

Safety Data Sheet (GHS)

according to Regulation (EC) No.1907/2006

Date of issue: 20-OCT-2017

Replaces version of: 15-FEB-2017

BIOSOL FORTE 141031 (AT14)

Section 1: Identification of the substance/preparation and of the company

1.1 Product identifier

Product name BIOSOL FORTE
Chemical Name Bacterial Biomass

1.2 Relevant identified uses of the substance or mixture and uses advised against

Usage Fertilizer

1.3 Details of the supplier of the Safety Data Sheet

Company name Sandoz GmbH
Biochemiestrasse 10
6250 Kundl, Austria
Tel: +43 5338 200 0, E-Mail: sds.support@novartis.com

1.4 Emergency telephone number

Emergency phone number CHEMTEL (International) +1 813 676 1670 (365/24/7)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

GHS hazard category
Classifications not available

2.2 Label elements

GHS-Label No label required according to regulation

Hazard statements

2.3 Other hazards

Specific hazards In case of moisture exothermal biogenic processes possible.

Section 3: Composition / information on ingredients

Chemical characterisation of the substance / preparation:

Type Preparation
Chemical Name Bacterial Biomass

For TLV values of declared components, see Section 8, Exposure controls / Personal
Full text of H-Phrases see under Section 16

Section 4: First aid measures

4.1 Description of 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.

Self-protection of the first aider

For personal protection see Section 8

4.2 Most important symptoms and effects, both acute and delayed

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4.3 Indication of any immediate medical attention and special treatment needed

Section 5: Fire fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Water spray or fog, foam, dry chemical powder, CO2, dry sand

Unsuitable Extinguishing Media No restrictions

5.2 Special hazards arising from the substance or mixture

Dangerous Combustion Products Carbon dioxide
carbon monoxide
nitrogen oxides
sulfur dioxide

5.3. Advice for firefighters

Protective equipment for firefighters Wear self-contained breathing apparatus and fire protective suite.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions

Environmental precautions Must not be released into sewers, drains or wells.

6.3 Methods and material for containment and cleaning up

Methods for cleaning Transfer large quantities into a container, rinse the rest with plenty of water.

6.4 Reference to other sections

For personal protection see Section 8, for disposal considerations see Section 13

Section 7: Handling and storage

7.1. Precautions for safe handling

Storage and Handling Precautions Keep dry.

For Industrial Hygiene Measures see Section 8, Exposure controls / Personal protection

7.2 Conditions for safe storage, including any incompatibilities

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

Maximum Storage Temperature (safety) 70 °C

7.3 Specific end use(s)

See Subsection 1.2

Section 8: Exposure controls / Personal protection

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8.1 Control parameters

no data available

8.2 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.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	solid
Formulation	amorphous solid
Particle Size	233 µm Method: Median value
Colour	dark grey
Odour	characteristic
Odour threshold	no data available
pH	6 - 7 (Concentration: 100 g/l, Temperature: 20 °C)
Melting point/range	no data available
Boiling Point	no data available
Flash Point	not applicable
Evaporation Rate (Ref: Ether)	not applicable
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
Explosion Limits	not applicable
Vapour Pressure [hPa]	not applicable
Vapour Density	not applicable
Density	no data available
Solubility (Aqueous Solvents)	no data available
Solubility (Solvents)	no data available
Partition Coefficient	no data available
Autoignition/MIT	no data available
Dynamic Decomposition	Exotherm: 180 °C (Air Stream) Method: Grewer test method, air stream, as is (temp.progr. 1,2°C/min, examined up to 350°C) Exotherm: 170 °C Method: Lütolf, open cup, as is (Temp.progr. 2.5°C/min, examined up to 350°C)
Isoperibolic Decomposition (>8h)	Stable up to: 110 °C Method: long duration test open cup (8h)
Flammable Gases over	Temperature: > 350 °C (Gas volume: 20 l/kg)
Viscosity	not applicable

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Explosivity/Reactivity	Deflagration: No suspect of deflagration based on thermal data Drop-Weight Test: Negative
Test for self-heating	no data available
Fire-promoting properties	no data available

9.2 Other information

Bulk Density	950 kg/m ³
Dust Explosion	Positive Minimum Ignition Energy: > 1000 mJ
Specific Resistivity	1.6 - 2.2 * 10E11 Ohm m

Section 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

10.5 Incompatible materials

For Incompatible materials see Subsection 7.2 Conditions for safe storage, including any incompatibilities

10.6 Hazardous decomposition products

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity	no data available
Irritation, Corrosion	no data available
Sensitisation	no data available
Additional advice	Based on the present knowledge, the product needs not be classified as toxic for humans.
Mutagenicity	no data available

Section 12: Ecological information

Ecotoxicity Summary Easily biodegradable.

12.1 Toxicity

Fish acute toxicity	no data available
Aquatic invertebrate acute toxicity	no data available
Algae Toxicity	no data available
Bacterial Respiration Inhibition	no data available

12.2 Persistence and degradability

Biological Elimination no data available

12.3 Bioaccumulative potential

Partition Coefficient	no data available
Biological accumulation	no data available

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12.4 Mobility in soil

Soil and Sludge Sorption/Desorption no data available

12.5 Results of PBT and vPvB assessment

PBT assessment no data available

12.6 Other adverse effects

Other adverse effects no data available

12.7 Additional information

no data available

Section 13: Disposal considerations

13.1. Waste treatment methods

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

Section 14: Transport information

Regulation	RID/ADR:	IMDG-Code:	ICAO/IATA-DGR:
14.1 UN Number	0	0	0
14.2 UN Proper Shipping Name	-	-	-
14.3 Transport Hazard Class(es)			
Transport Label(s)			
14.4 Packing Group			
14.5 Environmental Hazard			
Additional Information	Limited Quantities: N.A.		

14.6 Special Precaution for User

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

Temperature Conditions for Transport Undefined

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

List type	assessment	Comment	Date
Water Hazard Class (Germany)	1: Mildly water-endangering substance	Assessment by automatic procedure based on KSO data.	16-NOV-06

Emergency Regulations Emergency Regulations (CH) (2015-AUG-03)
Not a dangerous good according to StfV

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15.2 Chemical Safety Assessment

Chemical Safety Assessment not required.

Section 16: Other information

Abbreviations used

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.

Do not distribute!