

PRISTINE® WG Fungicide

For Greenhouse Cucumber and Greenhouse Tomato Production in Canada

Helping Make
Products Better™

**BASF**
The Chemical Company

Uses:

Greenhouse cucumbers for control of powdery mildew (*Sphaerotheca fuliginea*) and suppression of gummy stem blight (*Didymella bryoniae*)

Greenhouse Tomatoes for control of botrytis grey mold (*Botrytis cinerea*) and suppression of powdery mildews (*Oidium lycopersici*; *Leveillula taurica* and *Erysiphe polygoni*).

Formulation: 38% WG (water dispersible granule)

Packaging: 2.83 kg/bottle (4 bottles per case)

Active Ingredient:

25.8% boscalid
12.8% pyraclostrobin

Chemical Family: Anilide (Group 7 fungicide) and strobiluron (Group 11 fungicide)

Mode of Action: Boscalid inhibits an enzyme stage of the respiratory chain in fungi. It stops energy production in the fungus and blocks synthesis of amino acids, as well as lipids necessary for fungal growth. Pyraclostrobin blocks energy production in the fungal cell.

Behavior in Plant: Translaminar redistribution properties, which means it moves from the treated leaf surface through the plant tissue to the opposite surface.

Use Rates: 1.3 kg/ha in greenhouse cucumbers and 1.6 kg/ha in greenhouse tomatoes. Use a minimum 250 L/ha water volume to ensure thorough coverage on the crop.

REI: When sprays have dried

PPE: Coveralls over long-sleeved shirt and long pants; chemical-resistant gloves; shoes and socks

One Product, Broad Spectrum Disease Control

Pristine® WG Fungicide is a product with two modes of action. The combination of boscalid and pyraclostrobin results in an additive effect of their unique chemistries, providing disease control superior to that offered by the individual products. In addition, the combined modes of action within **Pristine WG Fungicide** could delay the onset of fungal tolerance to the strobilurin chemistries and act as an excellent resistance management tool.

When used as directed, **Pristine WG Fungicide**:

- Offers two active ingredients, boscalid and pyraclostrobin in one product and effectively control fungal diseases in greenhouse tomatoes and cucumbers using two modes of action.
- **Pristine WG Fungicide** is packaged as a 2.83 kg container, a size that fits many ornamental operations.

Diseases Controlled

Used as a protectant, **Pristine WG Fungicide** is an industry standard in numerous crops across Canada for control and prevention of fungal disease such as:

- *Downy and powdery mildew, fruit rots, rust, leaf spot, anthracnose, storage rot, spur and twig blight, blossom blight and leaf blotch.*

Keys to Success

Use **Pristine WG Fungicide** as a preventive application before the first sign of disease. It is not recommended to use **Pristine WG Fungicide** after an epidemic occurs.

In Greenhouse Cucumbers: For control of powdery mildew and suppression of gummy stem blight, apply **Pristine WG Fungicide** 1.3 kg/ha when conditions favour disease development. Do not apply **Pristine WG Fungicide** more than once per crop cycle. Do not use **Pristine WG Fungicide** on greenhouse transplants.

In Greenhouse Tomatoes: For control of botrytis grey mold and suppression of powdery mildew, apply **Pristine WG Fungicide** 1.6 kg/ha prior to disease development. **Pristine WG Fungicide** will provide control of Botrytis grey mold on greenhouse tomatoes for a period of 10-14 days, depending on disease pressure. Do not apply **Pristine WG Fungicide** more than once per crop cycle. Do not use **Pristine WG Fungicide** on greenhouse transplants.

Follow resistance management guidelines found on the label.

Mode of Action and Systemicity

Pristine WG Fungicide contains boscalid and pyraclostrobin. Boscalid inhibits fungal growth, spore germination, spore growth, and sporulation (anti-sporulant). Pyraclostrobin interferes with energy production of the fungus, inhibits spore germination, mycelial growth and sporulation of fungus.

Pristine WG Fungicide penetrates leaves and stems (translaminar uptake and rainfast).

Plant Safety

Pristine WG Fungicide has shown excellent plant safety on a number of greenhouse cucumber and tomato cultivars. However, due to the large number of varieties/cultivars, users should conduct small-scale tests under local growing conditions prior to the use of the product in a wide-scale operation

Disease Prevention in Your Greenhouse

- 1) Prevent introduction of disease into your greenhouse by enforcing year round sanitation practices and ensure greenhouse is thoroughly disinfected between crops. All structures, equipment and tools must be disinfected to ensure new crop will not come into contact with pathogens from the previous crop.
- 2) Use cultivars or varieties that are resistant/tolerant to persistent diseases in greenhouse vegetable crops.
- 3) Create an environment less favourable for disease development. This is achieved through management of relative humidity by increasing air circulation and increasing plant spacing; watering or irrigating in the morning to reduce periods of wetness; and reducing or eliminating puddles of water in the greenhouse.
- 4) Monitor environmental conditions in the greenhouse to identify when conditions favouring disease development develop.
- 5) Early detection of diseases through scouting and monitoring of crop will allow for quick action to reduce its spread and severity.

Disease Management in Your Greenhouse

- 1) Begin fungicide applications when disease pressure is low. Fungicides work best when applied under low disease pressure.
- 2) Follow a scheduled fungicide spray program which includes application of **Pristine WG** Fungicide when conditions favour development of disease.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS

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