

Date: 20.5.2009

Former date: 24.4.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**1.1 Identification of the substance or preparation****Trade name**

Prestop Mix

Code of the preparation

Reach registration number

Not applicable.

1.2 Use of the substance/preparation**1.2.1 The uses of the chemical**

Prestop Mix contains spores and mycelium of a natural soil fungus. The product is used for the control of fungal pathogens, such as Pythium and Rhizoctonia, causing damping-off and root diseases in vegetables, herbs and ornamentals, in peat or other organic substrates. Delivered by pollinators, it is also used for the control of Botrytis infection on strawberry. Use for other purposes is prohibited.

1.2.2 Classification of economic activities (NACE) A 011**1.2.3 Use categories (UC62)** Plant Protection Products 38**1.2.4 The chemical can be used by the general public** **1.2.5 The chemical is used by the general public only** **1.3 Company/undertaking identification****1.3.1 Manufacturer, importer, other undertaking**

VERDERA OY

1.3.2 Contact information:**Street address**

Kurjenkellontie 5 B

Postcode and post office

FI-02270 Espoo, FINLAND

Post-office box

5

Postcode and post office

FI-02271 Espoo, FINLAND

Telephone number

+358 10 217 3726

Telefax

+358 10 217 3711

E-mail address**Y code**

0220917-4

1.3.3 Information on the foreign manufacturer

1.4 Emergency telephone**1.4.1 Telephone number, name and address**

2. HAZARDS IDENTIFICATION

May cause sensitization by skin contact.

3. COMPOSITION AND INFORMATION ON INGREDIENTS**3.1 Hazardous ingredients**

3.1.1 CAS/EC number and the Registration number	3.1.2 Name of the ingredient	3.1.3 Concentration	3.1.4 Classification (symbol letters and R phrases) and other data on the ingredient
Reg. number in Finland 1898	Dried spores and mycelium of <i>Gliocladium catenulatum</i> J1446	>1E07 cfu/1g of the product	Xi, R43

3.1.5 There has been a request for confidentiality of a substance according to Annex 2 of the decree

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- 3.1.6 A substance not dangerous has been indicated as confidential
3.1.7 Other information
- - -

4. FIRST AID MEASURES

- 4.1 **Special instructions**
- - -
- 4.2 **Inhalation**
Remove from exposure to fresh air. Obtain medical attention.
- 4.3 **Skin contact**
Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
- 4.4 **Eye contact**
Rinse immediately with plenty of water for at least 15 minutes.
If eye irritation persists, consult a physician.
- 4.5 **Ingestion**
Immediately give plenty of water. Never give anything by mouth to an unconscious person. Induce vomiting immediately and call a physician.
- 4.6 **Information for a doctor or other professionals giving first aid**
- - -

5. FIRE-FIGHTING MEASURES

- 5.1 **Suitable extinguishing media**
Water
- 5.2 **Extinguishing media which shall not be used for safety reasons**
- - -
- 5.3 **Special exposure hazards in a fire**
- - -
- 5.4 **Special protective equipment for fire-fighters**
In case of fire, wear a self contained breathing apparatus and a protective suit.
- 5.5 **Other instructions**
- - -

6. ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal precautions**
Avoid contact with skin, eyes and clothing. Use personal protective equipment.
- 6.2 **Environmental precautions**
The active substance is a common, naturally occurring soil microbe.
- 6.3 **Methods for cleaning up**
Use personal protective equipment. Pick-up and arrange disposal without creating dust. Shovel into suitable container for disposal. Dispose of in compliance with local and national regulations.
- 6.4 **Other instructions**
- - -

7. HANDLING AND STORAGE

- 7.1 **Handling**
Avoid contact with skin, eyes and clothing. Do not breathe dust/spray mist. Wear personal protective clothing, gloves and eye/face protection when handling the product. Wash hands and face with soap and water before breaks and after handling the product.
Do not use as a tank mixture with chemical pesticides.
- 7.2 **Storage**
Keep unopened in a dry and cool place at temperatures below + 8 °C. Keep out of reach of children.
Keep away from food, drink and animal feeding stuffs.
- 7.3 **Specific use(s)**
- - -

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 **Exposure limit values**
- 8.1.1 **HTP values (in Finland)**
Organic dust, HTP (8h) = 5 mg/m³ (Finland), HTP (15 min) = 10 mg/m³ (Finland)
- 8.1.2 **Other limit values**

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- 8.1.3 **Limit values in other countries**
Particulates Not Otherwise Specified, TLV = 10 mg/m³ (TWA, E , I) USA, TLV = 3 mg/m³ (TWA, E, R) USA, Allgemeine Staube, MAK = 4 mg/m³ (E) Germany
8.1.4 **DNELs**

8.1.5 **PNECs**

8.2 Exposure controls

- 8.2.1 **Occupational exposure controls**
Avoid exposure.
8.2.1.1 **Respiratory protection**
Wear suitable respiratory equipment: respirator with combination filter for vapour/particulate (A + P2).
8.2.1.2 **Hand protection**
Rubber or plastic gloves (e.g. nitrile).
8.2.1.3 **Eye protection**
Goggles or face-shield.
8.2.1.4 **Skin protection**
Suitable protective clothing (protective suit, rubber boots, hat).
8.2.2 **Environmental exposure controls**

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 **General information (physical state, colour and odour)**
Pale powder, mild

9.2 Important health, safety and environmental information

- 9.2.1 **pH**
Approx. 6.3 (1% suspension)
9.2.2 **Boiling point/boiling range**
Not applicable.
9.2.3 **Flash point**
Not applicable.
9.2.4 **Flammability (solid, gas)**
Not applicable.
9.2.5 **Explosive properties**
Not applicable.
9.2.6 **Oxidising properties**
Not applicable.
9.2.7 **Vapour pressure**
Not applicable.
9.2.8 **Relative density**
Approx. 240 kg/cu.m.
9.2.9 **Solubility**
Insoluble.
9.2.10 **Water solubility**
Insoluble.
9.2.11 **Partition coefficient: n-octanol/water**
Not applicable.
9.2.12 **Viscosity**
Not applicable.
9.2.13 **Vapour density**
Not applicable.
9.2.14 **Evaporation rate**
Not applicable.

9.3 Other information

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10.	STABILITY AND REACTIVITY
10.1	Conditions to avoid High temperatures (>30 Celsius degrees), UV-light, irradiation
10.2	Materials to avoid Acids, bases, concentrated fertilizer liquids, chemical pesticides, food, drink, animal feeding stuffs.
10.3	Hazardous decomposition products Not applicable.
11.	TOXICOLOGICAL INFORMATION
11.1	Acute toxicity LD50/oral/rat > 2 g/kg. LD50/dermal/rat > 2 g/kg. Inhalation: Not toxic or pathogenic to rat.
11.2	Irritation and corrosivity Mild eye irritation.
11.3	Sensitisation May cause sensitizing.
11.4	Sub-acute, sub-chronic and prolonged toxicity No data available.
11.5	Human health effects based on experience May cause sensitizing. No adverse effects observed when used according to the instructions.
11.6	Other information on health effects - - -
12.	ECOLOGICAL INFORMATION
12.1	Ecotoxicity
12.1.1	Aquatic toxicity Active ingredient: LC50/30d/rainbow trout = 3.5*108 cfu/L (504 mg/L) EC50/21d/daphnia = 5.5*106 cfu/L (7.8 mg/L)
12.1.2	Toxicity to other organisms - - -
12.2	Mobility Gliocladium catenulatum -fungus is a natural habitant of soil.
12.3	Persistence and degradability
12.3.1	Biodegradation Like other naturally occurring soil microbes.
12.3.2	Chemical degradation Like other naturally occurring soil microbes.
12.4	Bioaccumulative potential Do not accumulate
12.5	Results of PBT assessment - - -
12.6	Other adverse effects - - -
13.	DISPOSAL CONSIDERATIONS
	Packagings can be landfilled or incinerated, when in compliance with local and national regulations. Wastes can be landfilled, when in compliance with local and national regulations.
14.	TRANSPORT INFORMATION
14.1	UN number - - -
14.2	Packing group - - -
14.3	Land transport
14.3.1	Transport class Not classified as dangerous in the meaning of transport regulations.
14.3.2	Risk code

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14.3.3 **Name according to bill of freight**
Prestop Mix

14.3.4 **Other information**

14.4 **Sea transport**

14.4.1 **IMDG class**
Not classified as dangerous in the meaning of transport regulations.

14.4.2 **Correct technical name**
Prestop Mix

14.4.3 **Other information**

14.5 **Air transport**

14.5.1 **ICAO/IATA class**
Not classified as dangerous in the meaning of transport regulations.

14.5.2 **Correct technical name**
Prestop Mix

14.5.3 **Other information**

15. **REGULATORY INFORMATION**

15.1 **Information on the label**

15.1.1 **Danger symbols (letters) and indications of danger**
Xi, irritant

15.1.2 **Substances to be named on the label**
Dried spores and mycelium of Gliocladium catenulatum J1446

15.1.3 **R phrases**
R43 **May cause sensitization by skin contact.**

15.1.4 **S phrases**
S2 **Keep out of reach of children.**
S13 **Keep away from food, drink and animal feeding stuffs.**
S22 **Do not breath dust.**
S24 **Avoid contact with the skin.**
S29 **Do not empty into drains.**
S37 **Wear suitable gloves.**

15.1.5 **Special provisions concerning the labelling of certain preparations**

15.1.6 **Chemical Safety Assessment has been carried out for the following substances**

15.2 **National regulations**

16. **OTHER INFORMATION**

16.1 **List of relevant R phrases**
R43 **May cause sensitization by skin contact.**

16.2 **Training advice**

16.3 **Recommended restrictions on use**
Prestop Mix is not recommended for unrooted cuttings of woody ornamentals. It is also not recommended for rock-wool cultivations. Prestop Mix can not be applied via drip irrigation system.

16.4 **Further information**
The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification, since the conditions of the operations mentioned are beyond our control. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text. Verdera Oy disclaims any liability for loss or damage resulting from the use of these data, information or suggestions.

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16.5 Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests

16.6 Information which has been added, deleted or revised

1.2.1 Delivered by pollinators, it is also used for the control of Botrytis infection on strawberry.