

# 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/m<sup>3</sup>  
**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 \* 10<sup>8</sup> 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.

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