



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

NOV - 8 2002

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Laurent C. Mezin, Ph.D
Arvesta Corporation
100 First Street, Suite 1700
San Francisco, CA 94105

Subject: Elevate 50 WDG
EPA Registration Number 66330-35
Submission Dated October 8, 2002

Dear Dr. Mezin:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided the following changes are made:

Delete "PHI = 365" and insert "Do not use for food or feed purposes within 1 year of treatment."

Change all the headers from "Notes" to "Restrictions".

A stamped copy of the label is enclosed for your records. Please submit one copy of your final printed label before you release the product for shipment. If you have any questions, you may contact Summer Gardner-Jenkins at (703) 308-9353.

Sincerely,

A handwritten signature in cursive script, which appears to read "Mary L. Waller", is positioned above the typed name.

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

Enclosure

(Front Panel)

ELEVATE® 50 WDG FUNGICIDE

50% Water Dispersible Granule for Use in Water as a Spray
for the Control of *Botrytis* and *Monilinia* Diseases in Various Crops, *Botrytis*
spp. in Ornamentals and for the Suppression of Powdery Mildew in Grapes and
Ornamentals

FOR AGRICULTURAL AND ORNAMENTAL HORTICULTURAL USE ONLY

Not for Residential Use

INGREDIENTS

ACTIVE INGREDIENT:

Fenhexamid* 50.0%

OTHER INGREDIENTS: 50.0%

Total 100.0%

* N-(2,3-dichloro-4-hydroxyphenyl)-1-methyl-cyclohexane carboxamide

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See back panel for additional precautionary statements.

Produced for:
Arvesta Corporation
100 First Street, Suite 1700
San Francisco, CA 94105

EPA Registration No. 66330-35
EPA Establishment No.

NET WEIGHT: _____ POUNDS (_____ KILOGRAMS)

ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV - 8 2002

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

66330-35

[Back panel]

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FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with warm water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

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

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE:
CALL 1-800-228-5635 Ext. 174

FOR 24-HOUR CHEMICAL EMERGENCY (Spill, Leak, Fire or Accident) ASSISTANCE:
CALL CHEMTREC 1-800-424-9300

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, socks, shoes and waterproof gloves. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems or enclosed cabs 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.

IMPORTANT: When reduced PPE is worn because a closed system is being used,

handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

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. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. 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 cleaning equipment or disposing of equipment washwaters.

DIRECTIONS FOR USE

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

Carefully read and understand the Directions for Use and restrictions before applying this product.

Do not apply this product in any 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 on this label about personal protective equipment (PPE), notification to workers, 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 entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry into 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, socks, shoes, chemical resistant gloves made of waterproof material.

GENERAL INFORMATION: ELEVATE 50 WDG Fungicide is a hydroxylanilide protectant fungicide used for the control of Gray mold (*Botrytis cinerea*) on bushberries, caneberries, cherries, ginseng, grapes, and strawberries. In addition, Elevate 50WDG also controls Botrytis blight caused by *Botrytis* spp. on ornamental crops; Botrytis blossom and shoot blight on pistachios; Brown rot, Blossom blight and Twig blight (*Monilinia* spp.) on stone fruit and almonds; and suppresses Powdery mildew (*Uncinula necator*) on grapes. This product should be used in a program with other products to provide season-long protection.

Apply as directed in the "APPLICATION" section using sufficient water to obtain thorough coverage of plants. Under severe disease conditions, use maximum rates and shorter application intervals as specified on the label. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly.

RESISTANCE MANAGEMENT: While there is no indication of cross-resistance between the active ingredient in this product and other fungicides, no more than two consecutive applications should be made with ELEVATE 50 WDG Fungicide or any product containing its active ingredient, fenhexamid. After the second application, use an alternative fungicide effective in controlling *Botrytis cinerea* for two applications before reapplying the active ingredient in this product. Consult your local crop advisor for appropriate rotation recommendations. Resistance management strategies such as a blocking program, alternation or tank mixture with other fungicides used for *Botrytis* and *Monilinia* control are recommended. To avoid the development of resistant strains, DO NOT apply ELEVATE 50 WDG at rates lower than recommended on this label.

COMPATIBILITY OF MIXTURES: This product is believed to be compatible with most commonly used fungicides, insecticides, micronutrients, growth regulators and spray adjuvants. Consult specific product labels for additional information. It is always advisable to conduct a tank spray compatibility test before mixing this product with other products. To determine the physical compatibility of this product with other products, use a jar test [Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible]. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank. It is suggested that combinations be used on a small number of plants before treating large areas.

PREPARATION OF SPRAY SOLUTION: Read **COMPATIBILITY OF MIXTURES** section prior to any tank mixing with this product. Begin with clean equipment. Add sufficient clean water to the spray tank for one-half of the mix load. Start tank agitation. Add and properly suspend the necessary amount of product before adding any other products. Agitate to ensure thorough mixing while adding the remaining required water. A high quality wetting agent or other spray adjuvant, approved for use on your crop, may be added to spray solutions according to the manufacturer's use instructions. ELEVATE should be properly suspended and diluted prior to the addition of any adjuvant. Consult the adjuvant label or manufacturer for crop tolerance and safety information when used with this product. Maintain agitation during mixing. DO NOT allow the spray mixture to stand without agitation. Apply with properly calibrated spray equipment. If agitation is stopped for any reason, the spray solution must be thoroughly re-mixed prior to any further use.

APPLICATION: Prepare only the amount of spray solution needed to treat the area to be sprayed. Maintain agitation during application. Applications should be made immediately after the spray solution is prepared. If there is any delay in application, continue mix agitation. DO NOT allow the spray mixture to stand without agitation. If agitation is stopped for any reason, the spray solution must be thoroughly re-mixed prior to any further use. Rainfall or overhead irrigation within 2 hours of application may necessitate re-treatment.

Proper calibration and operation of spray equipment is essential for successful spraying. Consult the spray equipment manufacturer's operators manual, spray nozzle catalogs, and/or your crop advisor for more information.

DO NOT apply this product through any type of irrigation system.

For agricultural applications, apply using ground equipment only (such as boom type, air blast, hand gun or mist blower sprayer). For food crops, thorough coverage of all flowers and fruiting parts is essential for control of blossom and fruit infections caused by *Botrytis* and *Monilinia* spp.

For ornamental crops, thorough coverage is essential for disease control. Apply in sufficient water to obtain complete coverage of flowers, foliage and stems. Applications may be made with high volume, low volume or ultra low volume (non-thermal foggers, misters, etc.) ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator manual, spray nozzle catalogs and/or your crop advisor for more information. DO NOT apply this product using thermal application equipment.

Do not plant food crops in the treated field, other than those for which the product is labeled within 30 days following the last application.

ALMONDS

Diseases	Application Rate	Application Timing
Blossom blight, twig blight (<i>Monilinia</i> spp.)	1.0-1.5 lbs/A (0.5-0.75 lb AI/A)	<ul style="list-style-type: none"> • Pink bud • Full bloom • Petal fall • Up to 28 days after petal fall
Notes: <ul style="list-style-type: none"> • Apply in sufficient water to obtain complete coverage of flowers, fruit and twigs • Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines. • Do not apply more than 6.0 lbs/A/season (3.0 lbs AI/A/season). 		

**BUSHBERRIES (blueberries, gooseberries, currants and huckleberries)
JUNEBERRIES, LINGONBERRIES AND SALAL**

Disease	Application Rate	Application Timing
Gray mold (<i>Botrytis cinerea</i>)	1.5 lbs/A (0.75 lb AI/A)	<ul style="list-style-type: none"> • Begin application at 10% bloom • Continue through harvest • Application should be made every 7 days or when conditions favor disease development
Notes: <ul style="list-style-type: none"> • PHI = 0 day. • Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines. • Do not apply more than 6.0 lbs/A/season (3.0 lbs AI/A/season). 		

CANEBERRIES (red and black raspberries, blackberries and loganberries)

Disease	Application Rate	Application Timing
Gray mold (<i>Botrytis cinerea</i>)	1.5 lbs/A (0.75 lb AI/A)	<ul style="list-style-type: none"> • Begin at 10% bloom • Continue thru harvest • Applications should be made every 7 days or when conditions favor disease development
Notes: <ul style="list-style-type: none"> • PHI = 0 day. • Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines. • Do not apply more than 6.0 lbs/A/season (3.0 lb AI/A/season). 		

GINSENG (Except CA)

Disease	Application Rate	Application Timing
Botrytis leaf and fruit blight (<i>Botrytis cinerea</i>)	1.5 lb/A (0.75 lb AI/A)	<ul style="list-style-type: none"> Applications should be made every 7-14 days when conditions favor disease development (esp. cool and wet weather or high humidity)
Notes: <ul style="list-style-type: none"> PHI = 365 days. Do not make more than 2 consecutive applications. Refer to the resistance Management section for rotation guidelines. Do not apply more than 6.0 lbs/A/season (3.0 lbs AI/A/season). 		

GRAPES

Disease	Application Rate	Application Timing
Botrytis bunch rot (<i>Botrytis cinerea</i>)	1.0 lb/A (0.5 lb AI/A)	<ul style="list-style-type: none"> Early bloom Bunch pre-closure Veraison Up to day of harvest
Powdery mildew suppression (<i>Uncinula necator</i>)		
Notes: <ul style="list-style-type: none"> PHI = 0 day. Elevate has been shown to enhance the efficacy of other fungicides when used in a powdery mildew spray program. Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines. Do not apply more than 3.0 lbs/A/season (1.5 lbs AI/A/season) 		

PISTACHIOS

Disease	Application Rate	Application Timing
Botrytis blossom and shoot blight (<i>Botrytis cinerea</i>)	1.0-1.5 lbs/A (0.5-0.75 lb AI/A)	<ul style="list-style-type: none"> • 5-10% bloom • Full bloom • Then every 7-10 days or when conditions favor disease development up to 28 days after petal fall

Notes:

- Apply in sufficient water to obtain complete coverage of flowers, fruit and twigs.
- Do not make more than 2 consecutive applications. Refer to the resistance Management section for rotation guidelines.
- Do not apply more than 6.0 lbs/A/season (3.0 lbs AI/A/season).

STONE FRUIT (apricot, cherries, nectarines, peaches, plums and fresh prunes)

Disease	Application Rate	Application Timing
Brown rot, Blossom blight, Twig blight (<i>Monilinia</i> spp.)	1.0-1.5 lbs/A (0.5-0.75 lb AI/A)	<ul style="list-style-type: none"> • Early bloom • Late bloom • 2 weeks after petal fall • Up to day of harvest
Gray mold on cherries (<i>Botrytis cinerea</i>) (Except CA)	1.0-1.5 lbs/A (0.5-0.75 lb AI/A)	<ul style="list-style-type: none"> • Early bloom • Then every 7-10 days or when conditions favor disease development • Up to day of harvest

Notes:

- PHI = 0 day.
- Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines.
- Do not apply more than a maximum of 6.0 lbs/A/season (3.0 lbs AI/A/season).

STRAWBERRIES

Disease		Application Rate	Application Timing
Gray mold (<i>Botrytis cinerea</i>)	Heavy disease pressure	1.5 lbs/A (0.75 lb AI/A)	<ul style="list-style-type: none"> • Early bloom • Then follow 7-14 day schedule or apply when conditions favor disease development • Up to the day of harvest
	Light to moderate disease pressure	1.0-1.5 lbs/A (0.5-0.75 lb AI/A) + Tank mix partner(s) at labeled rate(s)	

Notes:

- PHI = 0 day.
- Under light to moderate disease pressure, Elevate 50 WDG Fungicide may be applied in a tank mix at a rate of 1.0-1.5 pounds (0.5 to 0.75 lb AI/A) with the recommended rate of another fungicide (such as Captan) which is registered for use on strawberries to control *Botrytis cinerea* (Gray mold).
- Do not make more than 2 consecutive applications. Refer to the Resistance Management section for rotation guidelines.
- Do not apply more than 6.0 lbs/A/season (3.0 lbs AI/A/season)
- When plastic mulch is used, do not apply within 16 feet (5 meters) of naturally vegetated or aquatic areas.

OUTDOOR-GROWN AND GREENHOUSE-GROWN ORNAMENTALS: This product, when applied as a foliar spray, has been shown to effectively protect plants from *Botrytis* spp. and stop sporulation of the fungus if an infection has occurred. Also, this product has been shown to enhance the efficacy of other fungicides when used in a powdery mildew program. These directions are based upon the results of product testing programs.

NOTICE TO USER: Plant tolerance to this product has been found to be acceptable in research trials for the general plant species listed on this label. However, due to the large number of species and their associated varieties or cultivars of ornamental and nursery plants and due to variable growing conditions, it is impossible to test every plant and variety or cultivar for tolerance to this product. Neither the Manufacturer nor the Seller has determined whether or not this product can be safely used on all ornamental plants. The professional user should determine if this product can be used safely prior to commercial use. In a small test area, test the recommended rates on plants for phytotoxicity and disease control prior to general use.

This product has been shown to be safe and effective in a limited number of research trials on certain varieties or cultivars of the plant types listed. Users should conduct small scale tests under local growing conditions prior to wide-scale use.

African Violet	Lily (Asiatic/Oriental)	Rose
Fuchsia	Lisianthus	Spathiphyllum
Geranium	Pansy	Snapdragon
Gerbera Daisy	Petunia	
Impatiens	Poinsettia ¹	

¹ Due to the sensitivity of mature Poinsettia bracts and varying local environmental conditions, users should conduct preliminary tests as suggested above.

High Volume Spray Recommendations		
Application Rate	Disease Pressure	Spray Interval
0.75 lb product per 100 gal.	Conditions favor disease development; no disease present.	7 to 14 Days
1.0 to 1.5 lb product per 100 gal.	Conditions favor disease development; disease present.	7 Days

Low Volume / Ultra Low Volume Spray Recommendations		
Application Rate	Disease Pressure	Spray Interval
0.75 lb product per acre	Conditions favor disease development; no disease present.	7 to 14 Days
1.0 to 1.5 lb product per acre	Conditions favor disease development; disease present.	7 Days

For small application equipment, the scoop attached to the container is provided for ease in measuring the amount of this product to use per 1 gallon of water. Apply 1 to 2 level scoops per 1 gallon of water. One scoop equals 0.12 ounces or 3.4 grams or approximately one rounded teaspoon of this product.

Do not make more than two consecutive applications of this product. After the second application, use an alternative fungicide effective in controlling *Botrytis* spp. for two applications before reapplying the active ingredient in this product. Consult your local

Horticultural Advisor for the most appropriate alternative products.

Outdoor-Grown Ornamentals: DO NOT apply more than 6.0 pounds of product per acre per season (3.0 lb AI/A/season).

Greenhouse-Grown Ornamentals: DO NOT apply more than 0.14 pounds product per 1000 square feet per crop cycle (equal to 2.2 oz. product per 1000 square feet per crop cycle).

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a dry place away from excessive heat. Do not store near food or feed. Store in original container only. To close package, fold package or replace and tighten cap to form an airtight seal.

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

CONTAINER DISPOSAL:

Bags: Completely empty bag into application equipment. Then dispose of bag in a sanitary landfill or by incineration, or (if allowed by State and local authorities) by burning. If burned, stay out of smoke.

Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or (if allowed by State and local authorities) by burning. If burned, stay out of smoke.

Fiber drums: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill (or incinerate if allowed by State and local authorities). If drum is contaminated and cannot be reused, dispose of in the same manner.

CONDITIONS OF SALE

1. Arvesta Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with the Directions for Use under normal conditions of use.
2. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Arvesta. **ARVESTA DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE. ARVESTA DOES NOT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION CONCERNING THIS PRODUCT.**
3. Critical and unforeseeable factors beyond Arvesta's control prevent Arvesta from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which the product is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the use stated on the label and even though label directions are followed. Except as stated in 1 above, Buyer and User acknowledge and assume all risks and liabilities resulting from handling, storage, and use of this product.

Fenhexamid was invented and is produced by Bayer AG, Germany.