



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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Sue-Chi Shen Regulatory Project Manager Valent U.S.A. Corporation 2301 Ohio Drive, Suite 137 Piano, TX 75093

MAR 2 3 2010

Subject: V-10116 VPP Fungicide

EPA Registration No. 59639-144 Label amendment dated 12/17/2009

Decision No. 418897

Dear Ms. Shen,

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

- 1. On page 2, add the heading "User Safety Requirements" before the text starting "Follow the manufacturer's instructions".
- 2. On page 3, within the User Safety Recommendations box, for the second bullet add "/PPE" following "Remove clothing".
- 3. On page 4, include PPE information for early entry as follows. "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 materials, socks and shoes."
- 4. On page 18, replace the heading "Container Disposal" with the heading "Container Handling", within the Storage and Disposal box.

The supplemental label submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable providing the following change is made. Please note that the supplemental labeling must be incorporated into the master label within 18 months or at the next label printing, whichever comes first.

5. On page one of the supplemental labeling, revise the third paragraph as follows. "Refer to the V-10116 VPP main label, EPA Reg. No. 59639-144, for complete Directions for Use and all applicable restrictions and precautions. When following the

instructions on this supplemental label, the user must have this label and the entire V-10116 VPP container label in possession at the time of pesticide application. Read the container label for V-10116 VPP fungicide before applying"

Submit one copy of the final printed labeling incorporating the above changes before the product is released for shipment. For your records, a copy of the label stamped "Accepted with Comments" is enclosed. If you have questions concerning this letter, please contact Shaunta Hill via phone at 703-347-8961 or email at hill.shaunta@epa.gov.

Sincerely yours,

Mary L. Waller

Product Manager (21)

Fungicide Branch

Registration Division (7504P)

Mary L Waller



GROUP

**FUNGICIDE** 

# V-10116 VPP Fungicide

**Turfgrass Fungicide** A SYSTEMIC FUNGICIDE FOR CONTROL OF CERTAIN TURFGRASS DISEASES

**Ornamental Fungicide** A SYSTEMIC FUNGICIDE FOR CONTROL OF CERTAIN ORNAMENTAL DISEASES

| Active Ingredient | By Wt. |
|-------------------|--------|
| *Metconazole      | . 50%  |
| Other Ingredients |        |
| Total             | 100%   |

\*5-[(4-chlorophenyl)methyl]-2,2-dimethyl-1-(1H-1,2,4-triazol-1-ylmethyl)cyclopentanol

V-10116 VPP Fungicide is a water dispersible granule containing 50% active ingredient.

# KEEP OUT OF REACH OF CHILDREN

# **CAUTION**

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

NET CONTENT

ACCEPTED In EPA Letter Dated MAR 2 3 2010

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under FA Reg. No. 59639-144

# **FIRST AID**

#### If swallowed:

- Call a 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 to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

# If in eyes:

- 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.
- Call a poison control center or doctor for treatment advice.

#### **HOT LINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **800-892-0099** for emergency medical treatment information.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear: long-sleeved shirt and long pants, socks and shoes.

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

#### **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.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to shrimp, 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 by disposing of equipment washwaters or rinsate. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas.

Groundwater Advisory: This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Surface Water Advisory: This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils or soils with shallow water tables are more prone to runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features, such as ponds, streams and springs, will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

### DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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.

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to the uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, greenhouses or sodfarms.

Keep all unprotected persons out of operating areas or vicinity where there may be drift. Do not enter or allow others to enter treated areas until sprays have dried.

# DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

# **RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to. injury to plants and crops to which this product is applied, lack of control of the target pests and resistance of the target pest to this product. Such risks of crop injury, nonperformance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application. presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buver should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. To the extent allowed by law Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

#### LIMITED WARRANTY

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

#### LIMITATION OF LIABILITY

To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR 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 THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

#### PROMPT NOTICE OF CLAIM

To the extent consistent with applicable law allowing such requirements, Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

#### **NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

# **GENERAL INFORMATION**

V-10116 VPP Fungicide is formulated as 50% water dispersible granular (WDG). The active ingredient in V-10116 VPP is metconazole, a broad-spectrum triazole fungicide that works by inhibiting demethylation and other processes in sterol biosysthesis. V-10116 VPP is systemic and is quickly absorbed into plant tissue. V-10116 VPP displays preventive and curative properties.

V-10116 VPP may be used for disease control in turfgrass on golf courses, lawns and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, athletic fields and sod farms.

V-10116 VPP may be used for disease control on ornamental plants in commercial indoor and outdoor nurseries, greenhouses and on ornamental plants found in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

V-10116 VPP provides optimal disease control when applied in combination or as part of a rotation in a regularly scheduled spray program with other effective fungicides that have different modes of action (i.e., non Group 3 fungicides).

#### MODE OF ACTION

The active ingredient in V-10116 VPP, metconazole, belongs to the sterol biosynthesis inhibitor group of fungicides as classified by the U.S. EPA and Canada PMRA as a target site of action Group 3 fungicide.

#### RESISTANCE MANAGEMENT

V-10116 VPP contains metconazole a Group 3 fungicide (sterol biosynthesis inhibitors). Metconazole is effective against pathogens resistant to fungicides with modes of action different from those of target site Group 3 Fungicides (e.g., dicarboximides, strobilurins, benzimidazoles or phenylamides). Fungal isolates with acquired resistance to metconazole may eventually dominate the fungal population if metconazole is used repeatedly at the same site or in successive years as the primary method of control for the targeted pathogen species. Selection for resistance may be particularly rapid if resistance to Group 3 fungicides is already present in the pathogen population. This may result in reduced disease control by V-10116 VPP or other Group 3 fungicides. Follow the recommendations below to delay the development of fungicide resistance:

1. **Tank mixtures:** If V-10116 VPP is used in tank mixtures with fungicides from different target site of action Groups that are registered and/or permitted for the same use and that are effective against the pathogens of concern, use at least the minimum labeled rates of each fungicide in the tank mix.

- 2. Integrated Pest Management (IPM): Integrate V-10116 VPP into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified advisor and/or Valent representative for additional IPM strategies established for your area. V-10116 VPP may be used in advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
- 3. **Monitoring:** Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development.
- 4. Reporting: If a Group 3 target site fungicide appears to be less or no longer effective against a pathogen that it previously controlled or suppressed, contact a Valent representative, local extension specialist or certified advisor to assist in determining the cause of reduced performance.

# JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND V-10116 VPP

Perform a jar test before mixing commercial quantities of V-10116 VPP, when using V-10116 VPP for the first time, when using new adjuvants, when using new tank mixes or when a new water source is being used.

- 1. Add 1 pt. of the water to a quart jar. Use water from the same source and temperature as water that will be used in the spray tank mixing operation.
- 2. Add about 1 teaspoon (2.4 grams) of V-10116 VPP to the quart jar; gently mix until product goes into suspension.
- 3. Add appropriate amount of each tank mix adjuvant or partner.
- 4. Place cap on jar, invert 10 times, let stand for 15 minutes and evaluate.
- 5. An ideal tank mix combination will be uniform and free of large suspended particles. If any of the following conditions are observed, reevaluate the choice of the adjuvant:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

### **TANK MIX PARTNERS**

V-10116 VPP is compatible with most herbicides, insecticides, fungicides and other types of tank mix components. If tank mixes are used, follow all applicable restrictions and precautions on all labels. Do not tank mix with any product which has a prohibition on tank mixing. When evaluating potential tank mix partners, always apply to a small area of target plants and then monitor for adverse affects for at least two weeks before making large-scale applications.

#### SPRAYER PREPARATION

Before applying V-10116 VPP, start with clean, well maintained application equipment. The spray tank hoses and booms must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply V-10116 VPP. Check nozzles frequently for accuracy. If two or more products were tank mixed prior to V-10116 VPP application, follow the most restrictive cleanup procedure.

#### MIXING INSTRUCTIONS

- 1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
- 2. While agitating, slowly add the V-10116 VPP to the spray tank. A rippling or rolling action on the water surface will occur as the result of the agitation.
- 3. If tank mixing V-10116 VPP with other labeled pesticides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions.
- 4. Add any required adjuvants.
- 5. Fill spray tank to desired level with water. Continue to agitate until all spray solution has been applied.
- 6. Mix only the amount of spray solution that can be applied the day of mixing. Apply V-10116 VPP within 12 hours of mixing.

# **SPRAYER CLEANUP**

Clean the spray equipment each day following V-10116 VPP application. After V-10116 VPP is applied, follow the steps below to clean the spray equipment:

- 1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
- 2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
- 3. Drain tank completely.
- 4. Remove all nozzles and screens and rinse them in clean water.

#### SPRAY DRIFT MANAGEMENT

It is the responsibility of the applicator to ensure that spray drift does not occur. Do not apply this product when weather conditions favor spray drift from treated areas. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they must be observed.

# **TURFGRASS**

- V-10116 VPP may be used for disease control on golf courses, lawns and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, athletic fields and sod farms.
- Use V-10116 VPP in conjunction with turf management practices that promote good plant heath and optimum disease control. Proper identification of disease infestations is essential for providing control. Consult diagnostic guides, kits or other means of identification to determine the best control measures.
- V-10116 VPP is more effective when used preventively or early in disease development.
   Length of disease control will vary according to local environmental conditions, disease pressure and turfgrass management practices.
- Apply to dry turf or after mowing. For control of foliar diseases, allow turf to dry before irrigation. For control of soil born diseases, V-10116 VPP can be watered in after application.
- V-10116 VPP may be tank mixed with other registered turfgrass fungicides. Perform a jar
  test as describe above to determine compatibility before making applications. Directions for
  use of V-10116 VPP have been developed using no adjuvant in the spray solution.
- V-10116 VPP can injure golf course greens that are under high heat (temperatures exceeding 90°F) and/or drought stress. Under high heat and/or drought stress conditions (mid to late summer), do not apply more than 16 oz per acre (0.37 oz per 1,000 sq ft) every 30 days.
- Important: Under conditions of optimal disease development (such as high humidity and temperature), use higher labeled rates and shorter application intervals. When applications are made curatively, use higher rates of V-10116 VPP and short application intervals. Use higher application rate in areas with a history of severe disease pressure.
- Failure to follow label directions may result in turfgrass injury and or inferior disease control.

#### **APPLICATION DIRECTIONS:**

Apply V-10116 VPP using standard, low-pressure spray equipment designed to deliver coarse to medium size spray droplets (do not use nozzles designed to deliver fine droplets). Apply in a sufficient volume of water to provide thorough spray coverage and a uniform spray pattern. Do not position the spray boom more than 20 inches above the turf. For foliar disease, apply 2 gals of spray solution per 1,000 sq ft. For crown and root diseases, apply 2 to 4 gals of spray solution per 1,000 sq ft. For spot treatment, mix 0.1 to 0.2 oz of V-10116 VPP per gallon of water.

# **TURFGRASS TOLERANCE**

Due to the large number of turfgrass types, possible tank mixes and application techniques, it has not been determined if V-10116 VPP can be safely used on all turfgrasses under all conditions. Before making a large scale application, determine safety in a small test area. Monitor the test area for at least 2 weeks to determine safety under local growing conditions.

# **RECOMMENDED TURFGRASS SPECIES**

Annual Bluegrass
Bentgrass
Centipedegrass
Fescue
Kentucky Bluegrass
Perennial Ryegrass
St. Augustinegrass
Seashore Paspalum
Zoysia

# **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 4 lbs (2 lbs ai) of V-10116 VPP per acre per year.
- Do not apply directly to bermudagrass greens.
- Do not apply through any type of irrigation system.
- Do not apply by aerial application.
- Do not graze animals on treated areas for one year after application.
- Do not feed clippings from treated areas to livestock or poultry.

Table 1. TURFGRASS - Specific Diseases, Rates, Timings and Application Information

| Diseases  | Application       | plication Rates App |                     |   |  |
|---|-------------------|---------------------|---------------------|---|--|
| (Pathogens)   | oz/1,000<br>sq ft | oz/A                | Interval/<br>Timing | Special Instructions  |  |
| Dollar Spot<br>(Sclerotinia<br>homoeocarpa)   | 0.18 to<br>0.37   | 8 to 16             | 14 to 21<br>days    | Use preventively. Begin application when conditions favor disease development.                  |  |
| Brown Patch (Rhizoctonia solani) Anthracnose (Colletotrichum graminicola)   | 0.28 to<br>0.37   | 12 to 16            | 14 to 21<br>days    | Begin applications when conditions favor disease development.                                   |  |
| Gray Leaf Spot (Pyricularia grisea)  Necrotic Ring Spot (Ophiosphaerella korrae)  Red Thread (Laetisaria fuciformis)  Rhizoctonia Large Patch (Rhizoctonia solani)  Rust Diseases (Puccinia spp.)  Summer Patch (Magnaporthe poae)  Take-all Patch (Gaeumannomyces graminis)  Waitea Patch Brown Ring Patch (Waitea circinata)  Zoysia Patch (Rhizoctonia solani) | 0.37              | 16                  | 14 days             | Begin applications when conditions favor disease development or when the disease first appears. |  |

continued

Table 1. TURFGRASS – Specific Diseases, Rates, Timings and Application Information

(continued)

| Diseases  | Application       | n Rates       | Application         |   |  |
|---|-------------------|---------------|---------------------|---|--|
| (Pathogens)   | oz/1,000<br>sq ft | oz/A          | Interval/<br>Timing | Special Instructions  |  |
| Fairy Ring<br>(Various<br>Basidiomycetes)   | 0.37              | 16            | 21 days             | Apply as soon as possible after first symptoms appear. Apply in a volume of 4 gals per 1,000 sq ft For optimal control reapply after 21 days. Symptoms may take several weeks to disappear following application. |  |
| Pink Snow Mold Fusarium Patch (Microdochium nivale)  Gray Snow Mold (Typhula spp.)  Yellow Patch (Rhizoctonia cerealis) | 0.37 to<br>0.44   | 16 to<br>19.2 | Late Fall           | Make 1 to 2 applications in combination with PCNB, chlorothalonil or other fungicides active on snow mold in late fall before snow cover and if possible, one application during a midwinter thaw.                |  |

V-10116 VPP Rate Conversion Chart for Turfgrass

| oz product/1000<br>sq ft | oz product/acre | lbs product/acre | lbs ai/acre |
|--------------------------|-----------------|------------------|-------------|
| 0.18                     | 8               | 0.5              | 0.25        |
| 0.28                     | 12              | 0.75             | 0.38        |
| 0.37                     | 16              | 1.0              | 0.50        |
| 0.44                     | 19.2            | 1.2              | 0.60        |

<sup>1</sup> level teaspoon contains 2.4 grams, and one 8 fl oz measuring cup contains 4.1 oz of V-10116VPP

## **ORNAMENTAL PLANTS**

- V-10116 VPP provides disease control on ornamental plants in commercial outdoor nurseries and ornamental plants found in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.
- V-10116 VPP provides disease control on ornamental plants in indoor greenhouses and nurseries
- Use V-10116 VPP as part of a preventive disease control program.
- V-10116 VPP is more effective when used preventively or early in disease development.
   Length of disease control will vary according to local environmental conditions, disease pressure and management practices.
- Follow all use directions on this label. Failure to follow label directions may result in injury and or inferior disease control.

# ORNAMENTAL PLANT TOLERANCE

**IMPORTANT:** V-10116 VPP may cause growth regulation to some ornamental plant species. The large number of existing ornamental species and their varieties and cultivars coupled with the constant introduction of new varieties makes it impossible to field test V-10116 VPP in every locale where it is sold or in all of the combinations of location and plant variety. Further differences include the soil or media type, pH, moisture or fertility, environmental conditions such as temperature, lighting or degreedays and horticultural practice and the manner of use and application of this product. To ensure that V-10116 VPP is compatible with the ornamental plant variety or cultivar under your specific conditions, test this product on a small test area and observe for phytotoxicity or other unintended effects for at least two weeks before making large-scale applications.

#### **APPLICATION DIRECTIONS**

# Foliar applications

- Apply V-10116 VPP at 1 to 4 oz of product per 100 gals of water for disease control in ornamental plants.
- Apply as a full coverage spray to the point of run-off.
- · Apply as needed on a 14 to 28 day interval.
- Under conditions of optimal disease development (such as high humidity and temperature), use higher rates and shorter application intervals.
- When applications are made curatively, use higher rates of V-10116 VPP and shorter application intervals. Use higher application rate in areas with a history of severe disease pressure.
- For general disease control in landscapes, apply 1 to 4 oz of product per 100 gals of water on a 21 to 28-day interval.

## **Drench applications**

- To control soilborne, seedling and crown diseases, apply V-10116 VPP as a preventive drench treatment prior to disease development.
- Apply at 1 to 4 oz per 100 gals of water in a volume of 1 to 2 pts of solution per square foot of surface area on a 14 to 28 day interval.
- Roots must be healthy to ensure systemic uptake, translocation and disease protection.

#### COMPATIBILITY

V-10116 VPP is compatible with most commonly used insecticides, fungicides and spray adjuvants used in the production of ornamental plants. When using V-10116 VPP in tank mixes with other pesticides, observe all directions for use and precautions on the label of tank mix partner. Before applying a tank mix for the first time, check physical compatibility of the mixture. Do not tank mix with any product which contains a prohibition on tank mixing.

#### **APPLICATION EQUIPMENT**

Apply V-10116 VPP using suitable hand or power operated application equipment such as portable, pump-up, backpack, hydraulic or boom sprayers in a manner to provide complete and uniform coverage.

# **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 4 lbs (2 lbs ai) of product per acre per year.
- Do not apply through any type of irrigation system.
- · Do not apply by air.
- Do not graze animals on treated areas of one year after application.
- Do not feed plants from treated areas to livestock or poultry.

Table 2. DIRECTIONS FOR USE ON ORNAMENTALS

| Diseases                          | Pathogen  | Application Rates<br>(By Weight)   |
|-----------------------------------|---|--|
| Anthracnose                       | Apiognomonia spp. Colletotrichum spp. Cryptocline spp. Discula spp. Gleosporium spp.                                  | 1 to 4 oz/100 gals<br>on a 14 to 28 day interval   |
| Botrytis                          | Botrytis spp.   |  |
| Blossom Rot/Brown Rot             | Monilinia spp.  | <u>-</u>   |
| Conifer Blight                    | Phomopsis spp. Rhabdocline spp. Rhizosphaera spp. Sphaeropsis spp.  | 100 gals of spray mix will treat 20,000 sq ft of area when using a typical high volume sprayer. If using a |
| Damping-Off/Stem and Root<br>Rots | Rhizoctonia solani  | low volume sprayer,<br>adjust concentration to<br>apply the same amount of                                 |
| Eastern Filbert Blight            | Anisogramma anomola   | product per unit area.   |
| Leaf Spots                        | Alternaria spp. Cercospora spp. Diplocarpon spp. Mycosphaerella spp. Myrothecium spp. Phyllosticta spp. Septoria spp. |  |
| Powdery Mildew                    | Erysiphe spp. Microsphaera spp. Oidium spp. Phyllactinia spp. Podosphaera spp. Sphaerotheca spp.                      |  |
| Rusts                             | Chrysomyxa spp. Coleopsorium spp. Gymnosporangium spp. Puccinia spp. Uredo spp. Uromyces spp.                         |  |
| Scab                              | Cladosporium spp. Sphaceloma spp. Venturia spp.   |  |
| Shot Hole                         | Wilsonomyces carpophilus Blumeriella spp.   |  |
| White Mold                        | Sclerotinia sclerotium  |  |

Table 3. ORNAMENTAL PLANT LIST

| Flowering and Foliage Plants | Herbaceous<br>Ornamental Plants | Woody<br>Ornamental Plants | Non-Bearing Tree,<br>Fruit, Nut and Vine |
|------------------------------|---------------------------------|----------------------------|--|
| Begonia                      | Carnation                       | Amelanchier                | Apple                                    |
| Geranium                     | Chrysanthemum                   | Ash                        | Apricot                                  |
| Pansy                        | Dianthus                        | Azalea                     | Cherry                                   |
| Petunia                      | Iris                            | Bayberry                   | Citrus                                   |
| Poinsettia                   | Marigold                        | Beech                      | Filbert                                  |
| Snapdragon                   | Phlox                           | Birch                      | Grape                                    |
|                              | Verbena                         | Camellia                   | Peach                                    |
|                              | Zinnia                          | Cotoneaster                | Pear                                     |
|                              |                                 | Crabapple                  | Pecan                                    |
|                              |                                 | Crape Myrtle               | Pistachio                                |
|                              |                                 | Dogwood                    | Plum                                     |
|                              |                                 | Elm                        | Walnut                                   |
|                              |                                 | Euonymus                   |  |
|                              |                                 | Fir                        |  |
|                              |                                 | Hawthorn                   |  |
|                              |                                 | Hemlock                    |  |
|                              |                                 | Holly                      |  |
|                              |                                 | Juniper                    |  |
|                              |                                 | Laurel                     |  |
|                              |                                 | Lilac                      | ·  |
|                              |                                 | Linden                     |  |
|                              |                                 | London Plane               |  |
|                              |                                 | Magnolia                   |  |
|                              |                                 | Maple                      |  |
|                              |                                 | Mountain Ash               |  |
|                              |                                 | Mountain Laurel            |  |
|                              |                                 | Oaks<br>Pine               |  |
|                              |                                 |                            |  |
|                              |                                 | Poplar<br>Photinia         |  |
|                              |                                 | Pyracantha                 |  |
|                              |                                 | Rhododendron               |  |
|                              |                                 | Rose                       |  |
|                              |                                 | Sassafrass                 |  |
|                              |                                 | Spirea                     |  |
|                              |                                 | Spruce                     | ]  |
|                              |                                 | Sweetgum                   |  |
|                              |                                 | Sycamore                   |  |

# STORAGE AND DISPOSAL

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

# **PESTICIDE STORAGE**

Store in a cool dry secure place.

Keep pesticide in original container.

Keep container closed when not in use.

Do not put concentrate or dilute into food or drink containers.

Do not store in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night 800-892-0099.

#### **PESTICIDE DISPOSAL**

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

#### **CONTAINER DISPOSAL**

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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Manufactured for: **Valent U.S.A. Corporation** P.O. Box 8025 Walnut Creek, CA 94596-8025

Made in U.S.A.

EPA Reg. No. 59639-144 EPA Est. No. \_\_\_\_\_

059639-00144.20091217.V10116VPP

# Supplemental Label



# V-10116 VPP Fungicide EPA Reg. No. 59639-144

V-10116 VPP FOR USE ON ORNAMENTAL PLANTS

**DIRECTIONS FOR USE** 

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS, DIRECTIONS AND RESTRICTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR V-10116 VPP FUNGICIDE BEFORE APPLYING. USE OF V-10116 VPP FUNGICIDE ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR V-10116 VPP FUNGICIDE.

- V-10116 VPP Fungicide provides disease control on ornamental plants in commercial outdoor nurseries and ornamental plants found in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.
- Use V-10116 VPP Fungicide as part of a preventive disease control program.
- V-10116 VPP Fungicide is more effective when used preventively or early in disease development. Length of disease control will vary according to local environmental conditions, disease pressure and management practices.
- Follow all use directions on this label. Failure to follow label directions may result in injury and or inferior disease control.

# ORNAMENTAL PLANT TOLERANCE

**IMPORTANT:** V-10116 VPP Fungicide may cause growth regulation to some ornamental plant species. The large number of existing ornamental species and their varieties and cultivars coupled with the constant introduction of new varieties makes it impossible to field test V-10116 VPP Fungicide in every locale where it is sold or in all of the combinations of location and plant variety. Further differences include the soil or media type, pH, moisture or fertility, environmental conditions such as temperature, lighting or degree-days and horticultural practice and the manner of use and application of this product. To ensure that V-10116 VPP Fungicide is compatible with the ornamental plant variety or cultivar under your specific conditions, test this product on a small test area and observe for phytotoxicity or other unintended effects for at least two weeks before making large-scale applications.

#### **APPLICATION DIRECTIONS**

# Foliar applications

- Apply V-10116 VPP Fungicide at 1 to 4 oz of product per 100 gals of water for disease control in ornamental plants.
- Apply as a full coverage spray to the point of run-off.
- Apply as needed on a 14 to 28 day interval.
- Under conditions of optimal disease development (such as high humidity and temperature), use higher rates and shorter application intervals.
- When applications are made curatively, use higher rates of V-10116 VPP Fungicide and shorter application intervals. Use higher application rate in areas with a history of severe disease pressure.
- For general disease control in landscapes, apply 1 to 4 oz of product per 100 gals of water on a 21 to 28-day interval.

# **Drench applications**

- To control soilborne, seedling and crown diseases, apply V-10116 VPP Fungicide as a
  preventive drench treatment prior to disease development.
- Apply at 1 to 4 oz per 100 gals of water in a volume of 1 to 2 pts of solution per square foot
  of surface area on a 14 to 28 day interval.
- Roots must be healthy to ensure systemic uptake, translocation and disease protection.

#### COMPATIBILITY

V-10116 VPP Fungicide is compatible with most commonly used insecticides, fungicides and spray adjuvants used in the production of ornamental plants. When using V-10116 VPP Fungicide in tank mixes with other pesticides, observe all directions for use and precautions on the label of tank mix partner. Before applying a tank mix for the first time, check physical compatibility of the mixture.

Do not tank mix with any product which contains a prohibition on tank mixing.

# **APPLICATION EQUIPMENT**

Apply V-10116 VPP Fungicide using suitable hand or power operated application equipment such as portable, pump-up, backpack, hydraulic or boom sprayers in a manner to provide complete and uniform coverage.

# **RESTRICTIONS AND LIMITATIONS**

- Do not apply more than 4 lbs (2 lbs ai) of product per acre per year.
- Do not apply through any type of irrigation system.
- Do not apply by air.
- Do not graze animals on treated areas of one year after application.
- Do not feed plants from treated areas to livestock or poultry.

Table 1 DIRECTIONS FOR USE ON ORNAMENTALS

| Diseases                          | Pathogen  | Application Rates (By Weight)   |  |
|-----------------------------------|---|---|--|
| Anthracnose                       | Apiognomonia spp. Colletotrichum spp. Cryptocline spp. Discula spp. Gleosporium spp.                                  | 1 to 4 oz/100 gals<br>on a 14 to 28 day interval  |  |
| Botrytis                          | Botrytis spp.   |   |  |
| Blossom Rot/Brown Rot             | Monilinia spp.  |   |  |
| Conifer Blight                    | Phomopsis spp. Rhabdocline spp. Rhizosphaera spp. Sphaeropsis spp.  | 100 gals of spray mix will<br>treat 20,000 sq ft of area<br>when using a typical high<br>volume sprayer. If using a |  |
| Damping-Off/Stem and<br>Root Rots | Rhizoctonia solani  | low volume sprayer,<br>adjust concentration to<br>apply the same amount of  |  |
| Eastern Filbert Blight            | Anisogramma anomola   | product per unit area.  |  |
| Leaf Spots                        | Alternaria spp. Cercospora spp. Diplocarpon spp. Mycosphaerella spp. Myrothecium spp. Phyllosticta spp. Septoria spp. |   |  |
| Powdery Mildew                    | Erysiphe spp. Microsphaera spp. Oidium spp. Phyllactinia spp. Podosphaera spp. Sphaerotheca spp.                      |   |  |
| Rusts                             | Chrysomyxa spp. Coleopsorium spp. Gymnosporangium spp. Puccinia spp. Uredo spp. Uromyces spp.                         |   |  |
| Scab                              | Cladosporium spp. Sphaceloma spp. Venturia spp.   |   |  |
| Shot Hole                         | Wilsonomyces carpophilus<br>Blumeriella spp.  |   |  |
| White Mold                        | Sclerotinia sclerotium  |   |  |

| Table 2 ORNAMENTAL PLANTS LIST |                                       |  |  |
|--------------------------------|---------------------------------------|--|--|
| Woody Ornamental Plants        | Non-Bearing Tree, Fruit, Nut and Vine |  |  |
| Amelanchier                    | Apple                                 |  |  |
| Ash                            | Apricot                               |  |  |
| Azalea                         | Cherry                                |  |  |
| Bayberry                       | Citrus                                |  |  |
| Beech                          | Filbert                               |  |  |
| Birch                          | Grape                                 |  |  |
| Camellia                       | Peach                                 |  |  |
| Cotoneaster                    | Pear                                  |  |  |
| Crabapple                      | Pecan                                 |  |  |
| Crape Myrtle                   | Pistachio                             |  |  |
| Dogwood                        | Plum                                  |  |  |
| Elm                            | Walnut                                |  |  |
| Euonymus                       |                                       |  |  |
| Fir                            |                                       |  |  |
| Hawthorn                       | ·                                     |  |  |
| Hemlock                        | ·                                     |  |  |
| Holly                          |                                       |  |  |
| Juniper                        |                                       |  |  |
| Laurel                         |                                       |  |  |
| Lilac                          |                                       |  |  |
| Linden                         | ·                                     |  |  |
| London Plane                   |                                       |  |  |
| Magnolia                       |                                       |  |  |
| Maple                          |                                       |  |  |
| Mountain Ash                   |                                       |  |  |
| Mountain Laurel                |                                       |  |  |
| Oaks                           |                                       |  |  |
| Pine                           |                                       |  |  |
| Poplar                         |                                       |  |  |
| Photinia                       |                                       |  |  |
| Pyracantha                     |                                       |  |  |
| Rhododendron                   |                                       |  |  |
| Rose                           |                                       |  |  |
| Sassafrass                     |                                       |  |  |
| Spirea                         |                                       |  |  |
| Spruce                         |                                       |  |  |
| Sweetgum                       |                                       |  |  |
| Sycamore                       |                                       |  |  |

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# PLEASE CONTACT VALENT U.S.A. CORPORATION AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.

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