

MATERIAL SAFETY DATA SHEET

PRESTOP®

SECTION 1 - IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

a.- Product identifier

Trade Name: PRESTOP®
Material number:
REACH Registration number:

b.- Relevant identified uses of the mixture and uses advised against

The uses of the mixture: PRESTOP® is a biofungicide for the control of *Botrytis* grey mould and fungal pathogens, such as *Pythium*, *Phytophthora*, *Rhizoctonia* and *Fusarium*, causing damping-off and root diseases in vegetables, herbs and ornamentals as well as for the control of *Didymella* stem blight in cucumber.

c.- Details of the supplier of the Safety Data Sheet

Manufacturer: Danstar Ferment AG
Street address: Bahnhofstrass 7
Postcode and post office: 6300 Eug. Switzerland
Post-office box:
Telephone number: +358 10 217 3700
Telefax: +358 10 217 3711
E-mail address: info@lallemand.com

d.- Emergency telephone number

In UK: 111 (anti-poison center)
In Spain: 91 562 04 20 (Instituto Nacional de Toxicología)

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SECTION 2 - HAZARDS IDENTIFICATION

a.- Classification of the mixture

Product is not classified as hazardous and does not contain any substances that are classified or labelled according to Regulations (EC) 1272/2008, (EU) 453/2010, (EC) 1907/2006 (REACH), (EU) 547/2011 and (EC) 1107/2009, Directive 1999/45/EC, or according to local regulations in Finland (eg. Chemicals Act 599/2013 and Decree 807/2001).

b.- Label elements / Precaution statements

Classification and labelling according to CLP (EC) 1272/2008:

P102	Keep out of reach of children.
P261	Avoid breathing dust.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves, clothing and face protection (with PPF2 or PPF3 filter).
P501	Dispose of contents/container in accordance with local waste management regulation(s).
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Classification according to (EU) 547/2011 and other guidances related to plant protection products:

SP1	Do not contaminate water with the product or its container (Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads). "Prestop contains mycelium and spores of <i>Gliocladium catenulatum</i> J1446. Micro-organisms may have the potential to provoke sensitising reactions."
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Classification and labelling according to Directive 1999/45/EC:

Hazard pictogram:	Xi	Irritant
R phrases:	R43	May cause sensitisation by skin contact.
S phrases:	S2	Keep out of reach of children.
	S13	Keep away from food, drink and animal feedstuffs.
	S22	Do not breath dust.
	S24	Avoid contact with the skin.
	S29	Do not empty into drains.
	S37	Wear suitable gloves.

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c.- Other supplemental hazard information.

"Prestop contains mycelium and spores of *Gliocladium catenulatum* J1446. Micro-organisms may have the potential to provoke sensitising reactions."

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

a.- Mixtures

Composition according to CLP (EC) 1272/2008:

Substance name	CAS-, EC or index number	REACH Registration N°.	Composition (w/w)	Classification -pictograms -H-statements -category
Dried spores and mycelium of <i>Gliocladium catenulatum</i> J1446	n/a	n/a	1*10 ⁸ cfu/g of the product (minimum)	None

Composition according to Directive 1999/45/EC:

Substance name	CAS-, EC or index number	REACH Registration N°.	Composition (w/w)	Classification -pictograms -H-statements -category
Dried spores and mycelium of <i>Gliocladium catenulatum</i> J1446	n/a	n/a	1*10 ⁸ cfu/g of the product (minimum)	Xi (Irritant) R 43 (May cause sensitisation by skin contact.)

SECTION 4 - FIRST AID MEASURES

a.- Description of first aid measures

According to CLP (EC) 1272/2008:

If swallowed:	Rinse mouth. Get medical advice/attention. (P301 + P330 + P313).
If on skin:	Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. (P302 + P352 + P332 + P313).
If inhaled:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention. (P304 + P340 + P313)

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If in eyes:

Rinse cautiously with water for several minutes. If eye irritation persists, get medical advice/attention. (P305 + P351 + P338 + P337 + P313)

b.- Most important symptoms and effects, both acute and delayed

Micro-organisms may have the potential to provoke sensitising reactions.

c.- Indication of any immediate medical attention and special treatment needed

Drinking water and the facility to wash hands and flush eyes should be provided at working places and at treatment sites.

SECTION 5 - FIREFIGHTING MEASURES

a.- Extinguishing media

Adequate media: All common extinguishing media, eg. water and extinguishing foam.

Unsuitable media: None/unknown.

b.- Special hazards arising from the substance or mixture

None.

c.- Advice for firefighters

Wear fire/ flame resistant clothing. Wear respiratory protection (self contained breathing apparatus). (P283 + P284).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

a.- Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. (P281)

Drinking water and the facility to wash hands and flush eyes should be provided at working places and at treatment sites.

b.- Environmental precautions

Avoid release to the environment. (P273)

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads). (SP1)

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c.- Methods and material for containment and cleaning up

Dispose of contents and container: in accordance with local and national regulations. (P501)
See Section 13 for further information on national waste management.

d.- Reference to other sections

For further information regarding personal protection and waste management see Section 8 and 13.

SECTION 7 - HANDLING AND STORAGE

a.- Precautions for safe handling

Do not breath dust/Avoid breathing dust. (P260/P261)

Do not get in eyes, on skin, or on clothing. (P262)

Wear protective gloves, clothing and face protection (with PPF2 or PPF3 filter). (P280).

b.- Conditions for safe storage, including any incompatibilities

Store in a dry place and in a closed container at temperatures not exceeding +8°C. (P402+404+411)
Keep out of reach of children. (P102).

c.- Specific end use(s)

Identified end uses indicated in section 1. Information of this section 7 should be taken into account.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

a.- Control parameters

National occupational exposure
limit values :

None.

Other limit values :

None.

DNEL :

None.

PNEC :

None.

b.- Exposure controls

Appropriate hygiene and
engineering measures:

No exposure to the product is to be expected during normal handling when recommended and appropriate protective equipments are used.

Avoid exposure.

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Eye / face protection:	Goggles / face shield.
Skin protection:	Protective clothing (protective suit, rubber boots, hat).
Hand protection:	Rubber or plastic gloves (e.g. nitrile gloves).
Respiratory protection:	Respirator with combination filter for vapour /particulate (PPF2 or PPF3 filter recommended).
Thermal hazards:	None
Environmental exposure controls:	Active microbe is a natural and widely occurring fungus. No exposure limits.

SECTION 9 - STABILITY AND REACTIVITY

Reactivity:	Product is stable under normal conditions.
Chemical stability:	Product is stable under normal conditions.
Possibility of hazardous reactions:	Product is stable under normal conditions.
Conditions to avoid:	Avoid high temperatures (>30°C), UV-light and irradiation.
Incompatible materials:	Acids, bases, concentrated fertilizer liquids, chemical pesticides, food, drink and animal feeding stuffs.
Hazardous decomposition products:	Not applicable.

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pale powder.
Odour	Mild odour.
Odour threshold	None.
pH	Approx. 7 (1% suspension)
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Approx. 500 kg/cu.m.
Solubility(ies)	Insoluble.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

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a.- Other information

No other information.

SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of entry:	Inhalation : Not toxic, infective or pathogenic to rat. Ingestion : Not toxic, infective or pathogenic to rat. Contact : Not toxic, infective or pathogenic to rat.
Consequences of inhalation:	May have the potential to provoke sensitising reactions.
Consequences of ingestion:	Unlikely event.
Localized effect on the skin:	May have the potential to provoke sensitising reactions.
Localized effect on the eyes:	Slight irritations.
Other information:	Product does not present an acute toxicity hazard based on known information.

SECTION 12 - ECOLOGICAL INFORMATION

a.- Toxicity

The product and its components are not classified as ecologically toxic. *Gliocladium catenulatum* is a natural and widely occurring soil fungus.

Not toxic or pathogenic to fish, (no-observed-effect concentration (NOEC) = $1.3 \cdot 10^8$ cfu/l).

Not toxic or pathogenic to daphnia, (no-observed-effect concentration (NOEC) = $2 \cdot 10^6$ cfu/l).

Not toxic or pathogenic to bird, ($LD_{50} > 2000$ mg/kg).

Not toxic or pathogenic to honeybee ($LD_{50} > 5200$ ppm).

Not toxic or pathogenic to earthworm ($LC_{50} > 1250$ mg/kg).

b.- Persistence and degradability

Degradability expected to be easy, as for other naturally occurring soil microbes.

c.- Bioaccumulative potential

No expected bioaccumulative potential.

d.- Mobility in soil

Gliocladium catenulatum –fungus is a natural inhabitant in soil.

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e.- Results of PBT and vPvB assessment

No data available.

f.- Other adverse effects

No known adverse effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

a.- Waste treatment methods

Dispose of contents/container in accordance with local and national regulations.

Regulations and Directives related to waste management in Finland: Waste Act 646/2011, Government Decree on Waste 179/2012 and Environmental Protection Act 86/2000.

SECTION 14 - TRANSPORT INFORMATION

Product is not classified as dangerous goods according to international transportation regulations in force ADR, RID, ADN, IATA and AMDG.

Environmental hazards: None.

Special precautions for user: None.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

Product is not intended for bulk transport.

SECTION 15 - REGULATORY INFORMATION

a.- Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety Data Sheet and Classification in accordance with:

EU Regulations:

CLP Regulation (EC) 1272/2008 on classification, labelling, and packaging of substances and mixtures, amending and repealing Directives 67/548/EC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Regulation (EU) 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Regulation (EU) 453/2010 ANNEX II: Requirements for the compilation of safety data sheets.

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Directive 1999/45/EC concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

Regulation (EU) 547/2011 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards labelling requirements for plant protection products.

Directive 2003/82/EC regarding standard phrases for special risk and safety precautions for plant protection products.

Directive 2001/36/EC concerning the placing of plant protection products on the market. Active substance and formulated end product/mixture regulated as plant protection product under **Regulation (EC) 1107/2009, (EU) 540/2011** and **Directive 91/414/EEC**.

National Regulations in Finland:

Chemicals Act 599/2013, Ministry of Social Affairs and Health.

Decree 807/2001 on chemical classification principles and labelling, Ministry of Social Affairs and Health.

Environmental Protection Act 86/2000, Ministry of Environment.

Waste Act 646/2011 and amendments up to 195/2012 included, Ministry of the Environment.

Government Decree on Waste 179/2012, Ministry of Environment.

b.- Chemical safety assessment

Chemical safety assessment of the product and results thereof presented in Section 7 and 8 of this Safety Data Sheet.

Chemical safety assessment of the product done under Regulation (EC) 1107/2009 regarding plant protection products.

SECTION 16 - OTHER INFORMATION

a.- Indication of changes

First version of Safety Data Sheet in English to comply with current Regulations and Directives regarding the transitional period for mixtures: CLP Regulation (EC) 1272/2008, Regulation (EU) 453/2010, Directive 1999/45/EC and Decree 807/2001 (Finland).

b.- Abbreviations and acronyms

Cfu/g (Colony forming units per grams).

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c.- Key literature references and sources for data

Regulations, Directives, Acts, databases, literature and own studies.

d.- Used method in evaluating classification

CLP Regulation (EC) 1272/2008, Regulation (EU) 453/2010 and Directive 1999/45/EC.

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e.- List of relevant H-and P-statements or/and other safety and precautionary statements

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Classification according to (EU) 547/2011 and other guidances related to plant protection products:

SP1

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Classification and labelling according to Directive 1999/45/EC:

Hazard pictogram:

Xi Irritant

R phrases:

R43 May cause sensitisation by skin contact.

S phrases:

S2 Keep out of reach of children.

S13 Keep away from food, drink and animal feedstuffs.

S22 Do not breath dust.

S24 Avoid contact with the skin.

S29 Do not empty into drains.

S37 Wear suitable gloves.

f.- Disclaimer

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