

100-813

10/23/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Larry Zang  
Novartis Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300

OCT 23 2003

Dear Mr. Zang:

SUBJECT: Vanguard WP Fungicide  
EPA Registration Number 100-813  
Your Submission of July 18, 2003

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 that you make the following change:

**Precautionary Statements:**

Change the sentence "Harmful if swallowed or absorbed through skin" to "Harmful if absorbed through skin".

Please submit one copy of your final printed labeling before you release the product for shipment. A stamped copy of the label is enclosed for your records. If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at jones.lisa@epa.gov.

Sincerely,



Mary L. Waller  
Product Manager (21)  
Fungicide Branch  
Registration Division (7505C)

Enclosure: Stamped Label

CONCURRENCES							
SYMBOL ▶	7505C						
SURNAME ▶	Lisa Jones						
DATE ▶	Oct 22, 2003						

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# Vangard™ WP

## Fungicide

For control of certain diseases in almonds, grapes, pome fruit and stone fruit.

### Active Ingredient:

Cyprodinil: (4-cyclopropyl-6-methyl-N-phenyl-pyrimidinamine) (CAS #121552-61-2) ..... 75.0%

Other Ingredients: ..... 25.0%

Total: ..... 100.0%

Vangard WP is a wettable powder packaged in a water-soluble bag.

This outer protective container contains Vangard WP in an inner water-soluble bag. Entire inner bag and contents dissolve in water. After opening outer container, immediately dump entire unopened inner bag into partially filled sprayer or mix tank. Do not handle the soluble bag or expose it to moisture, since this may cause rupturing.

**KEEP OUT OF REACH OF CHILDREN.**

### CAUTION

See additional precautionary statements and directions for use on outer container.

EPA Reg. No. 100-813  
EPA Est.

Made in Switzerland

SCP 813A-L1

5 ounces  
Net Weight

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:**

**OCT 23 2003**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.

**100-813**

<b>FIRST AID</b>	
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <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 eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p><b>HOT LINE NUMBER</b>            For 24 Hour Medical Emergency Assistance (Human or Animal) or            Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),            Call  <b>1-800-888-8372</b></p>	

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**PRECAUTIONARY STATEMENTS**

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**Hazards to Humans and Domestic Animals**

**CAUTION**

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

**Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

### **Physical or Chemical Hazards**

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



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## 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

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

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### STORAGE AND DISPOSAL

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

**Pesticide Storage**

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer packaging carefully to avoid breakage of inner soluble bag.

**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 Disposal**

Do not reuse outer container. Dispose of empty container in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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**GENERAL INFORMATION**

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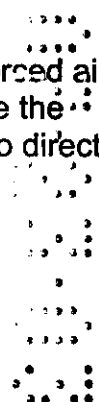
Vanguard WP is a broad spectrum fungicide for the control of certain diseases in almonds, grapes, pome fruit, and stone fruit.

**Spray Equipment**

Thorough coverage is necessary to provide good disease control. Applications using sufficient water volume to provide thorough and uniform coverage generally provide the most effective disease control. For ground application equipment, a minimum of 100 gals/A is recommended.

To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap, as crop injury may occur.

Air assisted or air blast sprayers move spray droplets into the canopy using a forced air stream. The fan should be set up 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 mixture in suspension. Use a jet agitator, liquid sparge tube, or mechanical paddle for agitation. Do not air sparge.

It is suggested that screens be used to prevent nozzles from clogging. Screens placed after the tank and before the nozzles should be 50-mesh or coarser. 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.

### MIXING PROCEDURES

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. The spray solution should be buffered to a pH of 5.0-7.0 when tank mixed with Rovral® Fungicide.

*Precaution: Water-soluble bags of Vanguard WP must be dissolved completely and the product must be uniformly dispersed in the mix water before any other tank mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution. Boron, especially in the form of a micronutrient additive, such as Solubor®, etc., may prevent water-soluble bags from dissolving.*

**Vanguard WP Alone:** Add ½ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Vanguard WP into the tank **all at once**. Continue agitation while adding the remainder of the water and during application to maintain a uniform suspension until all of the spray solution has been applied. Begin application of the spray solution after the soluble bags have dissolved, and the material has completely dispersed into the mix water.

**Vanguard WP + Tank Mixtures:** Add ½ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Vanguard WP, and any other products packaged in water soluble bags, into the tank **all at once**. After the water-soluble bags have dissolved and the products have dispersed uniformly into the mix water, continue to fill the tank with water. Then add the desired amount of other products recommended for tank mixture. In general tank mix



partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates. Allow each product to fully disperse before adding any other tank mix partners. Maintain rolling agitation while adding the remainder of the water and throughout the entire mixing and spraying process to maintain a uniform suspension.

If using Vanguard WP 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. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should 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.

**Chemigation:** Do not apply this product through any type of irrigation system.

**APPLICATION PROCEDURES**

Crop	Disease	Rate oz./Acre	Application Timing	Notes
Almonds	Brown Rot Blossom Blight ( <i>Monilinia</i> spp.)	<b>Vangard WP alone:</b>  5.0-10 (1-2 packets per acre)	Begin applications at 5-10% bloom. If favorable conditions for disease persist, make additional applications at 50-100% bloom, and petal fall. Use the higher rate when disease conditions are severe.	Do not apply more than 30 oz. of Vangard WP per acre per crop per season.
		<b>Vangard WP tank mixtures:</b>  5.0 (1 packet per acre)	For broad spectrum control apply Vangard WP in tank mixture with the recommended rate of another fungicide registered for use on almonds.	Do not apply within 150 days of harvest.
Pome Fruits Apples Crabapples Pears (see specific pear restrictions in notes)	Scab ( <i>Venturia</i> spp.)  <b>Prebloom</b>	<b>Vangard WP alone:</b>  5.0 (1 packet per acre)	For apples and crab-apples only (do not apply Vangard alone to pears). Begin application at green tip and continue on a 7-10 day interval. Under severe disease pressure use the shorter interval.	Do not apply more than 22 oz. of Vangard WP per acre per crop per season.
		<b>Vangard WP tank mixtures:</b>  3.0 (3 packets per 5 acres)	For scab control (apples, crabapples, and pears) utilizing multiple modes of action, apply Vangard WP in tank mixture with the recommended rate of a protectant or systemic fungicide registered on pome fruit, making applications on a 7-10 day interval.	Do not apply within 72 days of harvest.
	Scab ( <i>Venturia</i> spp.)  <b>Pink bloom Postbloom</b>	<b>Vangard WP tank mixtures:</b>  3.0 (3 packets per 5 acres)	Apply Vangard WP in tank-mix combination with the recommended rate of a protectant fungicide. Use of the recommended rate of an EBDC fungicide will broaden the disease control spectrum 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 spectrum to include powdery mildew	

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Crop	Disease	Rate oz./Acre	Application Timing	Notes
<b>Grapes</b>	<b>Botrytis Bunch Rot</b> <i>(Botrytis spp.)</i>	<b>Vangard WP alone:</b>  10 (2 packets per acre)	Begin applications of Vangard WP at early bloom. Make an additional application at berry touch, veraison, or preharvest. Botrytis Bunch Rot is most effectively controlled by ground application, using sufficient water volume to provide thorough coverage. Thorough coverage of bunches is essential.	Do not apply more than 20 oz. of Vangard WP per acre per crop per season.  Do not apply within 7 days of harvest.
		<b>Vangard WP tank mixtures:</b>  5.0-10 (1-2 packets per acre)	Apply Vangard in tank mixture with the recommended rate of another fungicide registered on grapes for use against Botrytis Bunch Rot.	
<b>Stone Fruits</b> Apricots Cherries Nectarines Peaches Plums Prunes	<b>Brown Rot Blossom Blight</b> <i>(Monilinia spp.)</i>	<b>Vangard alone:</b>  5.0 (1 packet per acre)	Begin applications at early bloom (apricots at red bud, cherries at popcorn, peaches and nectarines at pink bud, plums and prunes at green tip). Make a second application at full bloom.	Do not apply more than 10 oz. of Vangard WP per acre per season for blossom blight control.
		<b>Vangard WP Tank Mixtures:</b>  5.0 (1 packet per acre)	Apply Vangard WP in tank mixture with the recommended rate of another fungicide registered for stone fruit.	
	<b>Fruit Brown Rot</b> <i>(Monilinia spp.)</i> California only	<b>Vangard WP alone:</b>  10 (2 packets per acre)	Apply a maximum of 2 applications of Vangard WP during the preharvest period up through 2 days prior to harvest as needed.	Do not apply more than 20 oz. of Vangard WP per acre per season for fruit brown rot control.  Do not apply within 2 days of harvest.
		<b>Vangard WP tank mixtures:</b>  5.0 (1 packet per acre)	Apply Vangard WP in tank mixture with the recommended rate of another fungicide registered for use on stone fruit for fruit brown rot.	

