic copper) per acre per year.

COPPER-COUNT-N may be used alone or in combination with other registered fungicides as a maintenance spray. Observe all precautions and limitations on the label of each product used in tank mixes.

NOTE: Do not tank mix COPPER-COUNT-N with Aliette fungicide unless appropriate precautions have been taken to buffer the spray solution. Severe phytotoxicity may result if adequate precautions are not taken.

CROP	LATIN NAME	DISEASE
Althea (Rose of Sharon)	Hibiscus syriacus	Bacterial leaf spot
Aralia	Dizygotheca elegantissima	Alternaria, Cercospora leaf spot, Xanthomonas leaf spot
Arborvitae	Thuja spp.	Alternaria twig blight, Cercospora leaf blight
Azalea <sup>(1)</sup>	Rhododendron spp.	Botrytis blight, Cercospora leaf spot, Phytophthora dieback, Powdery mildew
Begonia	Begonia semperflorens	Bacterial leaf spot (Erwinia spp., Pseudomonas spp., Xanthomonas spp.)
Bougainvillea	Bougainvillea spectabilis	Anthracnose, Bacterial leaf spot
Bulbs (Tulip, Gladiolus)	Miscellaneous	Anthracnose, Botrytis blight
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
Chinese tallow tree	Sapium sebiferum	Bacterial leaf spot (Pseudomonas spp., Xanthomonas spp.,)
Chrysanthemum <sup>(1)</sup>	Chrysanthemum morifolium	Botrytis blight, Septoria leaf spot
Cotoneaster	Cotoneaster spp.	Botrytis blight
Dahlia	Dahlia pinnata	Alternaria leaf spot, Botrytis gray mold, Cercospora leaf spot
Date Palm	Phoenix canariensis	Pestalotia leaf spot
Dianthus	Dianthus spp.	Bacterial soft rot, Bacterial spot
Dogwood	Cornus florida	Anthracnose
Dusty Miller	Senecio cineraria	Bacterial leaf spot (Pseudomonas cichorii)
Easter lily <sup>(2)</sup>	Lilium longiflorum	Botrytis blight
Echinacea	Echinacea spp.	Bacterial leaf spot (Pseudomonas chiorii)
Elm "Drake"	Ulmus parvifolia	Xanthomonas leaf spot
Euonymus	Euonymus spp.	Anthracnose, Botrytis blight
European fan palm	Chamaerops humilis	Pestalotia leaf spot
Gardenia	Gardenia jasminoides	Alternaria leaf spot, Botrytis bud rot, Cercospora leaf spot
Geranium	Pelargonium spp.	Alternaria leaf spot, Botrytis gray mold, Cercospora leaf spot
Gladiolus	Gladiolus spp.	Alternaria leaf spot, Bacterial leaf blight, Botrytis gray mold
Goldenrain tree	Koeleruteria paniculata	Bacterial leaf spot
Hibiscus	Hibiscus rosa-sinensis	Bacterial leaf spot
Holly fern	Cyrtomium falcatum	Pseudomonas leaf spot
Impatiens	Impatiens sallerana	Bacterial leaf spot
India hawthorn <sup>(3)</sup>	Rhaphiolepis indica	Anthracnose, Entomosporium leaf spot

Continued

## ORNAMENTALS (Continued)

Ivy (English, Algerian) <sup>(1)</sup>	Hedera helix, H. canariensis	Xanthomonas leaf spot
Ixora	Ixora coccinea	Xanthomonas leaf spot
Juniper (Eastern red cedar)	Juniperus virginiana	Anthracnose
Lantana	Lantana camara	Bacterial leaf spot
Lilac	Syringa spp.	Cercospora leaf spot
Loblolly bay	Gordonia lasianthus	Anthracnose
Loquat	Eriobotrya japonica	Colletotrichum spp., Entomosporium maculata
Magnolia (Saucer)	Magnolia soulangiana	Bacterial leaf spot
Magnolia (Southern)	Magnolia grandiflora	Algal leaf spot, Anthracnose, Bacterial leaf spot
Magnolia (Sweet bay)	Magnolia virginiana	Anthracnose
Mandevillas	Mandevilla spp.	Anthracnose
Marigold	Tagetes spp.	Alternaria leaf spot, Botrytis leaf and flower rot, Cercospora leaf spot
Mulberry, weeping	Morus alba	Bacterial leaf spot
Oak, laurel	Quercus laurifolia	Algal leaf spot (Cephaleuros virescens)
Oleander	Nerium oleander	Bacterial leaf spot, Fungal leaf spot
Pachysandra	Pachysandra procumbens	Volutella leaf blight
Pansy	Viola spp.	Downy mildew
Pear (Flowering)	Pyrus calleryana	Fireblight, Leaf spot
Pentas (Egyptian star)	Pentas spp.	Bacterial leaf spot (Xanthomonas spp.)
Peony	Paeonia spp.	Botrytis blight
Periwinkle	Catharanthus roseus, Vinca spp.	Phomopsis stem blight
Philodendron	Philodendron selloum	Bacterial leaf spot
Phlox	Phlox spp.	Alternaria leaf spot
Photinia	Photinia fraseri, P. glabra	Anthracnose, Entomosporium
Pistachio	Pistacia chinensis	Anthracnose
Plantain lily	Hosta spp.	Bacterial leaf spot
Powder puff plant	Calliandra spp.	Bacterial leaf spot
Pyracantha	Pyracantha spp.	Fireblight, scab
Queen palm	Syagrus romanzoffianum	Exosporium leaf spot, Phytophthora bud rot
Rhododendron	Rhododendron spp.	Alternaria flower spot
Rose <sup>(1)</sup>	Rosa spp.	Black spot, Powdery mildew
Verbena	Verbena spp.	Xanthomonas leaf spot
Viburnum	Viburnum odoratissimum, V. suspensum	Anthracnose
Washingtonia palm	Washingtonia robusta	Pestalotia leaf spot
Weeping willow	Salix babylonica	Anthracnose
Yucca (Adam's needle)	Yucca spp.	Cercospora leaf spot, Septoria leaf spot

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

<sup>(2)</sup> Apply COPPER-COUNT-N at 3 – 5 quarts (0.58 to 0.97 lbs. metallic copper) in 20 – 100 gallons of water per acre.

<sup>(3)</sup> For India hawthorn use 2 – 4 quarts (0.39 to 0.773 lbs. metallic copper) per 100 gallons or 2 – 4 level tablespoons per gallon.

### FROST INJURY PROTECTION

**Bacterial Ice Nucleation Inhibitor** – Application of COPPER-COUNT-N made to all crops listed on this label at rates indicated on this label, just prior to anticipated frost conditions, will sustain control of ice nucleating bacteria (*Pseudomonas syringae*, *Erwinia herbicola* and *Pseudomonas fluorescens*) and may therefore provide protection against light frost.

Not recommended for those geographic areas where weather conditions favor severe frost.

## STORAGE AND DISPOSAL

**PESTICIDE STORAGE:** Do not contaminate water, food, or feed by storage or disposal.

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

***For liquid dilutable formulations in nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons):***

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure 2 more times. Offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

***For liquid dilutable formulations in 5 gallon or larger nonrefillable containers:***

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{2}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

## IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The Directions for Use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of the product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use of application, all of which are beyond the control of Mineral Research & Development Corp., Division of Chemical Specialties, Inc. To the extent permitted by applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Mineral Research & Development Corp., Division of Chemical Specialties, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Mineral Research & Development Corp., Division of Chemical Specialties, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Mineral Research & Development Corp., Division of Chemical Specialties, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Mineral Research & Development, Corp., Division of Chemical Specialties, Inc.'s election, the replacement of product.



# Copper-Count<sup>®</sup>-N

## Liquid Fungicide Spray

**ACTIVE INGREDIENT:**  
Copper diammonia diacetate complex\* ..... 27.15%  
[Bis (acetate-O) Diamminecopper]  
CAS No. 13822-80-5

**OTHER INGREDIENTS:** ..... 72.85%  
**TOTAL:** ..... 100.00%

\*Metallic Copper Equivalent, 8.0%  
Contains 0.773 Lbs. Copper per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

See Attached Booklet for Additional Precautionary  
Statements and Complete Directions for Use.

EPA Reg. No. 10465-3

EPA Est. No. 10465-NC-1  
48498-CA-1

Manufactured by / for:

#### Mineral Research & Development Corp.,

Division of Chemical Specialties, Inc.  
5910 Pharr Mill Road  
Harrisburg, NC 28075  
(704) 454-4811

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes eye and skin irritation. Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with the skin, eyes, or clothing. Avoid breathing vapor or spray mist.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce more 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 rinseate.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### FIRST AID

#### IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

#### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

120612N

**NET CONTENTS:** 2.5 Gallons (9.46 liters)

EPA Est. No. 48498-CA-1