

Safety Data Sheet (GHS)

according to Regulation (EC) No.1907/2006

Date of issue: 16-JAN-2013

Replaces version of: 16-JAN-2013

BIOSOL 141021 (KUNDL)



1. Identification of the substance/preparation and of the company

Product name BIOSOL
Usage Fertilizer
Company name Sandoz GmbH
Biochemiestrasse 10
6250 Kundl / Tirol
Austria
Emergency phone number +43 5338 200 0, E-Mail: sds.support@novartis.com

2. Hazards identification

Pictogram, Signal Word No classification required according REGULATION (EC) NO 1272/2008

Hazard statements

Specific hazards In case of moisture exothermal biogenic processes possible.

Classification according EU Directive 67/548/EEC or 1999/45/EC see chapter 15

3. Composition / information on ingredients

Chemical characterisation of the substance / preparation:

Chemical Name Dry Mycelium

For TLV values of declared components, see chapter 8

Full text of H-Phrases see under chapter 16

4. First aid measures

Inhalation Remove the victim from danger zone, avoid further exposure.
Skin Contact Rinse contaminated skin with plenty of water.
Eye Contact Immediately rinse eyes thoroughly with running water as long as possible (approx. 15 min).
Take injured quickly to factory medical center or call an ambulance (code word: eye accident).
Ingestion Clean mouth with water and drink afterwards plenty of water. Call a physician.

5. Fire fighting measures

Suitable Extinguishing Media Water spray or fog, foam, dry chemical powder, CO2, dry sand
Unsuitable Extinguishing Media No restrictions
Protective equipment for firefighters Wear self-contained breathing apparatus and fire protective suite.

6. Accidental release measures

Personal precautions Avoid contact with skin, eyes and clothing.
Environmental precautions Must not be released into sewers, drains or wells.
Methods for cleaning Transfer large quantities into a container, rinse the rest with plenty of water.
For personal protection see chapter 8; for disposal considerations see chapter 13

7. Handling and storage

Storage and Handling Precautions Keep dry.

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For industrial hygiene measures see chapter 8

Preventive Precautions (fire/explosion) Take precautionary measures against static discharges. Avoid formation of dust.

Maximum Storage Temperature (safety) 70 °C

8. Exposure controls / Personal protection

Occupational Exposure Controls

Industrial Hygiene After finishing work wash hands and face with water and soap

Open Handling

Respiration	: Disposable fine dust protection mask (EN149) or reusable halfmask (EN140)
Eye	: Safety glasses (EN166)
Hand	: Disposable gloves or chemical-resistant gloves, normal length (EN374/EN388)

These values are derived from experiments, literature and information from the glove manufacturer.

They can also be derived from similar materials. In daily work please be aware that the using time depends on several factors and can be shorter than the officially tested permeation time.

9. Physical and chemical properties

Appearance

Formulation amorphous solid
Physical state solid
Colour yellow brown
Odour characteristic

Safety relevant basic data

Melting point/range unknown
Boiling Point unknown
Bulk Density 750 kg/m³
Solubility (Aqueous Solvents) not available
Solubility (Solvents) not available
pH 3 - 5 (Concentration: 100 g/l, Temperature: 20 °C)
pKa not available
Specific Resistivity 9.4 - 9.8 * 10⁸ Ohm m

Safety Tests

Autoignition Temperature: 400 °C
Dynamic Decomposition Exothermy: 170 °C
Method: Grever test method, air stream, as is (temp.progr. 1,2°C/min, examined up to 350°C)
Exothermy: 170 °C
Method: Lütolf, open cup, as is (Temp.progr. 2.5°C/min, examined up to 350°C)
Combustibility Test Standard conditions: 2 = after ignition the fire dies out rapidly (Temperature: 20 °C)
Standard conditions: 2 = after ignition the fire dies out rapidly (Temperature: 100 °C)
Dust Explosion Positive Minimum Ignition Energy: 300 - 1000 mJ
Isoperibolic Decomposition (>8h) Stable up to: 130 °C
Method: long duration test open cup (8h)
Flammable Gases over Explosivity/Reactivity Temperature: > 350 °C (Gas volume: 30 l/kg)
Deflagration: No suspect of deflagration based on thermal data
Drop-Weight Test: Negative

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10. Stability and reactivity

Dangerous Combustion Products carbon monoxide
sulfur dioxide
nitrogen oxides
Carbon dioxide

11. Toxicological information

Acute Toxicity unknown
Irritation, Corrosion unknown
Sensitisation unknown
Additional advice Based on the present knowledge, the product needs not be classified as toxic for humans.
Mutagenicity unknown

12. Ecological information

Ecotoxicity Summary Easily biodegradable.

Environmental Toxicity

Fish acute toxicity unknown
Aquatic invertebrate acute toxicity unknown
Algae Toxicity unknown
Bacterial Respiration Inhibition unknown

Persistence and degradability

Biological Elimination unknown

13. Disposal considerations

Disposal Requirements May be incinerated if local official regulations are observed.

14. Transport information

Regulation	Class	UN No.	PG	Label	LQ
RID/ADR:	not restricted	0			N.A.
IMDG-Code:	not restricted	0			
ICAO/IATA-DGR:	not restricted	0			

ICAO/IATA-DGR: no dangerous good
Proper shipping name: -

15. Regulatory information

EC Label assessment: No labelling requirements according to EC Directives.

Chemical Safety Assessment not required.

16. Other information

Changes since the previous version in 2. Hazards identification
11. Toxicological information

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chapter 14. Transport information

Abbreviations used

Recipient To whom it may concern

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.