

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

Prestop EPA Reg. No. 64137-11

Use of the Substance/Preparation**Expressed in writing**

Prestop contains spores and mycelium of a natural soil fungus.

The product is used for the protection of vegetable, herb and ornamental crops from grey mold, damping off and root diseases as well for the control of gummy stem blight in cucumber.

Use for other purposes is prohibited.

Company/Undertaking Identification**Manufacturer, importer, supplier**Verdera Oy
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2. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

CAS number or other code	Chemical name of the substance	Concentration	Warning symbol, R phrases and other information
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	Dried spores and mycelium of <i>Gliocladium catenulatum</i>	>10 ⁷ cfu/g	Xi, R 43
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Further information*Gliocladium catenulatum* fungus, a naturally occurring living microorganism.**3. HAZARDS IDENTIFICATION**

May cause sensitization by skin contact.

4. FIRST AID MEASURES**Additional advice****Inhalation**

Remove from exposure to fresh air. Obtain medical attention.

Skin contactWash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.**Eye contact**Rinse immediately with plenty of water for at least 15 minutes.
If eye irritation persists, consult a specialist.**Ingestion**

Immediately give plenty of water. Never give anything by mouth to an unconscious person. Induce

vomiting immediately and call a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water

Extinguishing media which must not be used for safety reasons

Special exposure hazards in a fire

Special protective equipment for firefighters

In case of fire, wear a self contained breathing apparatus and a protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with skin, eyes and clothing.

Use personal protective equipment.

Environmental precautions

The active ingredient is a common naturally occurring soil microbe.

Methods for cleaning up

Use personal protective equipment. Pick-up and dispose of without creating dust. Dispose of in compliance with local and national regulations.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust. 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.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values

Exposure limit(s):

Organic dust

HTP (8h) = 5 mg/m³ (Finland)

HTP (15 min) = 10 mg/m³ (Finland)

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 Stäube

MAK = 4 mg/m³ (E) Germany

Exposure controls

Occupational exposure controls

Avoid exposure.

Respiratory protection

Wear suitable respiratory equipment: Half mask with a particle filter P2.

Hand protection

Rubber or plastic gloves (e.g. PVC, neoprene).

Eye protection

Goggles or face-shield.

Skin and body protection

Suitable protective clothing (protective suit, rubber boots, hat).

9. PHYSICAL AND CHEMICAL PROPERTIES**General Information (appearance, odour)**

powder; pale; mild

Important Health Safety and Environmental Information

pH ca 7 (1% solution)

Boiling point/range not applicable

Flash point not applicable

Explosive properties

Lower explosion limit not applicable

Upper explosion limit not applicable

Vapour pressure not applicable

Relative density ca 0.5

Solubility

Water solubility insoluble

Fat solubility (solvent - oil to be specified) insoluble

Partition coefficient (n-octanol/water) not applicable

Viscosity not applicable

10. STABILITY AND REACTIVITY**Conditions to avoid**

High temperatures.

Materials to avoid

Food, drink and animal feeding stuffs.

Hazardous decomposition products

not applicable

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50/oral/rat > 2 g/kg.

LD50/dermal/rat > 2 g/kg.

Inhalation: Not toxic or pathogenic to rat.

The tests were carried out with a product closely related to Prestop.

Irritation and corrosion

Mild eye irritation.

The tests were carried out with a product closely related to Prestop.

Sensitisation

May cause sensitization by skin contact.

The tests were carried out with a product closely related to Prestop.

Subacute, subchronic and prolonged toxicity

no data available

Human experience

May cause sensitizing. No adverse effects observed when used according to the instructions.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Aquatic toxicity**

Active ingredient:

LC50/30d/rainbow trout = $3.5 \cdot 10^8$ cfu/L (504 mg/L)

EC50/21d/daphnia = $5.5 \cdot 10^6$ cfu/L (7.8 mg/L)

Mobility

Gliocladium catenulatum fungus is a natural habitant of soil.

Persistence / degradability**Biological degradability**

Like other naturally occurring soil microbes.

Bioaccumulative potential

Do not accumulate.

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**Land transport****ADR/RID**

Not classified as dangerous in the meaning of transport regulations.

Sea transport**IMDG**

Not classified as dangerous in the meaning of transport regulations.

Air transport**ICAO/IATA**

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 90/492/EEC.

Information on the warning label**Letter code of the warning symbol and indications of danger for the preparation**

Xi Irritant

Names of the ingredients given on the warning label

Dried spores and mycelium of *Gliocladium catenulatum*.

R-phrases(s)

R43 May cause sensitization by skin contact.

S-phrases(s)

S2 Keep out of reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S22 Do not breathe dust.

S24 Avoid contact with the skin.

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Wear suitable protective clothing and gloves.

S38

In case of insufficient ventilation, wear suitable respiratory equipment.

16. OTHER INFORMATION**Text of R phrases mentioned in Section 2**

R43 May cause sensitization by skin contact.

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.

Literary reference

Regulations, databases, literature, own tests.