

1. Product and Company Identification

1.1 Product identifiers

EPI-BEN

Synonyms: Montmorillonite Clay, Sodium Bentonite

REACH registration number: Exempt

CAS number: 1302-78-9

EC number: 215-108-5

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

Identified uses: Rheology modifier, binding agent, adsorbent, filler

1.3 Details of the supplier of the Safety Data Sheet

Sirius-ES Deutschland GmbH

Grafftring 7

29227 Celle

Germany

Telephone: +49(0)5141 – 9748446

Telefax: +49(0)7242 – 9741993

e-mail: office@sirius-es.com

Web: www.sirius-es.com

1.4 Emergency telephone number

Germany: Giftnotruf Berlin (Berlin): +49 30 19 240

Austria: Vergiftungszentrale Wien: +43 1 406 43 430

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008):

Physical and chemical hazards: not classified

Human health: not classified

Environment: not classified

The full text for all R-phrases and hazard statements are displayed in section 16.

2.2 GHS Label Elements, including precautionary statements

EC No: 215-108-5

Label in accordance with (EC) No. 1272/2008

No pictogram required.

2.3 Other hazards

This product does not contain any PBT or vPvB substances.

Health Hazard Data

Route Of Entry - Inhalation: NO

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: NO SPECIFIC HEALTH HAZARD KNOWN.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

3. Composition/information on ingredients

3.1 Chemical characterization

Substances

Product / ingredient name	%	CAS No	EC No	Classification
				Regulation (EC) No. 1272/2008 [CLP]
Bentonite	>93	1302-78-9	215-108-5	Not classified
Quartz	<2	14808-60-7	238-878-4	Not classified

The full text for all R phrases and hazard statements are displayed in section 16.

REACH Registration number: Exempt

4. First Aid measures

4.1 Description of first aid measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No specific symptoms noted.

Ingestion: No specific symptoms noted.

Skin contact: No specific symptoms noted.

Eye contact: No specific symptoms noted.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5. Firefighting measures

5.1 Extinguisher media

Use any means suitable for extinguishing surrounding fire.

5.2 Special hazards arising from substance or mixture

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

5.3 Advice for firefighters

Special fire-fighting procedures: No specific fire-fighting procedures given

5.4 Further information

In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Precautions-Handling/Storing: SLIPPERY WHEN WET.

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

6.2 Environmental precautions

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

Steps if Material Released/Spill: SWEEP OR SCOOP UP SPILLED MATERIAL. PLACE IN CONTAINER MARKED NONHAZARDOUS MATERIALS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

6.3 Methods and materials for containment and cleaning up

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified.

Spills:

Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

6.4 Reference to other sections

For personal protection see section 8. For waste disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Precautions-Handling/Storing: SLIPPERY WHEN WET.

Avoid handling which leads to dust formation.

Avoid inhalation of high concentrations of dust. Observe occupational exposure limits and minimise the risk of inhalation of dust.

7.2 Conditions for safe storage, including any incompatibilities

Storage Color Code: Orange (General Storage)

Store in tightly closed original container in a dry, cool and well-ventilated place.

Keep in original container.

7.3 Specific end use(s)

The identified uses for this product are detailed in section 1.2

8. Exposure controls / personal protection

8.1 Control parameters

Name	STD	TWA – 8hrs		STEL – 15mins		Notes
Bentonite	WEL	10 mg/m ³	4 mg/m ³			
Quartz	WEL		0.1 mg/m ³			

WEL = Workplace Exposure Limit

Ingredient comments:

Dust contains respirable crystalline silica. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable dust should be monitored and controlled. The product should be handled using methods and techniques that minimise or eliminate dust

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generation. The product contains less than 1% w/w RCS (respirable crystalline silica) as determined by the SWERF method. The respirable crystalline silica content can be measured using the "Size-Weighted Respirable Fraction – SWERF" method. All details about the SWERF method is available at www.crystallinesilica.eu

8.2 Exposure controls

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Protective equipment



Engineering measures:

Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of dust.

Respiratory equipment:

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Wear dust masks in dusty areas.

Hand protection:

No specific hand protection noted, but gloves may still be advisable.

Eye protection:

Wear dust resistant safety goggles where this is a danger of eye contact.

Other protection:

Provide eyewash station.

Hygiene measures:

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance and Odor :	White /Brown / Earthy; No odor
Boiling Point :	NA
Specific Gravity :	2.6
Solubility in water :	Negligible
pH :	8-9
Flash Point:	NA
Lower Explosive Limit:	NA
Upper Explosive Limit:	NA
Flammability Rating:	0 - None
Reactivity Rating:	0 - None
Contact Rating:	0 - None

9.2 Other safety information

N/A

10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

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10.2 Chemical stability

Stable under normal temperature conditions.

10.3 Possibility of hazardous reactions

Not relevant

10.4 Conditions to avoid

No specific conditions are likely to result in a hazardous situation

10.5 Incompatible materials

Materials to avoid: No specific, or groups of materials, are likely to react to produce a hazardous situation.

10.6 Hazardous decomposition products

None under normal circumstances

11. Toxicological information

11.1 Information on toxicological effects

Other health effects: This substance has no evidence of carcinogenic properties.

Acute toxicity

Acute toxicity (Oral LD50): Not relevant

Acute toxicity (Dermal LD50): Not relevant

Acute toxicity (Inhalation LC50): Not relevant

Inhalation:

Not expected to be a health hazard.

Ingestion:

Not expected to be a health hazard.

Skin Contact:

No adverse effects expected.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

Long term inhalation of dust may lead to deposition in lungs in sufficient quantities to produce baritosis - a benign

12. Ecological information

12.1 Toxicity

Not regarded as dangerous for the environment

Acute fish toxicity: Not considered toxic to fish

12.2 Persistence and degradability

Degradability: The product is not readily biodegradable

12.3 Bioaccumulative potential

The product is not bioaccumulating

12.4 Mobility in soil

Not relevant, due to the form of the product

12.5 Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances

12.6 Other adverse effects

None known

13. Disposal considerations

13.1 Waste treatment methods

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility.

Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements.

Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport information

14.1 UN number

Not Regulated for Transport of Dangerous goods.

14.2 UN proper shipping name

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.3 Transport hazard class(es)

Not Regulated for Transport of Dangerous goods.

14.4 Packing group

Not classified for transportation

14.5 Environmental hazards

Environmentally hazardous substances / marine pollutant: no

14.6 Special precautions for user

N/A

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N/A

14.8 Additional information

N/A

15. Regulatory information

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

Approved code of practice: Classification and labelling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations.

Guidance notes: Workplace Exposure Limits EH40.

EU Legislation:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),

establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulations (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments

15.2 Chemical Safety assessment

Not applicable. No chemical safety assessment has been carried out.

16. Other information

Risk phrases in full: NC – not classified

N/A = Not Applicable

Disclaimer:

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However no warranty guarantee or representation is made to its accuracy, reliability of completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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