



Valdosta, GA 31603-5126

See additional precautionary statements on back panel and leaflet and directions for use in leaflet.













COPPER	GROUP	M01	FUNGICIDE



Fungicide and Bactericide 🤝 For Organic Production

### Active Ingredient:

Copper Hydroxide*		61.5 %
Other Ingredients		38.5 %
Total:		100.00%
*Metallic Copper Equiva	lent: 40% CAS No. 20427-59-2	

## KEEP OUT OF REACH OF CHILDREN WARNING-AVISO

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 Swallowed	<ul> <li>Call a 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 by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
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 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 a poison control center or doctor for further treatment advice.</li> </ul>
If In Eyes	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	HOT LINE NUMBER
EMERGENCY	<b>TELEPHONE NUMBERS</b> : Have the product container or label with you when calling
	enter or doctor, or going for treatment. For non-emergency information concerning this
	e National Pesticides Information Center (NPIC) at 1-800-858-7378 Monday - Friday,
8:00 am to 12:0	00 pm Pacific Time (NPIC Web site: www.npic.orst.edu ) or the Poison Help Line 24
	hours a day, seven days a week at 1-800-222-1222.
Note to Phys	sician: Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 35484-8

EPA Est. No. 35484-ESP-01



Industrias Quimicas del Valles, SA





### PRECAUTIONARY STATEMENTS

# WARNING

### HAZARD TO HUMANS AND DOMESTIC ANIMALS

May be fatal if swallowed. Harmful if absorbed through skin or if inhaled. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Remove and wash contaminated clothing before reuse. Wear PPE as listed below. Avoid breathing dust and spray mist.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- Long-Sleeved Shirt
- Long Pants
- Shoes Plus Socks
- Chemical Resistant Gloves Made of: Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Natural Rubber ≥14 mils, Polyethylene, Polyvinyl Chloride ≥14 mils, Or Viton ≥14 mils.
- Protective eyewear

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.

#### Engineering Controls

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

### USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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 pesticide is toxic to fish and aquatic organisms. Unlike most organic pesticides, copper is an element and will not break down in the environment and will therefore accumulate in sediment with repeated applications. Copper is a micronutrient, but its pesticidal application rate exceeds the amount of copper needed as a nutrient. 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 washwater 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, other persons, adults, children, or pets 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, and greenhouses, and handlers of agricultural workers. 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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hrs.

The restricted entry interval for greenhouses may be reduced to 24-hour REI, 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.

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:

- 1. Coveralls over long-sleeved shirt
- 2. Shoes plus socks
- Chemical resistant gloves made of: Barrier Laminate, Butyl Rubber ≥14 mils, Nitrile Rubber ≥14 mils, Neoprene Rubber ≥14 mils, Natural Rubber ≥14 mils, Polyethylene, Polyvinyl Chloride >14 mils. Or Viton >14 mils.
- 4. Protective eyewear

### SPRAY DRIFT

A variety of factors 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.

#### **Droplet Size**

Apply only as a medium or coarser spray (ASABE S572.1).

#### Wind Speed

Do not apply when wind speed exceeds 15 MPH at the application site. Only apply this product if the wind direction favors on-target deposition (approximately 3-10 MPH), and there are no sensitive areas within 250 feet downward.

#### **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 at 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.

#### Aerial Applications:

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

#### **Groundboom Applications:**

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

### SPRAY DRIFT ADVISORIES

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

#### IMPORTANCE OF DROPLET SIZE

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

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

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

### **Controlling Droplet Size - Aircraft**

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

### **BOOM HEIGHT – Ground Boom**

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

### **RELEASE HEIGHT – Aircraft**

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

#### SHIELDED SPRAYERS

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

#### TEMPERATURE AND HUMIDITY

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

#### TEMPERATURE INVERSIONS

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

#### WIND

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

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

### RESTRICTIONS

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

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, VITRA 40 DF contains a Group M01 fungicide. Any fungal population may contain individuals naturally resistant to VITRA 40 DF and other Group M01 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are use 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 VITRA 40 DF or other Group M01 fungicides within a growing season sequence with different groups that control the same pathogens.
- 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 developments, 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 pesticide distributor or university extension specialist to report resistance.

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.

### PRODUCT INSTRUCTIONS

VITRA 40 DF 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 VITRA 40 DF 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 Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from VITRA 40 DF. 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 VITRA 40 DF 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), the higher rates and shorter spray intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops.

#### SPECIAL PRECAUTIONS

- The Pre-Harvest Interval (PHI) for VITRA 40 DF is 0 days unless otherwise noted.
- If VITRA 40 DF is applied in a spray solution having a pH of less than 6.5, phytotoxicity may occur.
- Do not tank mix VITRA 40 DF with "Aliette" 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, or other metallic surfaces.
- 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 VITRA 40 DF 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 system(s). Do not apply this
  product through any other type of irrigation system. 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 VITRA 40 DF 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.

### CROP CLASSIFICATION

CITRUS: Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Tangelo and Tangerine.

CONIFERS (non-forestry): Douglas Fir, Fir, Juniper, Leyland Cypress, Pine and Spruce

FIELD CROPS: Alfalfa, Barley, Corn+, Oats, Peanut, Potato, Sugar Beet and Wheat.

SMALL FRUITS: Blackberry, Blueberry, Cranberry, Currant, Gooseberry, Raspberry and Strawberry.

TREE CROPS: Almond, Apple, Apricot, Avocado, Banana, Cacao, Cherry, Coffee, Filbertt, Mango, Nectarine, Olive, Peach, Pear, Pecan, Pistachio, Plum, Prune, Quince and Walnut.

VEGETABLES: Bean, Beet, Beet Greens, Broccoli, Brussels Sprout, Cabbage, Cantaloupe, Carrot, Cauliflower, Celeriac, Celery, Cucumber, Endive, Escarole, Eggplant, Greens (Collard, Mustard and Turnip), Honeydew, Lettuce, Muskmelon, Okra, Onion/Garlic/Leek, Pea, Pepper, Pumpkin, Spinach, Squash, Tomato, Waterress and Watermelon.

VINES: Grape, Hops and Kiwi.

MISCELLANEOUS: Atemoya, Carambola, Chives, Dill, Ginseng, Guava, Litchi, Live Oaki, Macadamia, Mamey Sapote, Papaya, Parsley, Passion Fruit, Sugar Apple and Sycamore.

GREENHOUSE AND SHADEHOUSE CROPS: VITRA 40 DF may be used in greenhouses and shadehouses to control diseases on any crop on this label where physiology allows greenhouse or shadehouse culture. While specific directions are presented for Eggplant, Pepperl, Cucumber, Tomato and Citrust; general use may occur for any crop on this label where physiology allows greenhouse or shadehouse culture. Consequently; injuries arising from the use of VITRA 40 DF on these types of greenhouse and shadehouse crops are the responsibility of the user.

<sup>‡</sup>Not for use in California.

	Minimum Recommended Spray When Applying V		Acre)
	Aerial	C	Fround
Crop Group		Dilute	Concentrate
Citrus	10	800	100 <sup>a</sup>
Conifers	10	100	30
Field Crops	3	20	
Small Fruits	5	150	50
Tree Crops	10	400	50
Vegetables	3	20	
Vines	5	150	50
Miscellaneous	10	150	50

a 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 following specific instructions are based on general application procedures. The recommendations of the State Agricultural Extension Service should be closely followed as to timing, frequency and number of sprays per year.

### FROST INJURY PROTECTION

### BACTERIAL ICE NUCLEATION INHIBITOR

Application of VITRA 40 DF 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. Not recommended for those geographical areas where weather conditions favor severe frost.

### VITRA 40 DF Use Rates

VII KA 40 DI	CITRUS							
to meet the this label. V disease cont	VITRA 40 DF 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. VITRA 40 DF per acer rates in these mixes must not exceed the maximum labeled rates for disease control. Adding foliar nutritionals or other products to spray mixtures containing VITRA 40 DF and applying to citrus during the post bloom period when young fruit are present may result in spray hum.							
Disease	Application Rate (lbs product/acre) ( <i>lbs metallic Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments				
Melanose, Scab, Algal Spot	1.5 - 7.5 (0.6 - 3) 2 - 7.5** (0.8 - 3)	31.5 (12.6)	7	Apply as pre-bloom and post- bloom sprays. Use the higher rates when conditions favor disease.				
Greasy Spot, Pink Pitting	$ \begin{array}{r} 1 - 7.5 \\ (0.4 - 3) \\ 1 - 6^{**} \\ (0.4 - 2.4) \end{array} $	31.5 (12.6)	7	Apply in summer on expanded new flush and fruit. Repeat on subsequent flushes where disease pressure is severe. Use the higher rates when conditions favor disease development.				
Alternaria Brown Spot	1.5 - 7.5 (0.6 - 3) 2 - 7.5** (0.8 - 3)	31.5 (12.6)	7	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 development.				

NOTE: Phytotoxicity may occur on young tender flush when Vitra 40 DF is applied

to citrus seedlings grown in greenhouses or shadehouses.

\* Metallic Copper Equivalent: 40%

\*\* Application rates for use only in California

#### CITRUS

VITRA 40 DF 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. VITRA 40 DF 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 VITRA 40 DF and applying to citrus during the post bloom period when young fruit are present may result in spray burn.

Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Black Spot	$   \begin{array}{r}     1 - 7.5 \\     (0.4 - 3) \\     2 - 7.5^{**} \\     (0.8 - 3)   \end{array} $	31.5 (12.6)	7	Begin treatment prior to or when disease first appears and repeat every 7 to 21 days if needed. Use the higher rates when conditions favor disease.
Phytophthora Brown Rot, Septoria Spot	1.5 - 7.5 (0.6 - 3) 2 - 7.5** (0.8 - 3)	31.5 (12.6)	7	Begin application in fall before or just after the first rain and continue as needed. For Brown Rot only, apply to skirts of trees tc a height of at least 4 feet. For control of Septoria Spot or where fruit have already been infected with Brown Rot, apply tc entire tree. Apply also to bare ground one foot beyond skirt. Use the higher rates when conditions favor disease. <b>NOTE:</b> In California, in areas subject tc copper injury, add 1/3 to 1 pound of high- quality lime per 2 pound of VITRA 40 DF.
Citrus Canker (suppression only)	1 - 7.5 (0.4 - 3) 2 - 7.5** (0.8 - 3)	31.5 (12.6)	7	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require an additional application. Number and timing of applications will be dependent upon disease pressure. Under heavy pressure, each flush of new growth should be sprayed.
Phytophthora Foot Rot	(0.4)	31.5 (12.6)	7	Mix with 1 quart of water, "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>NOTE:</b> Areas where microjet or low volume irrigation hit the tree trunk may

\*\* Application rates for use only in California

### CITRUS FIELD NURSERY GROWN

To control Melanose, Scab, Pink Pitting, Greasy Spot, Brown Rot and for suppression of Citrus Canker, apply 5 to 7.5 pounds of product per acre (2 to 3 pounds of metallic copper per acre) (6 to 7.5 pounds of product per acre (2.4 to 3 pounds of metallic copper per acre) only in California). Apply VITRA 40 DF at 28-day intervals if needed depending on disease severity. The maximum application rate per year is 31.5 pounds of product per acre (12.6 pounds of metallic copper per acre). The Minimum Retreatment Interval is 7 days.

	FIELD CROPS							
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments			
Alfalfa	Cercospora Leaf Spot, Leptosphareru- lina Leaf Spot	1 (0.4)	2.8 (1.12)	30	Apply 10 to 14 days before each harvest or earlier if disease threatens. <b>NOTE:</b> Spray injury may occur with sensitive varieties such as Lahontan.			
Corn (Field Corn, Popcorn, Sweet Corn) <del>!</del>	Bacterial Stalk Rot	0.5 - 2.6 (0.2 - 1.04)	10.5 (4.2)	7	Begin treatment when disease first appears and repeat every 7 to 10 days if needed. Use the higher rates and shorter spray intervals when conditions favor disease.			
Peanut	Cercospora Leaf Spot	1 - 1.5 (0.4 - 0.6)	11.85 (4.74)	7	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14-day intervals. Reduce time between sprays to 7-day intervals during humid weather. Use the higher rates when conditions favor disease development. Flowable sulfur may be added.			
Potato	Early & Late Blight	1 - 4 (0.4 - 1.6)	62.5 (25)	5	Apply 1 to 2.5 lbs. at 5 to 10-day intervals 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 VITRA 40 DF 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.			
	se in California Copper Equival	ant: 409/						

	FIELD CROPS							
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Retreatment Interval	Comments			
Sugar Beet	Cercospora Leaf Spot, Downy Mildew	2 - 3 (0.8 - 1.2)	19.6 (7.84)	10	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 development. Addition of a spreader/ sticker is recommended.			
Wheat, Oats, Barley	Septoria Leaf Blotch, Hel- minthosporium Spot Blotch	1 (0.4)	2.65 (1.06)	10	Make first application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease development.			

\* Metallic Copper Equivalent: 40%

	SMALL FRUITS					
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments	
Brambles (Logan, Blackberry, Santiam, Boysen, Marion, Aurora, Cascade, Chehalem and Thornless Evergreen)	Leaf & Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, Pseudomonas Blight Leaf & Cane Spot, Purple Blotch, Anthracnose, Yellow Rust,	$     \frac{2 - 4}{(0.8 - 1.6)}   $ $     \frac{2}{(0.8)}   $	25 (10) 25 (10)	7	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added. Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added.	
* Metallic Co	opper Equivalen	t: 40%			<b>NOTE:</b> Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.	

		SM	IALL FRUITS	5	
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments
Blueberry	Bacterial Canker	$   \begin{array}{r}     1.5 - 5 \\     (0.6 - 2) \\     \hline     2 - 5^{**} \\     (0.8 - 2)   \end{array} $	21 (8.4)	7	Make first application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.
	Fruit Rot, Phomopsis Twig Blight	1 - 5 (0.4 - 2) 2 - 5** (0.8 - 2)	21 (8.4)	7	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14-day intervals if needed before blooms open.
Cranberry	Fruit Rot	4 - 5 (1.6 - 2)	31.5 (12.6)	7	Make first application in late bloom. Apply one or two additional applications at 10 to 14-day intervals if needed depending on disease severity.
	Rose Bloom	4 - 5 (1.6 - 2)	31.5 (12.6)	7	Apply three sprays on 7 to 14-day schedule if needed as soon as symptoms are observed.
	Bacterial Stem Canker	4 <b>-</b> 5 (1.6 - 2)	31.5 (12.6)	7	Apply post-harvest and again in spring at bud swell. Apply one or two additional applications at 7 to 14-day intervals if needed depending on disease severity.
	Tip Blight (Monilinia), Red Leaf Spot, Stem and Leaf Blight	4 - 5 (1.6 - 2)	31.5 (12.6)	7	Apply delayed dormant spray in the spring. Repeat at 10 to 14-day intervals if needed through pre-bloom.
	opper Equivalen on rates for use	t: 40% only in California			

Disease Anthracnose, Leaf Spot	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cutacre</i> )* 6 (2.4)	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )* 40 (16)	Minimum Retreatment Interval (days) 10	Comments Make initial application after first leaves have expanded. Continue on a 10
Leaf Spot	6	40	10	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.
Leaf & Cane Spot, Purple Blotch, Anthracnose, Yellow Rust	2 (0.8)	25 (10)	7	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. <b>NOTE:</b> Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Leaf & Cane Spot, Purple Blotch, Anthracnose, Yellow Rust, Pseudomonas Blight	2 - 4 (0.8 - 1.6)	25 (10)	7	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Leaf Spot, Leaf Blight, Angular Leaf Spot Xanthomonas) Leaf Scorch, Downy Mildew	1 - 3 (0.4 - 1.2)	15 (6)	7	Begin applications when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease development. <b>NOTE:</b> Discontinue applications if signs of crop injury appear.
E / Y E E E E E E E E E E E E E E E E E	Jotch, Anthraenose, Anthraenose, Cellow Rust Leaf & Cane Spot, Purple Blotch, Anthraenose, Cellow Rust, Seudomonas Blight .eaf Spot, .eaf Blight, Angular Leaf Spot Kanthomonas) .eaf Scorch, Downy Mildew	Slotch, Anthracnose, / ellow Rust spot, Purple Slotch, Anthracnose, / ellow Rust, Secudomonas Blight .eaf Spot, .eaf Spot, .eaf Scorch, Downy Slotch, 1 - 3 (0.4 - 1.2) (0.4 - 1.2) Spot Yanthomonas) .eaf Scorch, Downy	Anthracnose, / ellow Rust Leaf & Cane Spot, Purple Jotch, Anthracnose, / ellow Rust, >seudomonas Blight .eaf Spot, .eaf Spot,	Anthraenose, / ellow Rust Leaf & Cane spot, Purple Jotch, Anthraenose, / ellow Rust, sead Spot, eaf Bight, Angular Leaf / pot Xanthomonas) eaf Spot, eaf Spot, Vanthraenose, / (0.4 - 1.2) / (6)

			TREE CROI	PS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments
Almond	Blossom Brown Rot, Coryneum Blight (spring)	3.5 (1.4)	45 (18)	5	Apply during early bloom. Do not apply after full bloom or injury may occur.
	Dormant: Coryneum Blight, Bacterial Blast ( <i>Pseudomonas</i> ), Bacterial Canker	$3 - 20 (1.2 - 8) 6 - 16^{**} (2.4 - 6.4)$	45 (18)	7	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be added.
	Bacterial blast (Pseudomonas) (spring)	3.5 (1.4)	45 (18)	5	For bacterial blast control in sprinkler irrigated orchards or where disease is severe, apply post-bloom at 2-week intervals if needed or just before sprinkling. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
Apple	Fall and Late Dormant: Anthracnose, European Canker (Nectria), Blossom Blast, Shoot Blast (Pseudomonas)	4 - 15 (1.6 - 6) 10 - 15** (4 - 6)	40 (16)	Only one application permitted per year.	Apply before fall rains. Use the higher rates when conditions favor disease development. <b>NOTE:</b> Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Bloom and Growing Season: Fire Blight	1.5 - 3.5 (0.6 - 1.4)	40 (16)	5	Extended spray schedule where fruit finish is not a concern: Continue applications may be made at 5 to 7-day intervals if needed between 1/2 inch green-tip and first cover spray.
	Copper Equivale ation rates for use		nia	I	1

			TREE CROI	PS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments
Apple	Bloom and Growing Season: Apple Scab	1 (0.4)	40 (16)	5	NOTE: 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 VITRA 40 DF may reduce crop injury.
	Between Silver- tip and Green- tip: Fire Blight, Apple Scab (spring)	5 - 15 (2 - 6)	40 (16)	Only one application permitted per year.	Make application between silver-tip and green-tip. Apply as a full cover spray for early season disease suppression. <b>NOTE:</b> Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Crown or Collar Rot <del>i</del>	1 (0.4)	40 (16)	5	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. <b>NOTE:</b> Do not use if soil pH is below 5.5 since copper toxicity may result.
	Bitter Rot, Black Spot, Blotch, Powdery Mildew	1 - 2 (0.4 - 0.8)	40 (16)	5	Begin applications at petal fall and repeat through fourth cover spray. The addition of 3 to 5 lbs hydrated lime per 100 gallons may reduce crop injury.
	Bullseye Rot	5 (2)	40 (16)	365	Use 5 lbs VITRA 40 DF plus sprayable oil per 100 gallons water. Make applications after harvest.

			TREE CROI	PS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year	Minimum Retreatment Interval (days)	Comments
Apple‡	Sooty Blotch	1.5 (0.6)	40 (16)	5	Use 1.5 lbs VITRA 40 DF plus 2 1/2 lbs hydrated lime per 100 gallons. Apply during late cover sprays. When conditions indicate the potential for increased copper injury, add additional lime.
Apricot	Dormant: Bacterial Blast (Pseudomonas) Bacterial canker, Coryneum Blight (Shot Hole)	3 - 20 (1.2 - 8) 6 - 16** (2.4 - 6.4)	45 (18)	7	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be added.
	Blossom Brown Rot, Coryneum Blight (Shot Hole) (spring)	3.5 (1.4)	45 (18)	5	Apply during early bloom. Do not apply after full bloom or injury may occur.
Avocado	Anthracnose, Blotch, Scab	3 - 7.5 (1.2 - 3) 6 - 7.5** (2.4 - 3)	47.2 (18.88)	14	Apply when bloom buds begin to swell and continue application at 14-30-day intervals for five to six applications. Use the higher rates when conditions favor disease development.
Banana	Sigatoka (Black and Yellow)	2 (0.8)	47.2 (18.88)	7	Apply by air in 3 gallons of water. If needed, agricultural- type spray oil may be added. Apply on a 7-14-day schedule throughout the wet season. Apply at 21-day intervals during dry periods.
* Metallic	use in California Copper Equivale ation rates for use		nia		

			TREE CROI	PS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Banana	Black Pitting	2.5 (1)	47.2 (18.88)	7	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.
Cacao	Black Pod	1 - 5.5 (0.4 - 2.2)	39.37 (15.75)	14	Begin applications at the start of the rainy season and continue while infection conditions persist. Apply 1 to 5.5 pounds at 14 to 21-day intervals if needed depending on disease severity. For drier areas, make two to four applications using 4.5 to 5.5 pounds per acre according to disease incidence and planting density.

			TREE CR	OPS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
	Dormant: Bacterial blast (Pseudomonas) Coryneum Blight, Bacterial Canker	3 - 20 (1.2 - 8) 6 - 16** (2.4 - 6.4)	45 (18)	7	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be added. Where disease is severe, an additional application shortly after harvest may be required.
	Blossom Brown Rot, Coryneum Blight (Shot Hole) (spring)	3.5 (1.4)	45 (18)	5	Apply during early bloom. Do not apply after full bloom or injury may occur.
	Cherry Leaf Spot (Sour Cherries Only)	3.5 (1.4)	45 (18)	5	Apply at petal fall as well as 1 to 2 times after petal fall. Do not apply to sweet cherry or the English Morello variety as severe injury will result. The addition of 1 to 3 pounds of hydrated lime per 2 pound of VITRA 40 DF may reduce crop injury. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post-bloom applications.
		quivalent: 40% r use only in Ca	alifornia		

			TREE CR	OPS	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Coffee	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium salmonicolor)	2 (0.8)	31.5 (12.6)	14	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.
	Coffee Berry Disease (Colletotrichum coffeanum)	2-5 (0.8-2) 4-5** (1.6-2)	31.5 (12.6)	14	Apply first spray after flowering and before onset of long rains and then at 14 to 28-day intervals if needed until picking. Use the higher rates when conditions favor disease.
	Bacterial Blight (Pseudomonas syringae)	2 - 5 (0.8 - 2) 4 - 5** (1.6 - 2)	31.5 (12.6)	14	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21-day intervals if needed. The critical time of spraying to control this disease is just before, during and after flowering(s), especially who coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	$   \begin{array}{r}     1 - 5 \\     (0.4 - 2) \\     \hline     2 - 4^{**} \\     (0.8 - 1.6)   \end{array} $	31.5 (12.6)	14	Apply before the onset of rain and then at 14-day intervals while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
	allic Copper Ed lication rates f	quivalent: 40% or use only in C	alifornia	1	

			TREE CROPS		
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Filbert (Permitted in the states of Washington and Oregon only)		5.5 - 15 (2.2 - 6)	60 (24)	14	Apply as a post-harve; spray. In seasons of heav rainfall, apply a second spray when three-fourths of th leaves have dropped. Use th higher rates when rainfall i heavy and disease pressure i high. If needed, agricultural type spray oil may be addec
	Eastern Filbert Blight	15 (6)	60 (24)	14	Apply as a dilute spray i adequate water for thoroug coverage. Make application starting at bud swell to bu break and continue at 14 da intervals if needed until earl May. Thorough coverage i essential. If needec agricultural-type spray o may be added.
Mango	Anthracnose	6.5 (2.6)	120 (48)	7	Apply 7 days after fruit so until harvest.

			TREE CROPS		
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Olive	Peacock Spot, Olive Knot, Anthracnose, Olive Leaf Spot	6 - 8 (2.4 - 3.2)	45 (18)	30	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Peach, Nectarine	Dormant: Leaf Curl, Coryneum Blight (Shot Hole), Bacterial Canker and Blast (Pseudomonas), Bacterial Spot (Xanthomonas)	3 - 20 (1.2 - 8) 6 - 16** (2.4 - 6.4)	45 (18)	7	Make first application before fall rains and a second at lat dormant. For peach leaf curl late dormant applicatior must be made before lead buds swell. Use the higher rates when rainfall is heavy and disease pressure is high If needed, agricultural-type spray oil may be added.
	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl (spring)	3.5 (1.4)	45 (18)	5	Full cover spray at pink bud.
	Bacterial Spot	1 (0.4)	45 (18)	5	Post-bloom application applied at first and seconc cover sprays. NOTE: Do no spray 3 weeks prior to harvest. Use only directed rates. Spotting of leaves and defoliation may occur from use in cover sprays.

			TREE CROPS	3	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Pear	Fire Blight	1 (0.4)	40 (16)	5	Apply at 5-day intervals throughout the bloom period. NOTE: Russetting may occur in copper sensitive varietics. Excessive dosages may cause fruit russet on any variety.
	Dormant: Blossom Blast ( <i>Pseudomonas</i> )	4 - 15 (1.6 - 6) 10 - 15** (4 - 6)	40 (16)	Only one application permitted per year.	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rate when disease pressure is high or when conditions favor disease development.
Pecan	Shuck and Kernel Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	$   \begin{array}{r}     1 - 5 \\     (0.4 - 2)   \end{array}   $ $   \begin{array}{r}     2.5 - 5^{**} \\     (1 - 2)   \end{array} $	15.5 (6.2)	14	Apply in sufficient water for good coverage at 2 to 4-week intervals starting at Kernel growth and continuing until shucks open. Use the higher rate and shorter intervals if frequent rainfall occurs.
	Ball Moss	2 - 5 (0.8 - 2) 3 - 5** (1.2 - 2)	15.5 (6.2)	365	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. A second application may be required after 12 months. <b>NOTE:</b> VITRA 40 DF may be injurious to ornamentals grown under Pecan. 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.

\*\* Application rates for use only in California

			TREE CROPS		
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Pistachio	Botrytis Blight, Botryosphaeria Panicle and Shoot Blight, Septoria Leaf Blight, Late Blight (Alternaria alternata)	1.5 - 5 (0.6 - 2) 2 - 5** (0.8 - 2)	21 (8.4)	14	Make initial application at bud swell and repeat on a 14 to 28-day schedule. If disease conditions are severe, use the higher rates and shorter spray intervals.
Plum, Prune	Dormant: Bacterial Blast (Pseudomonas) Bacterial canker, Coryneum Blight (Shot Hole)	3 - 20 (1.2 - 8) 6 - 16** (2.4 - 6.4)	45 (18)	7	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease development. If needed, agricultural-type spray oil may be added.
	Blossom Brown Rot, Coryneum Blight (Shot Hole) (spring)	3.5 (1.4)	45 (18)	5	Apply during early bloom. Do not apply after full bloom or injury may occur.

Knot $(0.6 - 1.4)$ $(18)$ swell up to early bloom for early season diseason suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high NOTE: To avoid plant injury, do not use after full bloom.Quince Bight, BlossomFire1405Apply at 5-day intervals throughout the bloom period. Apply in adequate water for through coverage.Walnut Blight, $(1.2 - 4)$ 3 - 10637Apply first spray at early pre- bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves, and nutlets is essential for effective control NOTE: Adequate when copper tolerant species of tolerant species of				TREE CRO	PS	
Knot $(0.6 - 1.4)$ $(18)$ swell up to early bloom for early season disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high NOTE: To avoid plant injury. do not use after full bloom.QuinceFire1405Apply at 5-day intervals throughout the bloom period Apply in adequate water for thorough coverage.WalnutWalnut3 - 10637Apply first spray at early pre- bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves, and nutlets is essential for effective control NOTE: Adquate wonto paperia.	Crop	Disease	Rate (lbs product/acre) ( <i>lbs metallic</i>	Application per Year (lbs/acre) ( <i>lbs metallic</i>	Retreatment Interval	Comments
Quince Blight, Blossom Blast     1     40     5     Apply at 5-day intervals throughout the bloom period. Apply in adequate water for thorough coverage.       Walnut Blight     3 - 10     63     7     Apply first spray at early pre- bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves, and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of Xanthomonas bacteria are present.	Plum		(0.6 - 1.4) 3 - 3.5**		5	suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury,
Walnut       3 - 10       63       7       Apply first spray at early preblom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves, and nutlets is essential for effective control may not be obtained when copper tolerant species of Xanthomonas bacteria are present.	Quince	Blight, Blossom			5	Apply at 5-day intervals throughout the bloom period. Apply in adequate water for
* Metallic Copper Equivalent: 40%	Walnut		(1.2 - 4) 6 - 8**		7	Apply first spray at early pre- bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves, and nutlets is essential for effective control. <b>NOTE:</b> Adequate control may not be obtained when copper tolerant species of Xanthomonas bacteria are
** Application rates for use only in California				Comeio	•	

			VEGETABLES		
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Beans (Dry, Green)	Bacterial Blight, Halo Blight, Common Blight, Brown Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew	1 - 1.5 (0.4 - 0.6)	11.8 (4.72)	7	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.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot, Downy Mildew	2 - 3 (0.8 - 1.2)	19.6 (7.84)	10	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 development.
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot, Downy Mildew ic Copper Equiva	2 (0.8)	12.5 (5)	7	Begin applications when disease first threatens and repeat at 7 to 14-day intervals if needed depending on disease severity.

		VI	EGETABLES		
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments
Celery, Celeriac	Cercospora Early Blight, Septoria Late Blight, Bacterial Blight, Downy Mildew	2 (0.8)	13.2 (5.28)	7	Begin applications as soon as plants are first established in the field, repeating at 7-day intervals depending on disease severity and environmental conditions.
Crucifers (Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Greens (Collard, Mustard and Turnip))	Black Rot (Xanthomonas), Black Leaf Spot (Alternaria), Downy Mildew (Peronospora)	0.5 - 1 (0.2 - 0.4) 1** (0.4)	6.6 (2.64)	7	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10-day intervals. Use the higher rates when conditions favor disease development. Note: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Downy Mildew, Alternaria Leaf Spot, Angular Leaf Spot, Anthracnose, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (Suppression)	$\begin{array}{c} 0.5 - 2\\ (0.2 - 0.8)\\ \hline 1 - 2^{**}\\ (0.4 - 0.8)\end{array}$	13.1 (5.24)	5	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 development. NOTE: Crop injury may occur from application at higher rates and short at higher rates and short at higher rates and short bigher intervals. Discontinue use if injury occurs.
Eggplant * Metallic Co	Alternaria blight, Anthracnose, Phomopsis	1.5 (0.6)	19.75 <i>(7.9)</i>	7	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10-day intervals if needed depending on disease severity.

	Application	Maximum		
Disease	Rate (lbs product/acre) (lbs metallic Cu/acre)*	Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments
Downy Mildew, Anthracnose, Leaf Spot	1.5 - 2.5 (0.6 - 1)	20 (8)	5	Begin applications when disease symptoms first appear or when conditions favor disease development. Repeat on a 5 to 10-day interval to suppress disease. NOTE: Determine if there is varietal sensitivity prior to use. Slight injury may occur under adverse conditions.
Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	0.5 - 2.5 (0.2 - 1) 0.5 - 1.5** (0.2 - 0.6)	13.1 (5.24)	5	Begin applications when conditions are favorable for disease is nearby. Repeat applications on a 5 to 10- day interval as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.
	Mildew, Anthraenose, Leaf Spot Bacterial Leaf Spot, Leaf Spot, Leaf Spot, Pod Spot, Powdery Mildew	Cu/acre)*           Downy         1.5 - 2.5           Mildew,         (0.6 - 1)           Anthracnose,         0.5 - 2.5           Bacterial         (0.2 - 1)           Leaf Spot,         0.0.5 - 1.5**	Cu/acre)*         (lbs metallic Cu/acre)*           Downy         1.5 - 2.5         20           Mildew,         (0.6 - 1)         (8)           Anthracnose,         0.5 - 2.5         (3)           Leaf Spot         (0.2 - 1)         (5.24)           Leaf Spot,         (0.2 - 1)         (5.24)           Leaf Spot,         0.5 - 1.5**         (0.2 - 0.6)	$\begin{tabular}{ c c c c c c c } \hline Cu/acre \end{pmatrix}^* & (lbs metallic & (days) \\ \hline Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline Mildew, & (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline Anthracnose, Leaf Spot, Leaf Spot, Powdery \\ \hline Mildew & (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* & (lbs metallic & Cu/acre )^* \\ \hline (lbs metallic & Cu/acre )^* $

			VEGETABL	ES	
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments
Onion, Garlic, Leek	Bacterial Blight	1.5 (0.6)	15 (6)	7	Begin when plants are 4 to 6 inches high and repeat at 7 to 10-day intervals if needed
	Downy Mildew, Purple Blotch	2 (0.8)	15 (6)	7	depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	1 - 1.5 (0.4 - 0.6)	9.8 (3.92)	7	Begin applications when disease symptoms first appear and repeat at weekly intervals. Use the higher rates when conditions favor disease development.
Pepper	Bacterial Spot, Anthracnose, Cercospora Leaf Spot, Alternaria, Downy Mildew, Early and Late Blight, Phytophthora Blight	1.5 - 1.97 (0.6 - 0.79) 1.97** (0.79)	29.6 (11.84)	3	Begin applications when conditions first favor disease development and repeat at 3 to 10-day intervals if needed depending on disease severity.
Spinach	Anthracnose, Blue Mold, Cercospora Leafspot, White Rust, Downy Mildew	1.5 (0.6)	9.8 (3.92)	7	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10-day intervals if needed. <b>NOTE:</b> Flecking may occur on spinach leaves.
Tomato	Early Blight, Late Blight, Bacterial Speck, Bacterial Canker, Bacterial	Fresh Market 1.5 - 4 (0.6 - 1.6) 1.32** (0.53)	Fresh Market 20 (8)	3	Begin applications when disease first threatens and repeat at 3 to 10-day intervals if needed depending on disease severity.
* Metallic	Spot, Anthracnose, Gray Leaf Mold, Septoria Leaf Spot Copper Equival	Processing 1.3 (0.5) ent: 40%	Processing 43.5 (17.4)	3	
		e only in Califor	nia		

Leaf Spot (0.4) (2.12) are first established in the fiel repeating at 7 to 14.4d intervals if needed dependi on disease severity. Do n exceed four applications p crop. Apply using grour spray equipment at no less the 50 gallons of spray solution p accre. For applications made waterress, production fiel must be drained of water least 24 hours prior to ead application and water must n be reapplied to the field for minimum of 24 hou following each applicatio		VEGETABLES								
Leaf Spot (0.4) (2.12) are first established in the fiel repeating at 7 to 14-di intervals if needed dependit on disease severity. Do n exceed four applications p crop. Apply using grout spray equipment at no less tha 50 gallons of spray solution p acre. For application fiel must be drained of water least 24 hours prior to east application and water must n be reapplied to the field for minimum of 24 hour following each applicatio	Сгор	Disease	Rate (lbs product/acre) ( <i>lbs metallic</i>	Application per Year (lbs/acre) ( <i>lbs metallic</i>	Retreatment Interval	Comments				
		Leaf Spot			7	following each application. Copper must not be applied to watercress during the aquatic				

	VINES								
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments				
Grape	Black Rot, Powdery Mildew, Phomopsis, Downy Mildew	$\frac{1-7.5}{(0.4-3)}$ $\frac{2-4^{**}}{(0.8-1.6)}$	50 (20)	3	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease development. <b>NOTE:</b> 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 VITRA 40 DF.				
Нор	Downy Mildew	1 (0.4)	6.6 (2.64)	10	Make crown treatment after pruning, but before training. After training, additional treatments are needed at about 10-day intervals. NOTE: Discontinue use two weeks before harvest.				
Kiwi	Pseudomonas syringae, Erwinia herbicola, Pseudomonas fluorescens	1.5 - 5 (0.6 - 2)	15.75 (6.3)	30	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.				
	lic Copper Equi lication rates fo	ivalent: 40% r use only in Cali	fornia						

	MISCELLANEOUS CROPS								
Crop	Disease	Application Rate (lbs product/acre) (lbs metallic Cu/acre)*	Maximum Application per Year (lbs/acre) (lbs metallic Cu/acre)*	Minimum Retreatment Interval (days)	Comments				
Atemoya	Anthracnose	1.5 - 4 (0.6 - 1.6) 3 - 4** (1.2 - 1.6)	31.5 (12.6)	7	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.				
Carambola	Anthracnose	5 (2)	26.2 (10.48)	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.				
Chives	Downy Mildew	1 (0.4)	6.6 (2.64)	7	Begin applications when plants are established in the field. Repeat applications every 7 to 10 days if needed depending on disease conditions.				
	Copper Equiva tion rates for u	lent: 40% se only in Califor	nia						

	MISCELLANEOUS CROPS								
Crop	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatm ent Interval (days)	Comments				
Dill	Phoma Leaf Spot, Rhizoctonia, Foliage Blight	1.5 (0.6)	9.8 (3.92)	7	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.				
Ginseng	Alternaria Leaf & Stem Blight	1 - 2.5 (0.4 - 1) 2 - 2.5** (0.8 - 1)	13.1 (5.24)	7	Use as a tank mix with 2 pounds "Rovral 50W" in 100 gallons of water. Use in accordance with the most restrictive of label limitations and precautions. Do not exceed any labeled dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Begin VITRA 40 DF- "Rovral" applications as soon as plants have emerged in spring. Applications should 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>NOTE:</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.				
Guava	Anthracnose, Red Algae	3 (1.2)	12.3 (4.92)	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.				
Litchi	Anthracnose	3 (1.2)	12.3 (4.92)	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.				
	c Copper Equi cation rates for	ivalent: 40% r use only in Cal	ifornia						

MISCELLANEOUS CROPS							
Сгор	Disease	Application Rate (lbs product/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments		
Live Oak†	Ball Moss	3 - 5 (1.2 - 2)	21 (8.4)	365	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. A second application may be required after 12 months. <b>NOTE:</b> VITRA 40 DF may be injurious to ornamentals grown under Live Oak. 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.		
Macadamia	Anthracnose	2 - 5.5 (0.8 - 2.2) 3 - 5.5** (1.2 - 2.2)	23.6 (9.44)	7	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease pressure.		
	Phytophthora Blight (P.capsici), Raceme Blight (Botrytis cinerea)	1 - 5.5 (0.4 - 2.2) 4 - 5.5** (1.6 - 2.2)	23.6 (9.44)	7	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease development.		
* Metallic C	e in California Copper Equivaler ion rates for use	nt: 40% only in California					

	MISCELLANEOUS CROPS							
Crop	Disease	Application Rate (lbs product/acre) (lbs metallic Cu/acre)*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments			
Mamey Sapote	Anthracnose, Algal Leaf Spot	2 - 5 (0.8 - 2) 4 - 5** (1.6 - 2)	21 (8.4)	14	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.			
Papaya	Anthracnose	1.5 - 6.5 (0.6 - 2.6) 3 - 6.5** (1.2 - 2.6)	53 (21.2)	7	Apply before disease appears. Apply at 7 to 14-day intervals if needed. The addition of an approved spreader is desirable. Use the higher rates when conditions favor disease development.			
Parsley	Bacterial Blight (Pseudomonas sp.)	2.5 (1)	5 (2)	10	Begin applications when plants are first established in the field and repeat at 10-day intervals if needed depending on disease severity and environmental conditions.			
	Copper Equivaler ion rates for use	nt: 40% only in California						

	MISCELLANEOUS CROPS								
Сгор	Disease	Application Rate (lbs product/acre) (lbs metallic Cu/acre)*	Maximum Application per Year (lbs/acre) ( <i>lbs metallic</i> <i>Cu/acre</i> )*	Minimum Retreatment Interval (days)	Comments				
Passion Fruit	Anthracnose	2 - 5.5 (0.8 - 2.2) 4 - 5.5** (1.6 - 2.2)	23.6 (9.44)	7	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 when conditions favor disease development.				
Sugar Apple (Annona)	Anthracnose	7.5 (3)	31.5 (12.6)	7	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage.				
	Anthracnose	$   \begin{array}{r}     1 - 5 \\     (0.4 - 2)   \end{array}   $ $   \begin{array}{r}     2 - 3^{**} \\     (0.8 - 1.2)   \end{array} $	50 (20)	7	Apply as a full cover spray in 100 gallons of water or sufficient volume for thorough coverage. Make first application at bud crack and second application 7 to 10 days later at 10% leaf expansion. Use the higher rates when conditions favor disease development.				
	Copper Equivation rates for	alent: 40% use only in Califor	nia						

#### CONFIERS

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

For control of foliar diseases, apply VITRA 40 DF as a thorough cover spray at rates ranging from 3-5 pounds per acre (1.2-2 pounds of metallic copper per acre). Begin applications in the spring at the initiation of new growth and repeat at 2 to 4-week 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 50 pounds (20 pounds of metallic copper) per acre.

Minimum Retreatment Interval 7 days.

VITRA 40 DF is recommended for use on the listed conifers for control of the following diseases:

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 12-20 pounds of VITRA 40 DF (4.8-8 pounds of metallic copper) 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.

NOTE: Do not buffer or combine with emulsifiable concentrate insecticides.

### GREENHOUSE AND SHADEHOUSE CROPS

VITRA 40 DF 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 VITRA 40 DF can be used safely on all greenhouse and shadehouse grown crops. Consequently, injury arising from the use of VITRA 40 DF on these types of greenhouse and shadehouse crops is the responsibility of the user. The user should determine if VITRA 40 DF can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e., foliage, fruit, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply VITRA 40 DF according to specific rates given for those crops in pounds per acre. VITRA 40 DF should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat at 7 to 14-day intervals; use shorter spray intervals during periods when severe disease conditions persist. For maximum yearly rates per acre, refer to the crop specific directions. NOTE: Phytotoxicity may occur on young tender flush when VITRA 40 DF is applied to citrus seedlings grown in greenhouses or shadehouses.

Blight, Anthracnose, Phomopsis         (0.2)         (2.94)         prior to dev of disease s Repeat spra 10-day depending c severity.           Peppert         Bacterial         0.5         11.02         3         Begin ap when condi favor developmen repeat at 3 intervals co on disease s           Cucumber         Angular         0.5         4.90         5         Apply wee plants begin Use the big           Cucumber         Angular         0.5         4.90         5         Apply wee plants begin Use the big	Сгор	Disease	Application Rate (oz product/1,000ft <sup>2</sup> ) (oz metallic Cu/1,000ft <sup>2</sup> )*	Maximum Application per Year (oz/1,000ft <sup>2</sup> ) (ozs metallic Cu/1,000ft <sup>2</sup> )*	Minimum Retreatment Interval (days)	Comments
Spot         (0.2)         (4.41)         when condition of two or development intervals of on diseases           Cucumber         Angular         0.5         4.90         5         Apply wee plants begin use the big intervals of on disease set.           Downy         0.2)         (1.96)         plants begin use the big intervals of the	Eggplant	Anthracnose,			7	prior to development of disease symptoms. Repeat sprays at 7 to 10-day intervals depending on disease
Leaf Spot, (0.2) (1.96) plants begin Downy Use the hig	Pepperŧ				3	when conditions first
		Leaf Spot, Downy Mildew	(0.2)		5	Apply weekly when plants begin to vine. Use the higher rates when conditions favor disease.

Сгор	Disease	Application Rate (oz product/1,000ft <sup>2</sup> ) (oz metallic Cu/1,000ft <sup>2</sup> )*	Maximum Application per Year (oz/1,000ft <sup>2</sup> ) ( <i>ozs metallic</i> Cu/1,000ft <sup>2</sup> )*	Minimum Retreatment Interval (days)	Comments
Tomato	Early Blight, Late Blight, Bacterial Speck, Bacterial Spot, Anthracnose, Gray Leaf Mold, Septoria Leaf Spot	0.5 (0.2)	15.92 (6.37)	3	Begin applications when disease first threatens and repeat at 3 to 10-day intervals depending on disease severity.
Citrus Non- Bearing Nursery‡	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	1 (0.4)	11.63 (4.65)	7	Begin applications when conditions favor disease development. Repeat at 30-day intervals depending on disease severity.
	se in California Copper Equiva				

### GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation system(s). Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of material to prevent deterioration and maintain legibility for the duration of the posting period. 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". All words shall consist of letters at least 2 ½ inches tall, and all letters and the symbol shall be a color that sharply contrasts with their immediate background. This sign is in addition to any sign posted to comply with the Worker Protection Standard.

#### 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. There shall be a complete physical break (air gap) between the flow 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. See Treatment Instructions, below.

#### SPRINKLER CHEMIGATION:

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 filtered with a system interlock. The system must contain a functional check valve, vacuum relief valve, and low pressure drain approximately 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. This pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the infection 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 filtered with a system interlock.

### TREATMENT INSTRUCTIONS:

Do not apply when wind speed favors drift beyond the area intended for treatment. When mixing, fill nurse tank half full with water. Add VITRA 40 DF 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 is test before mixing a whole tank. Because of the wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in mixtures. VITRA 40 DF should be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Agitation is recommended.

### STORAGE AND DISPOSAL

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

Storage: Store in a cool, secure, dry area in original containers. Keep product dry as product is water soluble. When opening, closing or handling open packages, or pouring product, wear goggles to prevent dusting into eyes. Spilled product should be swept up, used if clean, or disposed of according to the procedures below. Store product in original container. Store pesticide separately to prevent cross-contamination of other pesticides, fertilizers, food and feed.

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

Container Handling: Nonrefillable container. Do not reuse or refill this bag. 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 container in a sanitary landfill or by other procedures approved by state or local authorities. "Aliette" is a registered trademark of Bayer CropScience SA. "Curtec" is a registered trademark of Bei Incorporated "Rovral" is a registered trademark of Bayer CropScience Inc. "Tre-Hold" is a registered trademark of Amvac Chemical Corporation.

#### CONDITIONS OF SALE AND LIMITED WARRANTY

The Directions For Use of this product reflects the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of Industrias Quimicas del Vallés S.A. (IQV, S.A.) or the SELLER. To the extent permitted by law, all such risks shall be assumed by the Buyer.

IQV, S.A. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above.

IQV, S.A. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT PERMITTED BY LAW, IQV, S.A. AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. IQV, S.A. and the SELLER offer this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of IQV, S.A.