

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Teresa Cox Regulatory Product Manager Syngenta Crop Protection, Inc. PO Box 18300 Greensboro, NC 27419-8300

NOV 0 5 2010

Dear Ms. Cox:

SUBJECT: Vangard WG

**EPA Registration Number 100-828** 

Your submission of February 19, 2010 adding chemigation and aerial

application

OPPIN decision number 428848

The amendment referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable provided you make the following changes:

#### Page 3 – Surface and Ground Water Advisory:

Add the sentence: "Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff."

# Pages 6 and 7 – "General" Information, Use Precautions, and Use Instructions headings:

Change the heading "General Information" on page 6 to "Product Information." Change the heading "General Use Precautions" on page 7 to "Product Use Precautions."

Change the heading "General Information" on page 7 to "Application Information." Change the heading "General Use Instructions" on page 7 to "Product Use Instructions."

# Page 7 – "General Information" text:

Change the last sentence from "All applications should be made according to the use directions that follow." to "Make all applications according to the use directions that follow."

Please submit one copy of your final printed labeling before the product is released for shipment. A stamped copy of the label is enclosed for your records.

If you have any questions, please contact Lisa Jones on my team at (703) 308-9424 or jones.lisa@epa.gov.

Sincerely yours,

Shaja B Joyner

Product Manager (20)

Fungicide Branch

Registration Division (7504P)

Enclosure: Stamped label

Occupational/residential exposure assessment dated October 19, 2010 Environmental Fate Effects Division review dated October 26, 2010

GROUP 9 FUNGICIDE

#### Vangard® WG

## **Fungicide**

Active Ingredient:

Total:

100.0%

\*CAS No. 121552-61-2

Vangard WG is a water-dispersible granule.

#### KEEP OUT OF REACH OF CHILDREN.

#### **CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. 100-828

EPA Est.

ACCEPTED with COMMENTS In EPA Letter Dated:

NOV 0 5 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

100-828

Net Weight

	FIRST AID				
<ul> <li>Hold eye open and rinse slowly and gently with water for 15-minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, the continue single and the continue sing</li></ul>					
	continue rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
If on skin	Take off contaminated clothing.				
or clothing	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
	NOTE TO PHYSICIAN				
If ingested, indu	uce emesis or lavage stomach. Treat symptomatically.				
Have the produ	ct container or label with you when calling a poison control center or				
doctor, or going	for treatment.				
	HOT LINE NUMBER				
For 2	For 24 Hour Medical Emergency Assistance (Human or Animal) or				
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident)					
	Call				
	1-800-888-8372				

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco or the toilet. Remove and wash contaminated clothing before reuse.

#### 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 A on an EPA chemical-resistance category selection chart.

Handlers applying this product as a preplant dip to strawberry roots and crowns and workers packaging or preparing treated roots and crowns for shipment must wear:

- Chemical-resistant apron made of any waterproof material
- Elbow-length chemical-resistant gloves made of any waterproof material
- · Chemical-resistant boots made of any waterproof material

# All other applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof materials such as polyethylene or polyvinyl chloride
- Shoes plus socks

### **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Control Statements**

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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Environmental Hazards**

This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate. in bated to to rem, women

#### **Surface and Ground Water Advisory**

This chemical may contaminate water through runoff. This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This chemical 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 chemical. A level, well maintained vegetative buffer strip between areas to which this chemical is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of cyprodinil from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

# **Physical or Chemical Hazards**

Do not use, pour, spill or store near heat or open flame.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

#### 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.

#### 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 12 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### **GENERAL INFORMATION**

Vangard WG is a broad spectrum fungicide which controls certain diseases in fruits, herbs, nuts and vegetables.

#### **GENERAL USE PRECAUTIONS**

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

#### **GENERAL INFORMATION**

Vangard WG fungicide has preventative and systemic properties and is labeled for the control of many important plant diseases. Vangard WG provides excellent disease control of Botrytis, several leaf spots and powdery mildews. Vangard WG is applied as a foliar spray and can be used in block, alternating spray, or tank-mix programs with other crop protection products. All applications should be made according to the use directions that follow.

#### **GENERAL USE INSTRUCTIONS**

**Application**: Thorough coverage is necessary to provide good disease control. Make no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

Adjuvants: When an adjuvant is to be used with this product, Syngenta recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if the maximum amount of Vangard WG has been used. If resistant isolates to Group 9 fungicides are present, efficacy can be reduced for certain diseases. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, with highly susceptible varieties, or when environmental conditions are conducive to disease.

Integrated Pest Management (IPM): Integrate Vangard WG into an overall disease and pest management strategy whenever the use of a fungicide is required. Follow cultural practices known to reduce disease. Consult your local agricultural authorities for additional IPM strategies established for your area. Vangard WG may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

#### RESISTANCE MANAGEMENT

# GROUP 9 FUNGICIDE

Vangard WG contains the fungicide cyprodinil, an anilinopyrimidine in Group 9. A disease management program that includes alternation or tank mixes between Vangard WG and other labeled fungicides that have a different mode of action is essential to prevent pathogen populations from developing resistance to Vangard WG. Do not alternate or tank mix this product with fungicides to which resistance has already developed. Vangard WG may be applied in an alternating or blocking program.

As part of a resistance management strategy:

- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides satisfactory disease control when used alone at the mixture rate.

**Crop Tolerance:** Plant tolerance has been found to be acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application. See precautions regarding apple phytotoxicity.

Spray Drift Management: To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. More information on managing spray drift can be found on the SYNGENTA CROP PROTECTION website under Stewardship (<a href="http://www.syngentacropprotection-us.com/enviro/driftmanagement/index.asp?nav=drift\_management">http://www.syngentacropprotection-us.com/enviro/driftmanagement/index.asp?nav=drift\_management</a>).

#### **Rotational Crop Restrictions**

Do not plant any crop which is not registered for use with cyprodinil for a period of 30 days, unless a shorter interval is specified on the following list.

Rotation Crop	Planting Time From Last Vangard WG Application
Beans (dried and succulent except cowpeas)* Berries (bushberries, caneberries, juneberry, lingonberry, salal)* Brassica (Cole) Leafy Vegetables* Cucurbits* Herbs (fresh and dried)* Leafy Vegetables (except Brassica and Spinach)* Leaves of Root and Tuber Vegetables* Onions (dry bulb, including garlic, and green) Root Vegetables except Sugar beet* Strawberries Tomatoes and tomatillos Watercress	0 days
Crops Not Intended for Food or Feed  All Other Crops Intended for Food or Feed	30 days

<sup>\*</sup>See the complete crop lists for these groups in CROP USE DIRECTIONS - BERRIES, FRUITS, HERBS AND VEGETABLES section later in this label.

In annual crops, where multiple crops can be grown per year (double/triple cropping), do not apply more than 1.3 lb. a.i. per acre per year to an individual plot of land.

#### **APPLICATION AND MIXING PROCEDURES**

#### Mixing

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Vigorous agitation is necessary for proper dispersal of the product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area. Buffer the spray solution to a pH of 5.0-7.0 when tank mixed with Rovral® Fungicide.

Vangard WG Alone: Add ½ of the required amount of water to the mix tank. With the agitator running, add the Vangard WG to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Vangard WG has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Vangard WG + Tank Mixtures: Add ½ of the required amount of water to the mix tank. Start the agitator running before adding any tank-mix partners. In general, add tank-mix partners in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as Vangard WG, liquid flowables, liquids, and emulsifiable concentrates. Always allow each tank-mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been applied.

When using Vangard WG in tank mixtures, add all products in water-soluble packaging to the tank before any other tank-mix partner, including Vangard WG. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank.

If using Vangard WG in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. Do not exceed label dosage rates, and follow the most restrictive label precautions and limitations. Vangard WG must not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

**Additives:** Vangard WG is compatible with most crop protection additives. Do not use X-77® with Vangard WG for bloom sprays applied to stone fruits, almonds and pistachios.

#### Application

For best disease control, apply Vangard WG in sufficient water to provide thorough and uniform coverage. Recommended minimum ground spray volumes are 50 gals./A for tree crops, 30 gals./A for vine crops, and 15 gals./A for field and vegetable crops. For aerial application, see recommendations in the specific crop directions for use.

To prevent spray drift, do not apply when conditions favor drift beyond the target area. Spray overlap may cause crop injury.

For air assisted or air blast sprayers, move spray droplets into the canopy using a forced air stream. Set up the fan to deliver only enough air volume to penetrate the canopy and provide good coverage. Adjust deflectors or other aiming devices to direct spray only to the target area.

Equip sprayers with nozzles that provide accurate and uniform application. Check whirl plates and nozzle discs for wear and replace as necessary. Calibrate sprayer before use.

Use a pump with capacity to maintain the correct rated pressure for the nozzles selected. Maintain sufficient agitation to keep the spray mixture in suspension. Use a jet agitator, liquid sparge tube, or mechanical paddle for agitation. Do not air sparge.

Use screens to prevent nozzles from clogging. Use 50-mesh or coarser screens placed after the tank and before the nozzles. Check nozzle manufacturer's recommendations.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH PONDS.

- Do not apply within 75 ft. of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries.
- Shut off the sprayer when row ends.
- Do not cultivate within 10 ft. of aquatic areas in order to allow a vegetative filter strip.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.
- For perennial crops such as tree crops and grapes:
  - > For all plantings within 150 ft. of bodies of water as described above, spray crops from outside the planting away from the bodies of water.
  - > Spray last three rows windward of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas. Adjust or turn off top nozzles to prevent spray going over the tops of trees. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row or passing tree gaps in the rows.

#### **Aerial Spray Recommendations and Precautions**

Avoid applications under conditions when uniform coverage cannot be obtained or when excessive drift may occur.

Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.

- Use only on crops where aerial applications are indicated.
- Do not apply by air within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.
- For aerial applications, mount the spray boom on the aircraft so as to minimize the drift caused by wing tip vortices. Use the minimum practical boom length, which must not exceed 75% of wing span or rotor diameter.
- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orientating nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Release spray at the lowest height consistent with pest control and flight safety. Do not make applications more than 10 feet above the crop canopy.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic area. Avoid spraying during conditions of low humidity and/or high temperatures.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.

# **Application Through Irrigation Systems (Chemigation)**

- Use only on crops for which chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. 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.
- Apply in 0.125-0.25 inches/A of water. Excessive water may reduce efficacy.
- 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.

**Note:** Do not inject Vangard WG at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part Vangard WG. Vangard WG is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton®, Buna-N, Neoprene, or PVC seals.

#### **Operating Instructions**

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended.

# **Center Pivot Irrigation Equipment**

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Vangard WG through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Vangard WG through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Vangard WG required to treat the area covered by the irrigation system.
- Add the required amount of Vangard WG and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Vangard WG solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Vangard WG solution has cleared the sprinkler head.

#### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval. When applying Vangard WG through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Vangard WG required to treat the area covered by the irrigation system.
- Add the required amount of Vangard WG into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Vangard WG solution has cleared the last sprinkler head.

#### SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

- 1. 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 4. 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.
- 5. 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.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

# **CROP USE DIRECTIONS – TREES, NUTS AND VINES**

		Rate			
Crop	Disease	oz./Acre	Remarks		
<u>Crop</u> Almonds	Brown rot blossom blight (Monilinia spp.)  Suppression: Green fruit rot (Jacket rot) (Botrytis cinerea)  Shot hole (Wilsonomyces carpophilus)	<b>oz./Acre</b> 5 - 10	Remarks  Apply Vangard WG at 5-10% bloom. Additional applications at 50-100% bloom and petal fall may be necessary.  When used for control of brown rot blossom blight, Vangard WG will provide suppression of shot hole.  For broad spectrum disease control in tank mixture, apply Vangard WG at a minimum rate of 5 oz. in tank mixtures with other fungicides registered for use on almonds.  For suppression of green fruit rot, apply		
	coverage is essentia gallons/A spray volui	Disease suppression for almond disease refers to erratic control from fair to go consistent control at a level below the obtained with products registered for control.  pplication Instructions: Application may be made by ground or air. Goverage is essential for good disease control. Use a minimum of 20 allons/A spray volume by air. Make no more than two applications by alake additional applications by ground.			

- Make no more than two applications by air.
- Do not apply more than 30 oz./A of Vangard WG (1.4 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 60 days of harvest (60 day PHI).

		Rate			
Crop	Disease	oz./Acre	Remarks		
Citrus	Alternaria Stem	5.5 - 7	Make one application near harvest to		
	End Rot		prevent post harvest fruit rot. The		
Lemon	(A. citri)		application may be made up to and		
Lime			including the day of harvest.		
	Anthracnose				
	(Colletotrichum		·		
	gloeosporioides)				
			·		
	Blue Mold				
	(Penicillium		·		
	italicum)				
	Green Mold				
	(Penicillium				
	digitatum)				
		ns: Make ar	oplications by ground. Good coverage is		
		Application Instructions: Make applications by ground. Good coverage is essential for good disease control.			
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- Application may be made by ground only.
  Do not apply more than 7 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 0.33 lb. a.i./A of cyprodinil containing products per plot of land per
- May be applied on the day of harvest (0 day PHI).

Cron	Disease	Rate oz./Acre	Remarks
<u>Grop</u> Grapes	Botrytis bunch rot (Botrytis spp.)  Suppression: Powdery mildew (Uncinula necator)	Vangard WG alone 10	Begin applications of Vangard WG at early bloom. Make an additional application at berry touch, veraison, or preharvest, using at least a 7-day spray interval. Botrytis bunch rot is most effectively controlled by ground application, using sufficient water volume to provide thorough coverage. Thorough coverage of bunches is essential.  When used at 10 oz./A, Vangard WG will provide significant suppression (approximately 60% control) of powdery mildew.
		Vangard WG tank mixtures	Apply Vangard WG in tank mixture with the recommended rate of another fungicide registered on grapes for control of Botrytis bunch rot.
	coverage is essentia	l for good dis me by air.  M	ion may be made by ground or air. Good sease control. Use a minimum of 20 ake no more than two applications by air.

- Make no more than two applications by air.
- Do not apply more than 30 oz./A of Vangard WG (1.4 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

Crop	Disease	Rate oz./Acre	Remarks
Kiwi	Botrytis Fruit Rot (Botrytis spp.)	10	Make 1-2 applications on a 7-10 day interval prior to harvest to prevent post harvest fruit rot.
	coverage is essentia	l for good dis me by air.  Mi	on may be made by ground or air. Good ease control. Use a minimum of 20 ake no more than two applications by air. round.

- Make no more than two applications by air.
- Do not apply more than 20 oz. of Vangard WG (0.94 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

Crop	Disease	Rate oz./Acre	Remarks
Pistachios	Botrytis (Botrytis spp.)  Alternaria (Alternaria alternata)	5.5 - 7	Make the first application during early bloom and repeat applications at 14-day intervals if conditions remain favorable for disease development.
	coverage is essentia	l for good dis me by air.  M	on may be made by ground or air. Good ease control. Use a minimum of 20 ake no more than two applications by air. round.

- Make no more than two applications by air.

  Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

		Rate	
Crop	Disease	oz./Acre	Remarks
Pome Fruits	Prebloom	Vangard	For pome fruits except pear, begin
		WG	application at green tip and continue on a
Apples	Scab	alone	7- to 10-day interval. Under severe
Crabapples	(Venturia spp.)		disease pressure, use the shorter interval.
Loquat		5	
Mayhaw	•	Vangard	For scab control utilizing multiple modes of
Pears (see		WG	action, apply Vangard WG in tank mixture
tank mixture		tank	with the recommended rate of a protectant
instructions)		mixtures	or systemic fungicide registered on pome
Quince			fruit. Make applications on a 7- to 10-day
		3 - 5	interval.
	Pink, bloom, post-	Vangard	Apply Vangard WG in tank mix
	bloom	WG	combination with the recommended rate of
		tank	a protectant fungicide. Use of the
	Scab	mixtures	recommended rate of an EBDC fungicide
	(Venturia spp.)		will broaden the disease control spectrum
		3 - 5	to include cedar apple rust. The addition
			of the recommended rate of sulfur or a
			sterol inhibitor (SI) fungicide to this tank
			mix will broaden the disease control
		<u> </u>	spectrum to include powdery mildew.
	Application Instructions: Application may be made by ground or air. Good		
	coverage is essential for good disease control. Use a minimum of 20		
	gallons/A spray volume by air. Make no more than two applications by		
Specific Use Pe	Make additional appl	ications by g	round.

- When applying to pears, apply Vangard WG in tank mix only.
- Make no more than two applications by air.
- Do not apply more than 30 oz./A of Vangard WG (1.4 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 72 days of harvest (72 day PHI).

		Rate	
Crop	Disease	oz./Acre	Remarks
Stone Fruits	Brown rot blossom	5	Begin applications at bloom stage (apricots
(Including all	blight		at red bud, cherries at popcorn, peaches
cultivars and/or	(Monilinia spp.)		and nectarines at pink bud, plums and
hybrids of			prunes at green tip). Make a second
these)			application at full bloom. Use Vangard WG alone or in tank mixture with the
Apricots			recommended rate of another fungicide
Tart cherries			registered for stone fruit.
Nectarines	California only	Vangard	Apply a maximum of 2 applications of
Peaches	,	WG	Vangard WG during the preharvest period
Plums	Fruit brown rot	alone	up through 2 days prior to harvest as
Prunes	(Monilinia spp.)		needed.
	(	10	
		Vangard	Apply Vangard WG in tank mixture with the
		WG	recommended rate of another fungicide
		tank	registered on stone fruit for control of fruit
		mixtures	brown rot.
		5	
	Application Instructio	ns: Applicati	on may be made by ground or air. Good
	coverage is essential	l for good dis	ease control. Use a minimum of 20
	gallons/A spray volur	ne by air.  M	ake no more than two applications by air.
	Make additional applications by ground.		

- Do not apply Vangard WG to sweet cherries.
- Make no more than two applications by air.
- Do not apply more than 30 oz. of Vangard WG (1.4 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 2 days of harvest (2 day PHI).

		Rate		
Crop	Disease	oz./Acre	Remarks	
Tropical Fruits	Botrytis fruit rot	5.5 - 7	Make the first application during early	
	(Botrytis spp.)		bloom and repeat on 7- to 10-day intervals	
Avocado			if conditions remain favorable for disease	
Black sapote	Alternaria fruit rot		development.	
Canistel	(Alternaria spp.)			
Lychee			Resistance Management: After 2	
Longan	Anthracnose		applications of Vangard WG, alternate with	
Mamey sapote	(Colletotrichum		another fungicide with a different mode of	
Mango	spp.)		action for 2 applications.	
Papaya				
Pulasan		·		
Rambutan				
Sapodilla				
Spanish lime Star apple				
Star apple	Application Instruct	lions: Applica	tion may be made by ground or air. Good	
		Application Instructions: Application may be made by ground or air. Good		
	coverage is essential for good disease control. Use a minimum of 20 gallons/A spray volume by air. Make no more than two applications by air.			
	Make additional applications by ground.			
	I wanc additional ap	phoadons by	ground.	

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

# CROP USE DIRECTIONS - BERRIES, FRUITS, HERBS AND VEGETABLES

		Rate	T:
Crop	Disease	oz./Acre	Remarks
Beans (Dried and Succulent except cowpeas)  Chickpea (garbanzo bean) Bean (Lupinus spp.) (grain lupin, sweet lupin, white lupin, white sweet lupin) Bean (Phaseolus spp.) (kidney, lima, mung, navy, pinto, snap, wax) Broad Bean (fava bean) Bean (Vigna spp.) (asparagus, blackeyed	Gray mold (Botrytis cinerea)	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7-day interval if conditions remain favorable for disease development.  Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.
pea)	chemigation. Go minimum of 5 gal applications by ai For chemigation,	od coverage is lons/A spray v r. Make additi apply in 0.1-0.	ation may be made by ground, air, or sessential for good disease control. Use a olume by air. Make no more than two ional applications by ground or chemigation. 25 inches/A of water. Chemigation with decrease in efficacy.

- Make no more than two applications by air.
- Do not apply more 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

		Rate	
Crop	Disease	oz./Acre	Remarks
Berries	Mummy berry	5.5 - 7	Begin applications prior to or at the onset of
(Including all	(Monilinia		disease and repeat applications on a 7- to
cultivars	vacciniicorymbosi)		10-day interval if conditions remain
and/or hybrids			favorable for disease development.
of these)	Anthracnose		
	(Colletotrichum		Resistance Management: After 2
Bushberries	spp.)		applications of Vangard WG, alternate with
Blueberry			another fungicide with a different mode of
Currant	Alternaria fruit rot		action for 2 applications.
Elderberry	(Altemaria		
Gooseberry	tenuissima)		
Huckleberry	Botrytis fruit rot		
Caneberries	(Botryis cinerea)		
Blackberry	(Bollyis Ciriclea)		
Loganberry			
Red and Black			
Raspberry			
Raspocity			
Juneberry		•	
Lingonberry	·		
Salal			
<del>7</del>	Application Instructio	ns: Applica	tion may be made by ground or air. Good
			sease control. Use a minimum of 5 gallons/A
			ore than two applications by air. Make
	additional application	s by ground	l

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

		Rate	
Crop	Disease	oz./Acre	Remarks
Brassica (Cole) Leafy Vegetables (Including all cultivars and/or hybrids of these)  Broccoli Brussels sprouts Cabbage Cabbage, Chinese Cauliflower Collards Kale	Powdery mildew (Erysiphe polygoni)	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7- to 10-day interval if conditions remain favorable for disease development.  Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.
Mustard greens Turnip greens			·
. a.m.p grooms	Application Instructions: Application may be made by ground, air, or chemigation. Good coverage is essential for good disease control. Use a minimum of 10 gallons/A spray volume by air. Make no more than two applications by air. Make additional applications by ground or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with		

excessive water may lead to a decrease in efficacy.

Additional Cole Vegetables: Broccoli, Chinese, Broccoli raab, Cavalo broccolo, Kohlrabi, Mizuna, Mustard spinach, and Rape greens.

- · Make no more than two applications by air.
- Do not use roots of treated turnips for food or feed. Only turnip varieties harvested for their leaves may be treated.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

	Rate					
Crop	Disease	oz./Acre	Remarks			
Cucurbits	Alternaria Leaf	5.5 - 7	Begin applications prior to or at the onset of			
Gucuibits	Blight	0.0 7	disease and repeat applications on a 7-10			
Cantaloupe	(A. cucumerina)		day interval if conditions remain favorable			
Chayote	(* ** *********************************		for disease development.			
Chinese	Alternaria Leaf					
waxgourd	Spot		Resistance Management: After 2			
Cucumber	(A. alternate)		applications of Vangard WG, alternate with			
Gourds			another fungicide with a different mode of			
Honeydew	Gummy Stem		action for 2 applications.			
Momordica	Blight					
spp. (Bitter	(Didymella					
melon,	bryoniae)					
Balsam	D. J. NATA					
appie)	Powdery Mildew					
Muskmelon	(Sphaerotheca fuliginea,					
Watermelon	Erysiphe					
Pumpkin Squash	cichoracearum)					
Zucchini	Cionoraccarani					
Zuccilin						
Including						
cultivars						
and/or hybrids	:					
of these						
	Application Instruc	Application Instructions: Application may be made by ground, air, or				
			essential for good disease control. Use a			
			olume by air. Make no more than two			
			nal applications by ground or chemigation.			
	For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with					
	excessive water may lead to a decrease in efficacy.					

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 1.3 lb. a.i./A of cyprodinil containing products per plot of land per year.
- May be applied up to 1 day before harvest (1 day PHI).

	Τ- · · · · · · · · · · · · · · · · · · ·	D-4-	1	
0	Diagona	Rate	Damada	
Стор	Disease	oz./Acre	Remarks	
Herbs	Alternaria leaf	5.5 - 7	Begin applications prior to or at the onset of	
(Dried and	spot		disease and repeat applications on a 7- to	
fresh)	(Alternaria		10-day interval if conditions remain	
	spp.)		favorable for disease development.	
Basil				
Chive	Botrytis leaf		Resistance Management: After 2	
Coriander,	blight		applications of Vangard WG, alternate with	
leaves	(Botrytis spp.)		another fungicide with a different mode of	
(cilantro)			action for 2 applications.	
Dillweed ´			The second secon	
Lemongrass	,	1		
Parsley				
Rosemary				
Sage				
Tarragon	]			
Thyme				
THYTHE				
See additional				
• • • • • • • • • • • • • • • • • • • •				
crops below:	Application Instructions, Application was to use to be seen to be			
	Application Instructions: Application may be made by ground, air, or			
	chemigation. Good coverage is essential for good disease control. Use a			
	minimum of 10 gallons/A spray volume by air. Make no more than two			
	applications by air. Make additional applications by ground or chemigation.			
·	For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with			

Additional Herbs (dried and fresh): Angelica, Balm, Borage, Burnet, Camomile, Catnip, Chervil (dried leaves), Clary, Costmary, Culantro (leaves), Curry (leaves), Horehound, Hyssop, Lavender, Lovage (leaves), Marigold, Marjoram, Nasturtium, Pennyroyal, Rue, Savory (summer and winter), Sweet bay, Tansy, Wintergreen, Woodruff, and Wormwood.

excessive water may lead to a decrease in efficacy.

- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

		Rate	
Crop	Disease	oz./Acre	Remarks
Leafy	Alternaria leaf	5.5 - 7	Begin applications prior to or at the onset
Vegetables	spot		of disease and repeat applications on a 7-
(except	(Alternaria		to 10-day interval if conditions remain
Brassica and	spp.)		favorable for disease development.
Spinach)	0		Desistance Management AG 0
(Including	Gray mold		Resistance Management: After 2
cultivars and/or	(Botrytis		applications of Vangard WG, alternate with
hybrids of	cinerea)		another fungicide with a different mode of
these)			action for 2 applications.
	Suppression:		
Amaranth	Powdery mildew		
Arugula	(Erysiphe		
Chervil	cichoracearum)		
Chrysanthemum,			
edible			
Corn salad			
Cress			
Dandelion	5		
Dock			
Endive			
(escarole)			
Lettuce, head			
and leaf			
Orach			
Parsley			
Purslane			
Radicchio			
Radioonio	Application Instruc	tions: Applica	ation may be made by ground, air, or
	Application Instructions: Application may be made by ground, air, or chemigation. Good coverage is essential for good disease control. Use a		
			volume by air. Make no more than two
			onal applications by ground or chemigation.
	For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with		
<u> </u>	excessive water may lead to a decrease in efficacy.		

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

		Rate		
Crop	Disease	oz./Acre	Remarks	
Leaves of Root and Tuber Vegetables	Alternaria Leaf Blight (Alternaria dauci)	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7-10 day interval if conditions remain favorable for disease development.	
Carrot Beet, garden Beet, sugar Parsnip Radish (oriental) Rutabaga Sweet Potato Turnip Yam (true) See additional crops below	Powdery Mildew (Erysiphe spp.)		Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.	
Radish			On radish, make no more than two applications per crop.	
	Application Instructions: Application may be made by ground, air, or chemigation. Good coverage is essential for good disease control. Use a minimum of 10 gallons/A spray volume by air. Make no more than two applications by air. Make additional applications by ground or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.			

Additional Leaves of Root and Tuber Vegetables: Burdock (edible), Cassava, Celeriac, Chicory, Dasheen, Salsify (including black and Spanish), Tanier, and Turnip rooted chervil.

- Make no more than two applications by air.
- Radish ONLY do not apply more than 14 oz. per crop or more than 28 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 28 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 1.3 lb. a.i./A of cyprodinil containing products per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).
- Do not allow cattle or other livestock to feed upon the leaves of root vegetables.

		Rate	
Crop	Disease	oz./Acre	Remarks
Onions	Botrytis leaf blight or blast	5.5 - 10	Begin applications prior to or at the onset of disease and repeat applications on a 7-
Dry Bulb Green	(Botrytis spp.)		to10-day interval if conditions remain favorable for disease development.
Onions grown	Purple blotch		·
for seed	(Alternaria		For optimal effect on neck rot, apply on a 7-
	porri)		day schedule at the 10 oz. rate.
Garlic			
	Neck rot (Botrytis spp.)		applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.
	Application Instructions: Application may be made by ground, air, or chemigation. Good coverage is essential for good disease control. Use a		
	1		
	(Botrytis spp.) another fungicide with a different mode of action for 2 applications.  Application Instructions: Application may be made by ground, air, or		

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).

		Rate		
Crop	Disease	oz./Acre	Remarks	
Root Vegetables except Sugar beet	Alternaria Leaf Blight (Alternaria dauci)	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7-10 day interval if conditions remain favorable for disease development.	
Carrot Beet, garden Ginseng Horseradish Parsnip Radish (oriental) Rutabaga Turnip See additional	Powdery Mildew (Erysiphe spp.)		Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.	
crops below			·	
Radish			On radish, make no more than two applications per crop.	
	Application Instructions: Application may be made by ground, air, or			
	chemigation. Good coverage is essential for good disease control. Use a			
	minimum of 5 gallons/A spray volume by air. Make no more than two			
	applications by air. Make additional applications by ground or chemigation.			
	For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with			
	excessive water may lead to a decrease in efficacy.			
Additional Root and Tuber Vegetables: Burdock, edible, Celeriac, Chicory, Salsify (including				

Additional Root and Tuber Vegetables: Burdock, edible, Celeriac, Chicory, Salsify (including black and Spanish), Skirret, Turnip-root parsley, and Turnip rooted chervil.

- Make no more than two applications by air.
- Radish ONLY do not apply more than 14 oz. per crop or more than 28 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 28 oz./A.of Vangard WG per plot of land per year.
- Do not apply more than 1.3 lb. a.i./A of cyprodinil containing products per plot of land per year.
- Do not apply within 7 days of harvest (7 day PHI).
- Do not allow cattle or other livestock to feed upon the leaves of root vegetables.

		Rate			
Crop	Disease	oz./Acre	Remarks		
Strawberries	Gray mold (Botrytis cinerea)  Powdery mildew (Sphaerotheca macularis)  Anthracnose (Colletotrichum	5.5 - 10	Begin application at or before bloom and continue on a 7- to 10-day interval.  Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.		
	spp.)				
	Root and crown anthracnose at planting (Colletotrichum spp.)	2.5-4 oz. per 100 gals. water	Apply as a preplant dip to strawberry roots and crowns at the rate of 2.5 to 4 oz. per 100 gals. of water for suppression of root and crown rot caused by anthracnose. Wash transplants to remove excess soil prior to dipping. This helps to remove adhering spores from the external plant parts. Completely immerse planting stock in dip solution. Dip or expose plants for a minimum of 2 to 5 minutes. DO NOT reuse solution. Dispose of dip solution according to local regulations.  Plant treated plants as quickly as possible. For continued anthracnose control, follow with foliar applications of beginning 2-3 weeks after transplant.		
	Application Instructions: Application may be made by ground, air, or				
	chemigation. Good coverage is essential for good disease control. Use a minimum of 5 gallons/A spray volume by air. Make no more than two applications by air. Make additional applications by ground or chemigation. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with				
	excessive water may lead to a decrease in efficacy.				

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

		Rate		
Crop	Disease	oz./Acre	Remarks	
Tomatoes	Early Blight (Alternaria	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7-10	
Tomatillos	solani)		day interval if conditions remain favorable for disease development.	
	Grey Mold		•	
	(Botrytis		Resistance Management: After 2	
	cinerea)		applications of Vangard WG, alternate with another fungicide with a different mode of	
	Powdery		action for 2 applications.	
	Mildew			
	(Leveillula			
	taurica)			
	Application Instructions: Application may be made by ground, air, or chemigation. Good coverage is essential for good disease control. Use a minimum of 10 gallons/A spray volume by air. Make no more than two			
	applications by air. Make additional applications by ground or chemigation.			
	For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with			
	excessive water may lead to a decrease in efficacy.			

- Make no more than two applications by air.
- Do not apply more than 28 oz./A of Vangard WG per plot of land per year.
- Do not apply more than 1.3 lb. a.i./A of cyprodinil containing products per plot of land per year.
- May be applied on the day of harvest (0 day PHI).
- Do not apply to small tomatoes such as cherry or grape type tomatoes in the greenhouse.

Crop	Disease	Rate oz./Acre	Remarks
Watercress	Cercospora leaf spot (Cercospora spp.)	5.5 - 7	Begin applications prior to or at the onset of disease and repeat applications on a 7- to 10-day interval if conditions remain favorable for disease development.  Resistance Management: After 2 applications of Vangard WG, alternate with another fungicide with a different mode of action for 2 applications.
,	Application Instructions: Application may be made by ground or chemigation. Good coverage is essential for good disease control. F chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.		

- Do not apply more than 28 oz./A of Vangard WG (1.3 lb. a.i./A of cyprodinil) per plot of land per year.
- May be applied on the day of harvest (0 day PHI).

#### STORAGE AND DISPOSAL

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

#### Pesticide Storage

Store in a cool, dry, secure place.

# **Pesticide Disposal**

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

#### Container Handling [Less Than 5 Gallons]

Non-refillable 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling 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.

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