

66330-35

4-22-2002

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

APR 22 2002

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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Elevate 50 WDG Fungicide  
EPA Reg. No. 66330-35  
New Uses - Bushberries, Caneberries, Juneberries,  
Lingonberries, Salal, and Pistachios

Dear Dr. Laurent:

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

1. Revise the label as follows:  
  
In the Agricultural Use Requirements Box, revise the restricted entry interval (REI) by changing "4 hours" to "12 hours". Replace the phrase "waterproof gloves" with "chemical resistant gloves made of any waterproof material."
2. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit data.

A stamped copy of the label is enclosed for your records. Please submit (1) copy of the final printed labeling before you release the product for shipment. If you have any questions, please call Summer Gardner-Jenkins or my staff at (703) 308-9353.

Sincerely,

*Mary L. Waller*

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

Enclosure

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(Front Panel)

## ELEVATE® 50 WDG FUNGICIDE

**50% Water Dispersible Granule for Use in Water as a Spray  
for Control of *Botrytis cinerea* Diseases of Bushberries, Caneberries, Grapes,  
Pistachios, Strawberries and Ornamentals, Suppression of Powdery Mildew  
(*Uncinula necator*) of Grapes and Control of *Monilinia* Diseases of Almonds and  
Stone Fruit**

**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.

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated**

**APR 22 2002**

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

**66330-35**

Arvesta Corporation  
100 First Street, Suite 1700  
San Francisco, CA 94005

EPA Registration No. 66330-35  
EPA Establishment No.

**NET WEIGHT: \_\_\_\_\_ POUNDS ( \_\_\_\_\_ KILOGRAMS)**

[Back panel]

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with warm 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>
<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>

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 4 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, waterproof gloves.

**GENERAL INFORMATION:** ELEVATE 50 WDG Fungicide is a hydroxylanilid protectant fungicide used for the control of Gray mold (*Botrytis cinerea*) on bushberries, caneberries, grapes, strawberries and Botrytis blight caused by *Botrytis cinerea* on ornamental crops and for the control of Brown rot, Blossom blight, Twig blight and Fruit brown rot (*Monilinia spp.*) on stone fruit and almonds. ELEVATE 50 WDG is also used to control Botrytis blossom and shoot blight (*Botrytis cinerea*) on pistachios and suppression of Powdery Mildew (*Uncinula necator*) of 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:** There is no indication of cross-resistance between the active ingredient in this product and other fungicides. If more than two applications are to be made to the same crop per season, avoid making more than two consecutive applications with ELEVATE 50 WDG Fungicide. Your local crop advisor may provide an appropriate control recommendation. Resistance management strategies such as a blocking program, alternation or tank mixture with other fungicides used for *Botrytis* and *Monilinia* control are recommended. Resistance management strategies advise not to apply at rates lower than recommended on the 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 when you plan to mix 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 and application. 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 mixing and 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*. 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's manual, spray nozzle catalogs and/or your crop advisor for more information. DO NOT apply this product using thermal application equipment.

Do not replant food crops other than those for which the product is labeled within 30 days following the last application.

**ALMONDS:** For control of Blossom blight and Twig blight (*Monilinia* spp.) on almonds, apply 1.0 to 1.5 pounds ELEVATE 50 WDG Fungicide per acre (0.5 to 0.75 lb AI/A) at pink bud, full bloom, petal fall and up to 28 days after petal fall. Apply in sufficient water to obtain complete coverage of flowers, fruit and twigs. DO NOT apply more than 6.0 pounds of ELEVATE 50 WDG Fungicide per acre per season (3.0 lb AI/A/season).

**BUSHBERRIES (Blueberries, gooseberries, currants and huckleberries), JUNE BERRIES, LINGON BERRIES, AND SALAL:** For control of *Botrytis cinerea* (Gray mold), apply 1.5 pounds ELEVATE 50 WDG Fungicide per acre (0.75 lb AI/A). Begin application at 10% bloom and continue through harvest. Applications should be made every 7 days or when conditions favor disease development.

Avoid making more than two consecutive applications with ELEVATE 50 WDG Fungicide. After the second application, use an alternative fungicide effective in controlling *Botrytis cinerea* for two consecutive applications before reapplying the active ingredient in this product. Consult your local crop advisory for appropriate alternative products. The final

application may be made up to and including the day of harvest (PHI = 0). DO NOT apply more than 6.0 pounds of product per acre per season (3.0 lb AI/A/season).

**CANEBERRIES (Red and black raspberries, blackberries and loganberries):** For control of *Botrytis cinerea* (Gray mold), apply 1.5 pounds ELEVATE 50 WDG Fungicide per acre (0.75 lb AI/A). Begin application at 10% bloom and continue through harvest. Applications should be made every 7 days or when conditions favor disease development.

Avoid making more than two consecutive applications with ELEVATE 50 WDG Fungicide. After the second application, use an alternative fungicide effective in controlling *Botrytis cinerea* for two consecutive applications before reapplying the active ingredient in this product. Consult your local crop advisory for appropriate alternative products. The final application may be made up to and including the day of harvest (PHI = 0). DO NOT apply more than 6.0 pounds of product per acre per season (3.0 lb AI/A/season).

**GRAPES:** For the control of *Botrytis* bunch rot (Gray mold), apply 1.0 lb product per acre (0.50 lb AI/A) prior to disease establishment. Apply when conditions favor disease development at early bloom, bunch pre-close, veraison (beginning of fruit ripening), up to and including the day of harvest. For the suppression of Powdery Mildew (*Uncinula necator*), ELEVATE 50 WDG has been shown to enhance the activity of other fungicides when used in a Powdery Mildew spray program. The final application may be made up to and including the day of harvest. (PHI = 0 days.) DO NOT apply more than 3.0 pounds of ELEVATE 50 WDG Fungicide per acre per season (1.5 lb AI/A/season).

**PISTACHIOS:** For the control of *Botrytis* blossom and shoot blight (*Botrytis cinerea*) apply 1.0 to 1.5 lbs of ELEVATE 50 WDG Fungicide per acre (0.5 to 0.75 lb AI/A) at 5-10% bloom, full bloom, then every 7-10 days or when conditions favor disease development up to 28 days after petal fall. Apply in sufficient water to obtain complete coverage of flowers, fruit and twigs. DO NOT apply more than 6.0 pounds of product per acre per season (3.0 lb AI/A/season).

**STONE FRUIT (APRICOTS, CHERRIES, NECTARINES, PEACHES, PLUMS, AND FRESH PRUNES):** For control of Brown rot, Blossom blight and Twig blight (*Monilinia spp.*) on stone fruit, apply 1.0 to 1.5 pounds ELEVATE 50 WDG Fungicide per acre (0.5 to 0.75 lb AI/A) at early bloom, late bloom, and two weeks after petal fall when conditions favor disease. For control of Fruit brown rot (*Monilinia spp.*) on stone fruit, apply 1.0 to 1.5 pounds of ELEVATE 50 WDG Fungicide per acre (0.5 to 0.75 lb AI/A) pre-harvest when conditions favor disease. Application can be made up to and including the day of harvest. DO NOT apply more than 6.0 pounds ELEVATE 50 WDG Fungicide per acre per season (3.0 lb AI/A/season).

**STRAWBERRIES:** For the control of *Botrytis cinerea* (Gray mold), apply 1.5 pounds ELEVATE 50 WDG Fungicide per acre (0.75 lb AI/A) alone or in a tank mix. Begin applications at early bloom prior to disease establishment. Continue applications every 7 to 14 days or when conditions favor disease development. Under light to moderate disease pressure, ELEVATE 50 WDG Fungicide may be applied in a tank mix at a rate of 1.0 to 1.5 pounds ELEVATE 50 WDG Fungicide (0.50 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). When plastic mulch is used, do not apply within 16 feet (5 meters) of naturally vegetated or aquatic areas. Avoid making more than two consecutive applications with ELEVATE 50 WDG Fungicide. After the second application, use an alternative fungicide for two consecutive applications before reapplying the active ingredient in this product. Consult your local crop advisor for appropriate alternative products. The final application may be made up to and including the day of harvest. (PHI = 0 days.) DO NOT apply more than 6.0 pounds of product per acre per season (3.0 lb AI/A/season).

**OUTDOOR-GROWN AND GREENHOUSE-GROWN ORNAMENTALS:** This product, when applied as a foliar spray, has been shown to effectively protect plants from *Botrytis cinerea* and stop sporulation of the fungus if an infection has occurred. 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 <sup>1</sup>	

<sup>1</sup> 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.

Avoid making more than two consecutive applications of product. After the second application, use an alternative fungicide for two consecutive 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.

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#### 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.