

SAFETY DATA SHEET

BOTECTOR®

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. PRODUCT IDENTIFIER

Trade name: BOTECTOR®
Registration number: MAPP 20000
CAS-No.: Not applicable
UFI: -

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Product use: Plant protection product.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: SAN Agrow Holding GmbH.
Address: Industriestraße 21, 3130 Herzogenburg. Austria
Telephone no.: +43 (0) 2782 8330 0
E-mail address: sanagrow-at@san-group.com

1.4. EMERGENCY TELEPHONE NUMBER

Telephone no.: Call local emergency information

SECTION 2. HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

2.1.1. Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Not classified, the classification criteria are not met.

2.2 LABEL ELEMENTS

Hazard pictogram: none
Signal word: none
Hazard statements: **EUH208** Contains *Aureobasidium pullulans*. May produce an allergic reaction.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Precautionary statements: **P101** If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P261 Avoid breathing dust.
P270 Do not eat, drink, or smoke when using this product.
P280 Wear protective gloves.

2.3. OTHER HAZARDS

Microorganisms may have the potential to provoke sensitizing reactions.
The substances contained in the product are not classified as PBT- or vPvB-substances.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

Not applicable.

3.2. MIXTURES

<u>CAS / EC-no. /</u> <u>REACH No.</u>	<u>Name</u>	<u>Concentration %</u>	<u>Classification Reg. (EC)</u> <u>No. 1272/2008</u>	<u>SCL,</u> <u>M-actor, ATE</u>
67891-88-7	<i>Aureobasidium pullulans</i> DSM 14940	50	-	-
67891-88-7	<i>Aureobasidium pullulans</i> DSM 14941	50	-	-

SECTION 4. FIRST AID MEASURES

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4.1. DESCRIPTION OF FIRST AID MEASURES

General advice	Remove from source of exposure. No specific treatment after contact with cells of <i>A. pullulans</i> is required since no specific clinical symptoms are known to occur. As a general precautionary measure, persons who may want to seek medical advice, should inform the physician about the identity of the fungus on species level, and may show the label of the packing as supporting information. In case of severely immunocompromised persons, an antifungal treatment may be chosen despite the lacking infectiveness of this strain.
Inhalation	Provide fresh air; consult doctor in case symptoms persist.
Skin contact	Remove contaminated clothes; wash the affected skin with water and soap. If symptoms persist, seek medical advice.
Eye contact	Rinse open eyes immediately with plenty of water for at least 10 minutes. If symptoms persist, seek medical advice.
Ingestion	Flush with copious amounts of water (only if person is conscious). If symptoms of indisposition persist, seek medical advice.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No symptoms known or expected.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptomatic treatment. According to the results of a test for minimum inhibitory concentration (MIC) Itraconazole treatment would provide sufficient efficacy against *Aureobasidium pullulans*.

SECTION 5. FIRE FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable: CO₂, dry chemical powder, foam or water spray.

Unsuitable: not recorded.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Not recorded.

5.3. ADVICE FOR FIRE-FIGHTERS

Regarding the product, no special protective equipment is necessary. Use protective equipment suitable to the situation.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Please notice instructions for person-related safety precautions and wear protective equipment (see 8).

6.2. ENVIRONMENTAL PRECAUTIONS

No special measures required.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Cells of *Aureobasidium pullulans* can be inactivated by heating above 80 °C or by spraying with a disinfecting agent (e.g. 70% ethanol). Collect spilled material with shovel, place into a clean container and cover container loosely. Prevent formation of dust. Place into lockable, labeled salvage container for disposal according to the regulations.

6.4. REFERENCE TO OTHER SECTIONS

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

To avoid risks to man and the environment, comply with the instructions for use. Misuse can lead to injury of health. Prevent formation of dust. Ensure good ventilation/exhaustion at the workplace. Refer to Section 8.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in tightly closed containers in a cool, well ventilated and dry place. Consider expiry date.

Do not freeze. For reasons of storage stability do not expose the product to temperatures above 40°C. Do not store the product above 20°C for a longer period.

Do not store food, beverages and animal feeding stuffs in the storage area.

7.3. SPECIFIC END USE(S)

Plant protection product. Refer to the product label.

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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2. EXPOSURE CONTROLS

8.2.1. APPROPRIATE ENGINEERING CONTROLS

If ventilation in working space is insufficient, an exhaustor should be installed.

8.2.2. PERSONAL PROTECTIVE EQUIPMENT

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Eye and face protection:

Safety glasses with side protection shield (EN 166)

Skin protection:

Hand protection:

Rubber gloves or synthetic gloves.

Other skin protection: Wear appropriate protective clothing

Respiratory protection:

In case of dust formation, wear a fine dust filter mask, filter P2 or P3.

8.2.3. ENVIRONMENTAL EXPOSURE

See section 6 and 7.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<u>Physical state</u>	<u>Colour</u>	<u>Odour</u>	<u>Melting point/Freezing point</u>	<u>Boiling point</u>	<u>Flammability</u>
Solid granules	Pale pink to pale brown	Similar to bread	Not applicable	Not applicable	Product is not flammable. (EEC A.10)
<u>Explosive limits</u>	<u>Flash point</u>	<u>Auto-ignition Temperature</u>	<u>Decomposition Temperature</u>	<u>pH (20°C)</u>	<u>Kinematic Viscosity</u>
Not applicable	Not applicable	Not applicable	Not applicable	5-7	Not applicable
<u>Solubility in water</u>	<u>Partition coefficient n-octanol/water (log value)</u>	<u>Vapor pressure</u>	<u>Density (20°C)</u>	<u>Relative vapour density</u>	<u>Particle characteristics</u>
Dispersible	Not applicable	Not applicable	0.5-1.0 g/ml	Not applicable	< 1.0 mm

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

9.2. OTHER INFORMATION

No further safety-related physical-chemical data are known.

SECTION 10. STABILITY AND REACTIVITY DATA

10.1. REACTIVITY

None under normal conditions.

10.2. CHEMICAL STABILITY

Refer to 7.2.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known if used according to specifications.

10.4. CONDITIONS TO AVOID

Product must be stored out of direct sunlight in a cool dry place. Do not freeze. For reasons of storage stability, do not expose the product to temperatures above 40°C. Do not store the product above 20°C for a longer period. Keep dry.

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10.5. INCOMPATIBLE MATERIALS

No further relevant information available.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

No dangerous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) No 1272/2008

Acute toxicity:	Oral: LD ₅₀ > 2000 mg/kg (Rat) Dermal: LD ₅₀ > 2000 mg/kg (Rat) Inhalation: LC ₅₀ /4h > 5.18 mg/L (Rat)
Skin corrosion/irritation:	Not irritating (rabbit, OECD 404)
Serious eye damage/irritation:	Not irritating (rabbit, OECD 405)
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.
Germ cell Mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure:	May cause irritation of the respiratory tract if inhaled.

Specific target organ toxicity - repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

11.2. INFORMATION ON OTHER HAZARDS

Aureobasidium pullulans strain DSM 14941 did not show infectivity in an oral (OPPTS 885.3050), inhalative (885.3150) and subcutaneous test (OPPTS 885.3200) on infectivity.

SECTION 12. ECOLOGICAL INFORMATION

12.1. TOXICITY

Aquatic toxicity:	EC ₅₀ /48h > 200 mg/L (Water flea (<i>Daphnia magna</i>)) EC/LC ₅₀ /21d > 200 mg/L (Water flea (<i>Daphnia magna</i>)) EC ₅₀ /7d > 100 mg/L (Water lense (<i>Lemna minor</i>)) EC ₅₀ /7d > 250 mg/L (Water lense (<i>Lemna gibba</i>)) EC ₅₀ /72h > 100 mg/L (Algae (<i>Pseudokirchneriella subcapitata</i>)) EC ₅₀ /96h > 100 mg/L (Rainbow trout (<i>Oncorhynchus mykiss</i>))
Effects on earthworms:	LC ₅₀ /14d > 1000 mg/kg soil (Earthworm (<i>Dendrobena hortensis</i>))
Effects on spider mites:	A laboratory test with the predatory mite <i>Typhlodromus pyri</i> resulted in a LR ₅₀ above the maximum application rate.
Effects on birds:	LD ₅₀ /30d > 2000 mg/kg-bw* ID ₅₀ /30d > 2000 mg/kg-bw*
Effects on bees:	LD ₅₀ /22d > 200 µg/bee NOEC/22d 200 µg/bee

* Data refer to a product which contains the strain *Aureobasidium pullulans* DSM 14941.

12.2. PERSISTENCE AND DEGRADABILITY

Degradation in soil: The product is easily biodegradable.
Not hazardous to water.

12.3. BIOACCUMULATIVE POTENTIAL

Evaluation of bioaccumulation is not relevant for microorganisms.

12.4. Mobility in soil

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Not relevant for microorganisms.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

Not relevant for microorganisms.

12.6. ENDOCRINE DISRUPTING PROPERTIES

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7. OTHER ADVERSE EFFECTS

No further relevant information available.

SECTION 13. DISPOSAL PROCEDURES

13.1. WASTE TREATMENT METHODS

Product / Packaging disposal:

Do not reuse contaminated packaging for other purposes; dispose according to official regulations. Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers. To minimize generation of left-overs, users are recommended to store not more than will be consumed within the shelf life period of the product. To minimize product waste, users are required not to prepare more than they will use for the treatment. Reminders of the spray shall be diluted and sprayed over already treated areas. Small amounts could be added to the compost.

Waste treatment-relevant information:

Non-contaminated packaging can be used for recycling.
Empty contaminated packaging must be cleaned thoroughly. They can be recycled after thorough and proper cleaning.

Sewage disposal-relevant information:

Other disposal recommendations:

European waste catalogue for unused product:

02 01 09 Agrochemical waste other than those mentioned in 02 01 08

SECTION 14. TRANSPORT INFORMATION

14.1. UN NUMBER OR ID NUMBER

Not applicable

14.2. UN PROPER SHIPPING NAME

Not applicable

14.3. TRANSPORT HAZARD CLASS(ES)

Not applicable

14.4. PACKING GROUP

Not applicable

14.5. ENVIRONMENTAL HAZARDS

Not applicable

14.6. SPECIAL PRECAUTIONS FOR USER

Not applicable

14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS

The product is sold only in appropriate packaging.

SECTION 15. REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR THE MIXTURE

15.1.1. EU regulations

The product is classified according to EC guidelines.

Directive 2012/18/EU:

Named dangerous substances - ANNEX I: None of the ingredients is listed.

15.1.2. National regulations

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No additional information available

15.2. CHEMICAL SAFETY ASSESSMENT

The mixture was not subject to a chemical safety assessment.

SECTION 16. OTHER INFORMATION

All information, recommendations and suggestions appearing herein concerning our products are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity, and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, we make no guarantee, expressed or implied, as to the effects of such use, the results to be obtained, or the safety and toxicity of the product; nor do we assume any liability arising out of use, by others, of the product referred to herein. The information herein is not to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

INDICATION OF CHANGES			
Section	Changed item	Change	Comments
	SDS EU format	Modified	2020/878
1.2.	Main use category	Modified	
2	Precautionary statements (CLP)	Modified	
3	SCL, M-factor, ATE	Added	
9	Information on basic physical and chemical properties	Modified	
12	ED properties	Modified	
16	Abbreviation and acronyms	Added	

ABBREVIATIONS AND ACRONYMS	
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine Disrupting
UFI	Unique Formula Identifier
SCL	Specific Concentration Limit
ATE	Acute Toxicity Estimate

PREPARED BY: SAN Agrow Holding GmbH
SAN Agrow is part of the SAN Group