#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

MAY | 3 2003

Dear Mr. Zang:

SUBJECT:

Vangard WG

EPA Registration Number 100-828 Your Submission of January 10, 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 changes:

#### **Directions for Use:**

- Delete the sentence on page 5, "Vangard WG should be used only in accordance with recommendations on this label or in separately published Syngenta supplemental labeling recommendations for this product."
- In the General Information section on page 6, change "Caution: Under conditions conducive to extended infection . . . " to "Notice: Under conditions conducive to extended infection . . . "
- In the section on page 13 beginning "Observe the following precautions . . . " change the bullet "Do not cultivate within 10 ft. of aquatic areas as to allow a vegetative filter strip." to "Do not cultivate within 10 ft. of aquatic areas in order to allow a vegetative filter strip."

#### Storage and Disposal:

Move the sentence on page 6, "Do not contaminate water, food or feed by storage or disposal." from its current place at the beginning of the "Pesticide Disposal" subsection so that it immediately follows the heading "Storage and Disposal".

#### Base Label:

- On page 16, change the sentence "See directions for use in attached booklet" to "See
  directions for use and additional precautionary statements including personal protective
  equipment (PPE) requirements in attached booklet"
- On page 16, move the text "For minor spills, leaks . . . and disposal of wastes" from the Physical Hazards section to the end of the Environmental Hazards section.
- On page 17, add the heading "Storage and Disposal", and add the sentence "Do not contaminate water, food or feed by storage or disposal." immediately after it.
- Change the subheading "Storage" on page 17 to "Pesticide Storage".
- Immediately after the "Pesticide Storage" subheading, add the subheading "Pesticide Disposal" followed by the sentence "Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility."

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)

Mary L. Waller

Fungicide Branch

Registration Division (7505C)

Enclosure: Stamped Label

		CONCURREN	ICES		
SYMBOL >	7505C				
SURNAME >	Lisa Jones				
DATE >	May 5, 2003				

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

#### **Booklet**

## Vangard™ WG

## **Fungicide**

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

Active Ingredient:

Cyprodinil: 4-cyclopropyl-6-methyl-

N-phenyl-pyrimidinamine (CAS No. 121552-61-2	2)75.0%
Other Ingredients:	25.0%
Total:	100.0%

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. 67545-AZ-1

Made in Switzerland

3 pounds 2 ounces Net Weight

SCP 828A-L1 AMD Draft 1 12/16/02

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAY | 3 2003

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

100=828

for 15-20 minutes.  Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.  Call a poison control center or doctor for treatment advice.  If on skin or clothing  Rinse skin immediately with plenty of water for 15-2 minutes.	FIRST AID		
• Rinse skin immediately with plenty of water for 15-2 minutes.	If in eyes	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment</li> </ul>	
advice.		<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment</li> </ul>	

If ingested, induce emesis or lavage stomach. Treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### **HOT LINE NUMBER**

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.

# 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.

## 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

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, 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.

## 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 should 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. All such risks shall be assumed by Buyer and User, and 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. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. 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 of 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.

Vangard WG should be used only in accordance with recommendations on this label or in separately published Syngenta supplemental labeling recommendations for this product.

#### 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 restrictedentry 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

#### STORAGE AND DISPOSAL

Store in a cool, dry place.

## **Pesticide Disposal**

Do not contaminate water, food, or feed by storage or 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**

Triple rinse container (or equivalent) then offer for recycling or reconditioning or puncture and dispose of container in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay 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.

#### **GENERAL INFORMATION**

Vangard WG is a broad spectrum fungicide which controls certain diseases in almonds, grapes, pome fruits, and stone fruits.

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

CAUTION: UNDER CONDITIONS CONDUCIVE TO EXTENDED INFECTION PERIODS, ADDITIONAL FUNGICIDE APPLICATIONS BEYOND THE NUMBER ALLOWED BY THIS LABEL MAY BE NEEDED. UNDER THESE CONDITIONS, USE ANOTHER FUNGICIDE REGISTERED FOR THE CROP/DISEASE APPEARING ON THIS LABEL.

#### **SPRAY EQUIPMENT**

For best disease control apply Vangard WG in sufficient water to provide thorough and uniform coverage. For ground application equipment, a minimum of 100 gals./A is recommended for orchard crops and 50 gals./A is recommended for vine crops.

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

For 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 spray mixture in suspension. Use a jet agitator, liquid sparge tube, or mechanical paddle for agitation. Do not air sparge.

Screens should 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.

Vangard WG Alone: Add 1/2 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 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. In general tank mix partners should be added 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.

**Note:** When using Vangard WG in tank mixtures, all products in water-soluble packaging should be added 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. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. 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.

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

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

# **CROP USE DIRECTIONS**

Crop	Disease	Rate oz./Acre	Application Timing	Notes
Almonds	Brown Rot Blossom Blight ( <i>Monilinia</i> spp.) control	Vangard WG alone: 5-10	Apply Vangard WG at 5–10% bloom. Additional applications at 50–100% bloom and petal fall may be necessary.	Do not apply more than 30 oz. of Vangard WG per acre per crop.  Do not apply within 150 days of harvest.
	Green Fruit Rot (Jack Rot) (Botrytis cinerea) suppression  Shot Hole (Wilsonomyces carpophilus) suppression	Vangard WG alone: 5–10	When used for control of brown rot blossom blight, Vangard WG will provide suppression of shot hole.  For suppression of green fruit rot apply Vangard WG at full bloom.	Disease suppression for almond diseases refers to erratic control from fair to good, or consistent control at a level below that obtained with products registered for control.

For broad spectrum disease control in tank mixture, apply Vangard WG a minimum rate of 5 oz. in tank mixtures with other fungicides registered for use on almonds.

Сгор	Disease	Rate oz./Acre	Application Timing	Notes
Pome Fruits: Apples Crabapples	Scab (Venturia spp.)	Vangard WG alone:	For apples and crabapples only (do not apply Vangard WG	Do not apply more than 22 oz. of Vangard WG per
Pears (see specific pear restrictions in Application Timing)	Prebloom	5	alone to pears), begin application at green tip and continue on a 7 to 10-day interval. Under severe disease pressure use the shorter interval.	acre per crop per year.
		Vangard WG tank mixtures:	For scab control (apples, crabapples,	Do not apply within 72 days of harvest.
		3-5	and pears) utilizing multiple modes of action, apply Vangard WG in tank mixture with the recommended rate of a protectant or systemic fungicide registered on pome fruit, making applications, on a 7 to 10-day interval.	

Crop	Disease	Rate oz./Acre	Application Timing	Notes
Pome Fruits: Apples Crabapples Pears (see specific pear restrictions in Application Timing) (Continued)	Scab (Venturia spp.) Pink, bloom, post-bloom	Vangard WG Tank mixtures: 3-5	Apply Vangard WG 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.	
Grapes	Botrytis Bunch Rot (Botrytis spp.)  Powdery Mildew Suppression (Uncinula necator)	Vangard WG alone: 10	Begin applications of Vangard WG 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 WG per acre per crop per year.  Do not apply within 7 days of harvest or or a second shorter than 7 days.
		Vangard WG tank mixtures: 5-10	Apply Vangard WG in tank mixture with the recommended rate of another fungicide registered on grapes for control of Botrytis Bunch Rot.	When used at 10 oz./A consider significant suppression (approximately 60% control) of powdery mildew.

Crop	Disease	Rate oz./Acre	Application Timing	Notes
Stone Fruits: Apricots Tart cherries	Brown Rot Blossom Blight ( <i>Monilinia</i>	Vangard WG alone:	Begin applications at bloom stage (apricots at red bud, cherries at	Do not apply more than 10 oz. of Vangard WG per
Nectarines Peaches Plums Prunes Do not apply	spp.)	5	popcorn, peaches and nectarines at pink bud, plums and prunes at green tip). Make a second application at full bloom.	acre per year for blossom blight control.
Vangard WG to sweet cherries.		Vangard WG tank mixtures:	Apply Vangard WG in tank mixture with the recommended rate of	Do not apply Vangard WG to
		5	another fungicide registered for stone fruit.	Conservation and the servation
	Fruit Brown Rot (Monilinia spp.)	Vangard WG Alone:	Apply a maximum of 2 applications of Vangard WG during the	Do not apply more than 20 oz. of Vangard WG per
	California only	10	preharvest period up through 2 days prior to harvest as needed.	acre per year for fruit brown rot control.
		Vangard WG tank mixtures:	Apply Vangard WG in tank mixture with the recommended rate of	Do not apply within 2 days of harvest.
		5	another fungicide registered on stone fruit for control of fruit brown rot.	·

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.
- 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.
- Shut off the sprayer when row ends.
- Spray last three rows windward of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas. Avoid spray going over the tops of trees by adjusting or turning off top nozzles. 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.
- Do not cultivate within 10 ft. of aquatic areas as 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.

Vangard<sup>™</sup> and the Syngenta logo are trademarks of a Syngenta Group Company
U.S. Patent No. 5,153,200

Rovral® trademark of Aventis Crop Science

X-77® trademark of Loveland Industries, Inc.

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP 828A-L1 AMD Draft 1 12/16/02

VAN WG 828A-L1 AMD Draft 1 (CLEAN) - nsp 12/16/02

#### Base Label

## Vangard™ WG

## **Fungicide**

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

Active Ingredient:

Cyprodinil: 4-cyclopropyl-6-methyl-

Total:

100.0%

Vangard WG is a water-dispersible granule.

See directions for use in attached booklet.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

### KEEP OUT OF REACH OF CHILDREN.

**CAUTION** 

EPA Reg. No. 100-828

EPA Est. 67545-AZ-1

3 pounds 2 ounces
Net Weight

## **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

FIRST AID		
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
<ul> <li>If on skin</li> <li>or clothing</li> <li>Rinse skin immediately with plenty of water for minutes.</li> <li>Call a poison control center or doctor for treatmadvice.</li> </ul>		
If ingested, induce	NOTE TO PHYSICIAN emesis or lavage stomach. Treat symptomatically.	
Have the product co doctor, or going for	ontainer or label with you when calling a poison control center or treatment.	
	HOT LINE NUMBER our Medical Emergency Assistance (Human or Animal) or eal Emergency Assistance (Spill, Leak, Fire, or Accident) Call 1-800-888-8372	

#### **Environmental Hazards**

This pesticide is toxic to fish and aquatic invertebrates. 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.

## **Physical or Chemical Hazards**

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

For minor spills, leaks, etc., follow 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.

## Storage

Store in a cool, dry place.

## **Container Disposal**

Triple rinse container (or equivalent) then offer for recycling or reconditioning or puncture and dispose of container in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## Chemigation

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

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Made in Switzerland

Vangard<sup>™</sup> and the Syngenta logo are trademarks of a Syngenta Group Company.

U. S. Patent No. 5,153,200

Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP 828A-L1 AMD Draft 1 12/16/02

VAN WG-828A-L1AMD Draft 1 (CLEAN) - nsp 12/16/02