

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

Product name	BIOSOL FORTE
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 hazardsIn 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 NameBacterial BiomassFor TLV values of declared components, see chapter 8Full 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 Keep dry. Precautions

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according to Regulation (EC) No.1907/2006 Date of issue: 16-JAN-2013 Replaces version of: 16-JAN-2013 BIOSOL FORTE 141985 (KUNDL)



#### For industrial hygiene measures see chapter 8

Preventive PrecautionsTake precautionary measures against static discharges. Avoid formation of dust.(fire/explosion)70 °CMaximum Storage70 °CTemperature (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 Hand	: Safety glasses (EN166) : 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 oficially tested permeation time.

## 9. Physical and chemical properties

#### Appearance

Appearance	
Formulation	amorphous solid
Physical state	solid
Colour	dark grey
Odour	characteristic
Safety relevant basic	e data
Melting point/range	unknown
Boiling Point	unknown
Bulk Density	950 kg/m3
Solubility (Aqueous Solvents)	not available
Solubility (Solvents)	not available
рН	6 - 7 (Concentration: 100 g/l, Temperature: 20 °C)
рКа	not available
Specific Resistivity	1.6 - 2.2 * 10E11 Ohm m
Safety Tests	
Autoignition	Temperature: 450 °C Method: BAM (fluidized dust)
Dynamic Decomposition	Exothermy: 150 °C Method: Grewer test method, air stream, as is (temp.progr. 1,2°C/min, examined up to 350°C)
Decomposition	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) Method: Combustibility test Safety Institute
	Standard conditions: 2 = after ignition the fire dies out rapidly (Temperature: 100 °C) Method: Combustibility test Safety Institute
Dust Explosion	Positive Minimum Ignition Energy: > 1000 mJ
Isoperibolic	Stable up to: 110 °C
Decomposition (>8h)	Method: long duration test open cup (8h)

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Flammable Gases over	Temperature: > 350 °C (Gas volume: 20 l/kg)
Explosivity/Reactivity	Deflagration: No suspect of deflagration based on thermal data
	Drop-Weight Test: Negative

## 10. Stability and reactivity

<b>Dangerous Combustion</b>	Carbon dioxide
Products	carbon monoxide
	nitrogen oxides
	sulfur 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.

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#### 16. Other information

Changes since the<br/>previous version in<br/>chapter14. Transport informationAbbreviations usedTo 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.