



## SPECIMEN LABEL

**EPA REGISTRATION NO.** 64137-13-70299

**ACTIVE INGREDIENT**

*Gliocladium catenulatum* Strain J1446\*.....93.0%

**OTHER INGREDIENTS**.....7.0%

**TOTAL**.....100.0%

\*Contains a minimum of 1 X 10<sup>9</sup> cfu/g of active ingredient.

### KEEP OUT OF REACH OF CHILDREN CAUTION

#### 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 a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**If on skin or clothing**

- 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.

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222.

#### PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION:**

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks

Mixer/loaders and applicators must wear a NIOSH-approved particulate respirator with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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)(4-5)], 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 breakdown.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS:** For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal 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 4 hours.

Do not enter or allow workers to enter the treated greenhouse or enclosed space until the ventilation requirements in 40 CFR 170.405(b) (3) have been met and the REI of 4 hours has expired. Until then, only handlers wearing the appropriate personal protective equipment can enter the greenhouse or enclosed space.

**EXCEPTION:** If the product is soil incorporated or soil injected, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Waterproof gloves
- Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to 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, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### PRODUCT INFORMATION

Pvent controls seed-borne and soil-borne plant diseases such as damping-off, root and stem rot, and wilt caused by *Alternaria*, *Bipolaris*, *Botrytis*, *Cladosporium*, *Colletotrichum*, *Fusarium*, *Mycosphaerella*, *Penicillium*, *Phytophthora*, *Plasmodiophora*, *Plicaria*, *Pyrenochaeta*, *Pythium*, *Rhizoctonia*, *Sclerotinia* and *Verticillium*; certain storage diseases caused by *Helminthosporium* and *Rhizoctonia*; and foliar diseases like grapevine trunk diseases (several pathogens) as well as diseases caused by *Alternaria*, *Anthraco*se (*Colletotrichum*), *Bipolaris*, *Botrytis*, *Cladosporium*, *Didymella*, *Fusarium*, *Monilinia*, *Mycosphaerella*, *Penicillium* and *Sclerotinia* on (greenhouse or field-grown) vegetables, herbs, ornamentals, flowering plants, bedding plants, berries, cereals, legumes, pome and stone fruits, nut trees, tree and forest seedlings, turf and other labeled crops. PVENT also suppresses powdery mildew symptoms on these (greenhouse or field-grown) crops.

### USE INSTRUCTIONS

Apply PVENT by spraying or drenching the growth substrate, by incorporation into the growth substrate, as a foliar spray, by fogging, or by hydroponic or chemigation application in the field or greenhouse as an aqueous suspension.

PVENT has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations, is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

**Tank Mixing:** Do not combine PVENT in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective, and non-injurious under your use conditions. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

To ensure compatibility of tank-mix combinations, they must be evaluated prior to use. 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 one quart of water with agitation. Add dry formulations first, then flowables, and then emulsifiable concentrates last. After thoroughly mixing, let this mixture 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.

**Surfactants** are not generally needed. A non-ionic surfactant may be used in combination with PVENT for crops with waxy/hard-to-wet leaf surfaces.

**Integrated Pest Control Programs:** PVENT can be used in integrated pest control programs. Always check the compatibility of PVENT with other biological fungicides or chemical pesticides with the local distributor.

### APPLICATION RATES: Pre-harvest Interval (PHI) = 0 days

CROP	APPLICATION METHOD	APPLICATION RATE, TIMING, FREQUENCY AND OTHER APPLICATION INSTRUCTIONS
<b>Beans, Lentils and Peas</b>	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	In-Furrow	0.45–0.90 lbs. PVENT/acre. Apply in 5–25 gallons of water per acre as a directed spray into the seed furrow just before seeds are covered. Use high rate for high disease pressure and/or high plant density.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Berries and Small Fruits, including:</b> Blackberry, Blueberry, Cranberry, Currant, Elderberry, Gooseberry, Huckleberry, Kiwifruit, Loganberry, Raspberry, Strawberry, Grape (e.g., Table and Wine)	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in 1 gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.

<b>Cereal Grain, Forage, Oilseed, and Soybean Crops, including:</b> Alfalfa, Barley, Canola, Corn, Millet, Oats, Rice, Rye, Sorghum, Soybean, Triticale, Wheat	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
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	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Citrus Fruits, including:</b> Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Orange, Pummelo, Satsuma Mandarin	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Cucurbit Vegetables, including:</b> Cucumber, Cantaloupe, Melon, Gourd, Pumpkin, Squash (e.g., Winter), Watermelon	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension)
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.

<b>Flowers, Bedding Plants, Foliage and Potted Plants, and Ornamentals, including:</b> Acchillea, African Violet, Ageratum, Alyssum, Amaryllis, Anemone, Anthurium, Aster, Azalea, Begonia, Calceolaria, Campanula, Carnation, Centaurea, Cerastium, Chrysanthemum, Cineraria, Coleus, Cyclamen, Daffodil, Dahlia, Daisy, Delphinium, Dianthus, Dieffenbachia, Freesia, Fuchsia, Gaillardia, Gazania, Geranium, Gerbera, Gladiolus, Gloxinia, Gypsophila, Hedera, Hyacinth, Impatiens, Iris, Kalanchoe, Liatris, Lily, Lobelia, Marigold, Matthiola, Monarda, Nigella, Pansy, Pelargonium, Petunia, Phlox, Poinsettia, Poppy, Primrose, Rhododendron, Rose, Rudbeckia, Salvia, Senecio, Sinningia, Statice, Sweet Pea, Tulip, Verbena, Vinca, Zinnia	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3-to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
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<b>Fruiting Vegetables, including:</b> Eggplant, Pepper (e.g., Bell, Sweet, and Hot), Okra, Tomatillo, Tomato	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
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<b>Herbs, Spices, and Mints, including:</b> Aniseed, Basil, Caraway, Chive, Dill, Fennel, Lavender, Marjoram, Oregano, Parsley, Rosemary, Sage, Savory, Thyme	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
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<b>Hydroponic Crops:</b> Cucumber, Lettuce and Other Leafy Greens, Herbs and Spices, Tomato, Strawberry	Injection into Hydroponic Systems	Apply PVENT by injection into hydroponic NFT, ebb-and-flow and rockwool applications with each water change or every 5–7 days depending on disease pressure. Presoak transplants in the same solution mix.  Rate for NFT and ebb-and-flow applications: 0.09 oz. PVENT per 1,000 plants, 0.002 oz. PVENT/100 sq. ft.  Rate for rockwool applications: 0.7–0.9 oz. PVENT per 1,000 plants, 0.013–0.016 oz. PVENT/100 sq. ft.
<b>Leafy Vegetables, Brassica (Cole) Leafy Vegetables, and Other Vegetables, including:</b> LEAFY VEGETABLES- Arugula, Celery, Endive, Fennel, Lettuce (e.g., Head and Leaf), Parsley, Radicchio, Rhubarb, Spinach, Swiss Chard, Watercress  BRASSICA (COLE) LEAFY VEGETABLES- Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Mustard Greens  OTHER VEGETABLES- Asparagus	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)–Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.	
<b>Peanut</b>	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.

<b>Pome Fruits, including:</b> Apple, Pear, Quince	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Stone Fruits, including:</b> Apricot, Cherry (e.g., Sweet and Tart), Nectarine, Peach, Plum, Prune (Fresh)	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
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	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Tobacco</b>	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
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	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.

<b>Trees, Shrub Seedlings, and Shadehouse and Outdoor Nursery Crops, including:</b> Birch, Deciduous Trees (e.g., Maple and Oak), Forest Trees, Fruit Trees, Juniper, Ornamentals, Pine, Shrubs, Spruce, Vine Crops, Woody Ornamentals	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
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	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.	
<b>Tree Nuts, including:</b> Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Coconut, Filbert, Hickory Nut, Macadamia Nut, Pecan, Pistachio, Walnut	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	In-Furrow	0.45–0.90 lbs. PVENT/acre. Apply in 5–25 gallons of water per acre as a directed spray into the seed furrow just before seeds are covered. Use high rate for high disease pressure and/or high plant density.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Root, Tuber, and Bulb Vegetables, including:</b> Beet (e.g., Garden and Sugar), Carrot, Cassava, Celeriac, Chicory, Chinese Artichoke, Chive, Dasheen, Garlic, Ginger, Ginseng, Horseradish, Jerusalem Artichoke, Leek, Onion, Parsnip, Potato, Radish, Rutabaga, Salsify, Shallot, Sweet Potato, Turmeric, Turnip, Turnip-Rooted, Chervil, Yam	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Transplant, Root or Bulb Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension). Dip bulbs and tubers before planting or storage.
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.

<b>Turf, including:</b> Lawns, Turf Grown for Seed and Sod, Turf Greens, Sod Farms	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.
	Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
<b>Miscellaneous Crops:</b> Avocado, Banana, Coffee, Globe Artichoke, Hops, Mushrooms, Papaya, Plantain, Other Flowering Plants, and Bedding Plants	Greenhouse or Nursery Soil/Media Drench	0.33 oz. PVENT per 2.5 gallons of water (0.1% suspension). Repeat applications every 3 weeks depending on disease pressure.
	Growing Media Incorporation	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Store treated growing media below 77°F and use within 3 weeks after preparation.
	Cuttings, Bare Root or Transplant Dip or Drench	0.1 oz. PVENT in one gallon of water (0.075% suspension).
	Greenhouse Chemigation	0.16–0.33 oz. PVENT per 1,000 sq. ft. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.
	Foliar Spray	0.33 oz. PVENT per 5 gallons of water (0.05% suspension). Repeat applications every 3–6 weeks depending on disease pressure. See FOLIAR APPLICATION INSTRUCTIONS CHART for the amount of PVENT/acre.  For fogging (cold fogging only)—Make a 0.1% suspension (0.13 oz. PVENT per gallon of water) and apply as a fog at a rate of 0.6–1 gallon of suspension per every 10,000 sq. ft. of crop area.
Field Chemigation (Drip or Sprinkler)	0.45–0.90 lbs. PVENT/acre. Make first application immediately after seeding/transplanting and repeat at a 3- to 6-week interval. Use high rate for high disease pressure and/or high plant density. See CHEMIGATION USE DIRECTIONS.	

#### PREPARING AN AQUEOUS SUSPENSION OF PVENT

To prepare an aqueous suspension of PVENT, mix product in a small volume of water such as 1/2 gallon (e.g., 0.35 oz. of PVENT per 1/2 gallon of water). For best results, let the suspension stand 30 minutes. Agitate sufficiently to evenly disperse product before diluting to final volume. Apply the aqueous suspension as a dip, drench or spray or via drip or sprinkler chemigation or incorporation in potting media. Use the aqueous suspension within 1 day of preparation. Examples of mixing ratios of PVENT with water are as follows:

Concentration of PVENT Suspension	Ounces (oz.) of PVENT	Gallons of Water	Grams (g) of PVENT	Liters (L) of Water
0.01%	0.33	25	10	100
0.05%		5		20
0.1%		2.5		10
0.25%		1		4

#### FOLIAR APPLICATION INSTRUCTIONS CHART

Foliar Spray: 0.33 oz. PVENT per 5 gallons of water (0.05% suspension). When using ultra-low volume sprayers, use a maximum pressure of 0.05 psi and a minimum nozzle size of 80 microns.

Foliar Spray Solution Volume (Gallons/Acre)	PVENT (0.05% suspension)		
	Ounces/Acre	Pounds/Acre	Grams/Acre
10	0.66	0.041	18.71
30	1.98	0.123	56.13
50	3.30	0.206	93.55
75	4.95	0.309	140.33
100	6.60	0.413	187.11
200	13.20	0.825	374.21
400	26.40	1.650	748.43

Foliar Spray Solution Volume (Gallons/1,000 sq. ft.)	PVENT (0.05% suspension)	
	Ounces/1,000 sq. ft.	Grams/100 sq. ft.
0.5	0.033	0.94
1.0	0.066	1.87
2.0	0.132	3.74
3.0	0.198	5.61
4.0	0.264	7.48
5.0	0.330	9.36



## FOGGING APPLICATION INSTRUCTIONS

Use cold fogging systems only. Use a pressure of 0.036 psi and nozzle size of 100–150 microns.

## CHEMIGATION USE DIRECTIONS

### General Requirements -

1. Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

### Specific Requirements for Chemigation Systems Connected to Public Water Systems -

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

### Specific Requirements for Sprinkler and Drip (Trickle) Chemigation -

1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional,

normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

### Application Instructions for All Types of Chemigation -

1. Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause product to lose effectiveness or strength.
2. Determine the treatment rates as indicated in the directions for use and make proper dilutions.
3. Make sufficient stock solution of PVENT to allow for even injection into irrigation systems during the irrigation cycle. For preparing a stock solution, use clean water with a neutral pH and devoid of salts and chemicals.
4. Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. Utilize agitation to keep solution in suspension. Apply continuously for the duration of the water application.
5. Apply in sufficient amount of water to move into root zone. Repeat every 3–6 weeks for disease control, depending on disease pressure and new plant growth.
6. When applying through sprinkler irrigation systems for soil-borne disease control, use the high rate and time the application for the early stages of crop growth when crop canopy is sparse, which will allow PVENT-injected water to reach the ground more efficiently.

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store unopened package under refrigerated conditions (36°F - 43°F; 2°C - 6°C). Immediately use the entire package's content after opening.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. (For instances where state and local ordinances do allow burning: If burned, stay out of smoke.)

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. To the extent consistent with applicable law, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of BIOSAFE SYSTEMS LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold BIOSAFE SYSTEMS and Seller harmless for any claims relating to such factors.

BIOSAFE SYSTEMS warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above when used in accordance with directions under normal use conditions. To the extent consistent with applicable law, this warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or BIOSAFE SYSTEMS, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BIOSAFE SYSTEMS MAKES NO WARRANTIES OF MERCHANTABILITY FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, in no event shall BIOSAFE SYSTEMS or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF BIOSAFE SYSTEMS AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF BIOSAFE SYSTEMS OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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