

PRESTOP WG

Front panel

BIOLOGICAL FUNGICIDE

For the Suppression of Soil-Borne and Foliar Diseases on the following Greenhouse Crops:
Strawberries, Listed Vegetables, Asian Water Spinach, Herbs, Ornamentals and Cannabis

COMMERCIAL

ACTIVE INGREDIENT: *Gliocladium catenulatum* strain J1446 Minimum 1×10^9 CFU/g

NET CONTENTS: xx g (content range 10 g to 25 kg).

POTENTIAL SENSITIZER

KEEP OUT OF THE REACH OF CHILDREN.

READ THE BACK PANEL AND LABEL INSIDE THIS PACKAGE BEFORE USING

REGISTRATION NO: _____ **32404** _____ **PEST CONTROL PRODUCTS ACT**

Registration holder:
Danstar Ferment AG
Poststrasse 30
CH-6300 ZUG
Switzerland

Manufactured by:
Verdera Oy / Lallemand Plant Care
Kurjenkellontie 5B, PO Box 5
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59 Industrial Park Crescent, Unit 1
Sault Ste, Marie, ON P6B 5P3
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Back panel

PRESTOP WG

PRECAUTIONS: KEEP OUT OF THE REACH OF CHILDREN. Keep away from food, drink and animal feed.

PRESTOP WG contains *Gliocladium catenulatum* J1446. Micro-organisms may have the potential to provoke sensitizing reactions.

Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist.

Wear a long-sleeved shirt, long pants, waterproof gloves, eye goggles, shoes plus socks, as well as a NIOSH approved mist filtering mask or respirator when handling, mixing/loading or applying the product and during all clean-up/repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

After foliar applications, early entry workers are restricted from entering application areas for 4 hours unless wearing a long-sleeved shirt, long pants, water proof gloves, shoes plus socks. In addition eye goggles and a NIOSH approved mist filtering mask or respirator are required until spray mist has settled.

FIRST AID

IF ON SKIN/CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control centre or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

IF SWALLOWED: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

GENERAL: Seek medical attention IMMEDIATELY if irritation or signs of toxicity occur and persist or are severe. Take container, label or product name and Pest Control Product Registration Number with you, when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS:

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters. For guidance contact the Provincial Regulatory Agency.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

STORAGE

Store in original container in a dry place. Avoid overheating. Store unopened packets at or below +25°C. Use all contents in packet during the same day. Do not store opened packets since product will lose its viability. Unopened packets stored at or below +25°C have a viable shelf life of 12 months.

Verdera

LALLEMAND
PLANT CARE

PRESTOP WG DIRECTIONS FOR USE

GENERAL

PRESTOP WG contains a naturally occurring soil fungus. The effect of PRESTOP WG comes from several factors. The microbe deprives pathogen fungi of living space and nourishment by colonizing plant roots in advance of pathogens. In addition, the microbe acts as a hyperparasite for harmful fungi by producing enzymes, which results in lysis of cell walls of pathogens.

PRESTOP WG suppresses the listed fungal diseases on the specified greenhouse crops: listed vegetables, strawberries, Asian water spinach (tung choy, kankon, rao muong), herbs, ornamentals, and cannabis. PRESTOP WG is not recommended for treatment of unrooted cuttings.

PRESTOP WG is compatible with IPM programs.

DIRECTIONS FOR USE

PRESTOP WG is in the form of water dispersible granules, packed in air-tight, moisture-proof packets. PRESTOP WG should always be prepared as an aqueous suspension, and then applied in one of three ways: as a growing media treatment, as a drench treatment or as a foliar spray treatment. PRESTOP WG is most effective when applied preventatively, before disease starts. Refer to the **Crops Treated and Diseases Suppressed** section for information on what diseases PRESTOP WG will suppress on specific crops. Refer to **PRESTOP WG Mixing Instructions** section for directions as how to prepare an aqueous suspension of PRESTOP WG. Refer to the **Application Timing, Methods and Rates** section for specific information on when to apply PRESTOP WG, application instructions, and use rates.

CROPS TREATED AND DISEASES SUPPRESSED

Propagation Stage

Apply PRESTOP WG as a growing media incorporation, or as a drench application.

PRESTOP WG will suppress damping-off (*Pythium* sp. and *Rhizoctonia solani*) on greenhouse strawberries and the following greenhouse vegetables and herbs: Asian water spinach (tung choy, kankon, rao muong), cucumber, eggplant, pepper, tomato, cauliflower, broccoli, lettuce, oregano, basil, parsley, thyme, dill, and cannabis.

It will suppress damping-off (*Pythium* spp. and *Rhizoctonia solani*) on the following greenhouse grown bedding plants: alyssum, geranium, pansy, petunia, salvia, snapdragon and tagetes; as well as on potted poinsettia and saintpaulia.

Cultivation Stage

When incorporated into media, and/or applied as repeated drench treatments, PRESTOP WG will suppress crown and root rot (*Pythium* spp.) on the following greenhouse-grown crops: strawberries, Asian water spinach (tung choy, kankon, rao muong), cucumber, pepper, tomato, cauliflower, broccoli, lettuce, oregano, basil, parsley, thyme, dill, and cannabis as well as root and stem wilt disease (*Fusarium oxysporum*) on greenhouse cucumbers and basil.

For greenhouse ornamentals, PRESTOP WG will suppress root and basal stem rot (*Phytophthora cryptogea*) on alyssum, geranium, pansy, petunia, salvia, snapdragon and tagetes; as well as poinsettia and saintpaulia.

Foliar and stem diseases

When applied as a foliar spray, PRESTOP WG will suppress stem canker (*Botrytis cinerea*) on the following greenhouse crops: strawberries, eggplant, Asian water spinach (tung choy, kankon, rao muong), peppers, tomatoes, cucumbers, and cannabis, as well as grey mould (*Botrytis cinerea*) on the following greenhouse crops: strawberries, eggplant, peppers, tomatoes, cucumbers, lettuce, oregano, basil, parsley, thyme, dill, and cannabis. It will also suppress gummy stem blight disease (*Didymella bryoniae*) on greenhouse cucumbers.



For greenhouse ornamentals, it will suppress grey mould (*Botrytis cinerea*) on alyssum, geranium, pansy, petunia, salvia, snapdragon and tagetes, as well as poinsettia and saintpaulia.

PRESTOP® WG Mixing Instructions

To prepare an aqueous suspension of PRESTOP WG, refer to the table below. Make an aqueous suspension to either 0.05% or 0.1% by mixing the PRESTOP WG packet contents carefully in a small volume of water (e.g. 1L). Agitate as needed to get the product evenly dispersed before dilution to final volume. The water suspension should be used within 24 hours of being prepared.

Concentration of PRESTOP WG	Grams of PRESTOP WG	Litres of Water
0.05%	2.5	5
0.05%	10	20
0.1%	5	5
0.1%	20	20

Do not tank mix PRESTOP WG with any chemical pesticide including fungicides, insecticides and herbicides, or adjuvants. Do not apply through chemigation equipment. PRESTOP WG can be applied in alternation with other fungicides registered for disease control.

APPLICATION TIMING, METHODS and RATES

Application Timing

The effect of PRESTOP WG is preventative. Start by treating the growing media prior to seeding, transplanting or potting, or else make a drench application immediately after seeding, transplanting or potting. Once seeds are sown or seedlings transplanted, additional applications of PRESTOP WG can be made as a drench or foliar application. Always use an aqueous suspension of the product. Repeat applications every 3 to 6 weeks, with the shorter interval used under conditions of moderate to high disease pressures. For suppression of foliar and stem diseases, re-apply every 3 to 4 weeks as a foliar spray application, with the shorter interval used under conditions of moderate to high disease pressure.

METHOD 1: Growing Media Treatment

Prepare and apply a 0.05% aqueous solution of PRESTOP WG to the indicated volume of growing media just prior to planting, transplanting or sowing. Growing media includes rock-wool containers, peat-based and other media. Always adjust the volume of water according to the moisture content of the growing media. A drench application of PRESTOP WG may follow a growing media treatment immediately after planting or transplanting has occurred.

Required Volume of 0.05% PRESTOP WG Suspension*	Per Quantity of Growth Media
125-250 mL	per 10 L
625-1250 mL	per 50 L
12.5-25 L	per 1.0 m ³

* Always adjust the volume of water according to the moisture content of the growing media.

METHOD 2: Soil Drench Treatment

Prepare and apply a 0.05% aqueous solution of PRESTOP WG as a drench application to the surface of the growing media after planting, transplanting or sowing. Always adjust the volume of water according to the moisture content of the growing media. Refer to the tables below for correct volume of suspension to apply per area of growing media (propagation stage), or per plant (cultivation stage). For suppression of *Fusarium* root and stem wilt only, use the 0.1% rate.



Required Volume of 0.05% or 0.1% PRESTOP WG Suspension*	Per Area of Growth Media
20 L	per 10 m ²
200 L	per 100 m ²

*Always adjust the volume of water according to the moisture content of the growing media.

Required Volume of 0.05% or 0.1% PRESTOP WG Suspension*	Per Number of Plants
20 L	per 400 plants
100 L	per 2000 plants

*Always adjust the volume of water according to the moisture content of the growing media.

METHOD 3: Foliar Treatment

Greenhouse vegetables and herbs: Asian Water Spinach (tung choy, kankon, rao muong), tomato, pepper, cucumber, lettuce, oregano, basil, parsley, thyme, dill, strawberry, eggplant and cannabis.

Greenhouse ornamentals: alyssum, geranium, pansy, petunia, salvia, snapdragon and tagetes, poinsettia and saintpaulia.

Rate: Prepare and apply 0.05% aqueous suspension of PRESTOP WG to plant stems and leaves. Spray to wet but not to run-off. For the suppression of gummy stem blight, use the 0.1% rate.

METHOD 4: Hydroponic Treatment

Apply PRESTOP WG in hydroponic NFT, ebb-and-flow and rockwool applications according to following rates:

- NFT and ebb-and-flow application: 2.5 grams PRESTOP WG per 1000 plants, 0.05 kg/ha.
- Rockwool: PRESTOP WG 20-25 g/1000 plants, 0.4-0.5 kg/ha.
- Repeated hydroponic applications may be done within 3 – 6 weeks or sooner depending on disease pressure and new plant growth.

STORAGE

Store in original container in a dry place. Avoid overheating. Store unopened packets at or below +25°C. Use all contents in packet during the same day. Do not store opened packets since product will lose its viability. Unopened packets stored at or below +25°C have a viable shelf life of 12 months.

DISPOSAL

1. Triple-rinse the empty container. Add the rinsings to the aqueous suspension.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

PRESTOP WG is a registered trademark of Danstar Ferment AG.

