
Safety Data Sheet conforms to European Standards (EU) No 453/2010.

Last rev. 0002, 07/11/2013.

1. Product and Society Identity.

1.1 Product Identity

Commercial Name: **BENTOTELO**
REACH Pre-registration Number: None.

1.2 Relevant identified use of the product and recommended uses.

Geocomposite Bentonite waterproofing.

1.3 Supplier's Details for the safety data sheet

Society name: Diasen s.r.l.
Z.ind.le Berbentina, 5
60041 Sassoferrato An – Italia
Tel. +39 0732 9718
Fax +39 0732 971899
E-mail: diasen@diasen.com

Competent and person in charge for this Safety Data Sheet e-mail address: reach@diasen.com

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1.4 Emergency number

Emergency telephone number of the company and / or of an authorized advisory:

Diasen s.r.l. Tel. 0732/9718

Not available out of working hours.

2. Dangers Identification.

2.1 Labelling as for Standards CE 1272/2008 (CLP), GHS (Globally Harmonized System) and subsequent amendments and adjustments.

The product does not need to be labeled according to the CLP and GHS criteria and subsequent amendments and adjustments.

2.2 Labelling as for Standards 67/548/CEE or 99/45/CE and subsequent amendments (2001/60/CE e 2006/08/CE)

The product is not subject to labeled according to CE standard and subsequent amendments and adjustments.

The classification of the compound, characterized by an extreme pH value, is based on the results of an appropriate validated in vitro test as expected in par. 3.2.5 `s Annex VI of Directive 67/548/EEC, and subsequent amended.

2.3 Further warning

The product is not accordant with the substance PBT o vPvB (annex XIII of the REACH).

3. Composition / ingredients information.

3.1 Substances

The product do not contain substances classified as dangerous for health or the environment as per Standard 67/548/EEC, 99/45/EC, Regulation EC 1272/2008 (CLP), GHS (Globally Harmonized System) and subsequent amendments.

3.2 Mixtures

Information not relevant.

The full text of dangers classes of dangers symbols, R-phrases and H-phrases is specified in chapter 16.

Impurities:

Do not contain relevant impurities for classification and labeling.

4. First Aid

General Information:	Delayed effects are not knows. Consult a physician for all cases of exposure except in minor cases, showing this safety data sheet or product label.
Inhalation of dust:	Ventilate the area. Get out the patient from the contaminated area to rest in a ventilate area. In case of disease consult a doctor showing this safety data sheet or product label.
Contact with skin:	Wash immediately the affected area with water and soap as a precaution. Do not use abrasives or solvents substance to wash the hands. Take off contaminated clothing. Consult a doctor in case of any redness or irritation, showing this safety data sheet or product label.
Contact with eyes:	Wash immediately with running water, keeping eyelids raised, for at least 10 minutes. In case of persisting irritation, consult a physician and present this safety data sheet or product label.
Ingestion:	Rinse the mouth with a lot of water. Consult immediately the physician presenting this safety data sheet or product label. Never give anything by mouth to an unconscious person.

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4.1 Most important symptoms and effects, both acute and delayed

Symptoms:	Significant symptoms not expected.
Dangerous:	No danger predictable. No episodes of damage to health ascribable to the product.

4.2 Indication of any immediate medical attention and special treatment needed.

Information not available.

5. Antifire measures

5.1 Suitable extinguishing media

For the extinction of fire use water spray, dry powder, foam or CO₂. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Forbidden extinguisher: None.

5.2 Special dangers arising from the substance

Avoid breathing combustion products (carbon oxide, toxic pyrolysis products, etc.).

5.3 Advice for firefighters

Always wear full fire prevention: Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut-proof and dielectric), a depressurised mask over-pressure with facial-covers for the entire face or a self-respirator (self protector) in case of large quantities of smoke.

Cool down by spraying water all over the rolls of product in order to avoid decomposition and development of substances potentially dangerous for health.

The fire debris and contaminated extinguishing water must be removed according to local, national and community regulations.

6. Measures in case of accidental release

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6.1.1 For non-emergency personnel

Keep people, who do not wear any type of protection, out of the area. Avoid contact with skin and eyes - wear appropriate personal protective equipment (see section 8).

6.1.2 For emergency responders

Keep people, who do not wear any type of protection, out of the area. Avoid contact with skin and eyes - wear appropriate personal protective equipment (see section 8). Ensure adequate ventilation.

6.2 Environmental precautions

Contain the spreading of bentonite clay. Ensure that clay and cleaning fluids do not reach uncontrollably waterways or sewer system. In case of emission into watercourses must be alerted the Environmental Agency or other organization responsible for environmental protection.

6.3 Methods and materials for containment and cleaning up

Small amounts: Collect the product in suitable labeled containers, dispose it according to national and EU regulations and eliminate the rest using jets of water. Ventilate the room if spreading occurred indoors.

Large amounts: Aspire mechanically bentonite clay, Collect the product in suitable labeled containers, dispose it according to national and EU

regulations. Eliminate the rest using jets of water. Ventilate the room if spreading occurred indoors.

6.4 Reference and other sections

Information regarding exposure controls / personal protection and disposal considerations can be found in sections 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

7.1.1 Protective Measures

Avoid contact with skin, eyes and mucous membranes. Wear personal protective equipment for the hands, eyes and skin (see section 8). Do not wear contact lenses when working with this product. Do not breathe bentonite clay.

7.1.2 General hygiene advice

Avoid inhalation, ingestion or contact with skin and eyes. General hygiene measures are required at work to ensure safe handling of the substance. These measures include: good personal practices, regular cleaning of the workplace, do not drink, eat or smoke in the workplace, wash your hands after any manipulation, take a shower and change clothes at the end of each work shift. Do not wear contaminated clothing at home. Separate work clothes from others. Wash them separately.

7.2 Recommendations on the conditions for safe storage, including any incompatibilities.

The product should be stored in a dry, well-ventilated, protected from sunlight, water and frost at temperatures between +5 ° C and +35 ° C. Keep away from acids, from open flames, sparks and heat sources. Keep out of the reach of children.

If the product is stored on site, must be adequately protected from the sun, frost and water and maintained at temperatures between +5 ° C and +35 ° C.

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7.3 End use relief

Information not available.

8. Exposure controls / personal protection

8.1 Control parameters

Components with limit value: none.

8.2 Exposure controls

Wear personal protective equipment (goggles and protective clothing).

8.2.1 Appropriate engineering controls

None.

8.2.2 Individual protection measures, such as personal protective equipment.

8.2.2.1 Protection Eyes/face

Do not use contact lenses. Use safety goggles according to the current EN 166 standard.

8.2.2.2 Skin Protection

Wear suitable protective gloves according to the current EN 374 parts 1 and 2.

It should be borne in mind that, due to various factors (for example the temperature), the duration of a glove for protection against chemical agents can also be considerably lower than the permeation time detected by the test. Change protective gloves in case of signs of wear or contamination. Wear standard covering the whole surface of the skin, long pants, long sleeved overalls, with close fittings at and safety footwear.

8.2.2.3 Respiratory protection

In case of dust formation use of bentonite dust mask or, in the case of development in large quantities, a respiratory protective equipment with CE marking comply with the requirements of the regulations (Directives 89/656/EEC, 89/686 / EEC). Give adequate ventilation to the premises where the product is used or stored.

8.2.2.4 Thermal dangers.

Data not available.

8.2.3 Environmental exposure controls

Contain the spreading of bentonite clay. In case of any large spreading of bentonite clay into water courses must be alerted to the Environmental Agency or other organization responsible for environmental protection.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties.

Physical state: geocomposite multilayer.

Color: light gray.

Smell: none.

Odor Threshold: none.

pH: 6-10.

Melting or freezing point : NA (not available) .

Initial Boiling Point : NA (not applicable) .

Boiling Range : Not Applicable (NA) .

Flash Point : NA (not available) .

Evaporation Rate: NA (not applicable) .

Flammability of solids and gases : NA (not applicable) .

Lower limit of flammability : NA (not available) .

Lower explosive limit : NA (not available) .

Lower explosive limit : NA (not available) .

Upper explosivity limit : NA (not available) .

Vapour pressure: NA (not applicable) .

Vapor Density : NA (not applicable) .
Specific weight: 5300 g/m².
Solubility : NA (not available) .
Partition coefficient : n-octanol/water (not available) .
Autoignition Temperature : NA (not available) .
Decomposition Temperature : NA (not available) .
Viscosity: NA (not applicable) .
Oxidizing properties : NA (not available) .

Note: The values detailed above, regarding physico and chemical properties, are typical values for this product and should not therefore be considered specification data.

9.2 Other information

VOC (Directive 1999/13/EC): 0

VOC (volatile carbon) : 0

10. Stability and reactivity

10.1 Reactivity

If safe handling and storage guidelines are respected there are not dangerous reactions.

10.2 Chemical Stability

The product is stable if the requirements / guidelines for safe handling and storage are respected.

10.3 Reactions potentially dangerous.

When the product is stored and handled according to instructions there are not dangerous reactions.

10.4 Conditions to avoid

The product should be stored in a dry place, well-ventilated, protected from sunlight, water and frost, at temperatures between +5 ° C and +35 ° C. Keep away from acids, from open flames, sparks and heat sources. Keep out of the reach of children.

If the product is stored on site, must be adequately protected from the sun, frost and water and maintained at temperatures between +5 ° C and +35 ° C.

10.5 Incompatible materials.

Keep away from acids, from open flames, sparks and heat sources.

10.6 Dangerous decomposition products

When heated or in the event of fire, gases and vapors potentially dangerous to health can be release.

10.7 Polymerization

Product will not undergo polymerization.

11. Toxicological information

No episodes of damage to health due to exposure to the product. In any case, it must be handled in accordance with the rules of good industrial hygiene.

Ways of penetration: ingestion: yes
inhalation: yes
contact: no
Acute toxicity: data not available.
Irritation / corrosion:
Skin: prolonged contact may cause irritation and raising.
Eyes: Direct contact may cause irritation.
Irritation of the respiratory tract: data not available.
Dermal and respiratory sensitization: data not available.
Germ cell mutagenicity: data not available.
Carcinogenicity: data not available.
Reproductive toxicity: data not available.
Developmental Toxicity: the available data do not allow a proper assessment of a possible toxic effects reported substance.
Repeated dose toxicity and Specific target organ toxicity (repeated exposure): data not available.
Other relevant toxicity: data not available.

12. Ecological information

Use according to good working practices, avoiding disposal in the environment.

12.1 Toxicity

Data not available.

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12.1.1 Toxicity acute / prolonged on fish

There are no experimental data, but it is expected that the product is not totally harmless.

12.1.2 Toxicity acute / prolonged on aquatic invertebrates

There are no experimental data, but it is expected that the product is not totally harmless.

12.1.3 Toxicity acute / prolonged on aquatic plants

There are no experimental data, but it is expected that the product is not totally harmless.

12.1.4 Toxicity on microorganisms (es. bacteria)/ effects on activated sludge

Data not available.

12.1.5 Chronic toxicity to aquatic organisms.

Data not available.

12.1.6 Toxicity on the soil organisms.

Data not available.

12.1.6 Toxicity on ground plants.

Data not available.

12.1.7 General effect.

Data not available.

12.2 Persistence and degradability.

Inherent biodegradability (OECD 302 B):

There are no experimental data, but it is expected that the product is only partially biodegradable.

Disposal considerations:

Data not available.

Do not stream the product into pipelines and waterways, if the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the fact to the competent authorities.

12.3 Bioaccumulative potential

Data not available.

12.4 Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:

Data not available.

12.5 Results of evaluations on substances PBT o vPvB

Data not available.

12.6 Other adverse effects

Data not available.

12.7 Additional indications

Halogenated organic compounds absorbable (AOX):

Data not available.

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13. Disposal considerations

13.1 Methods of treatment of the waste

Reuse, when possible. The product residues should be considered as non-dangerous waste.

Disposal must be performed by an authorized society for waste management, in compliance with local, national and community regulation. For solid residues may be suitable the disposal in a sanitary landfill.

Disposal of the product (code CER):

08 04 10

14. Transport information

Product is not classified as dangerous for transport (ADR via roadway, RID by train, ADN Inland waterway transport, IMDG / GGVSea by sea, IATA/ICAO by air).

14.1 Number ONU

Not regulate.

14.2 Correct technical name for shipment ONU

Not regulate.

14.3 Class of danger for the transport

Product is not classified as dangerous for transport.

14.4 Packing Group

Not regulate.

14.5 Environmental dangers

Product is not classified as dangerous for transport.

14.6 Special precautions for users

Product is not classified as dangerous for transport.

14.7 Transport product in compliance with the Convention MARPOL73/78 and the code IBC

Product is not classified as dangerous for transport.

Transportation classifications may change according to different national law.

15. Regulatory information.

15.1 Regulations / legislation relating to safety, health and environmental product protection.

Seveso category: none

Restrictions relating to the product or contained substances pursuant as per the Annex XVII Regulation (CE) 1907/2006: none

Substances in Candidate List (Art. 59 REACH): none.

Substances subject to authorization (Annex XIV REACH): none.

Healthcare controls : Information not available .

Other EU regulations : Directive 67/548/EEC and subsequent amendments (classification, labeling and packaging of dangerous substances) ;Directive 2006/8/EC (Ministerial Decree of 03/04/2007) .

National regulations : Presidential Decree 1124/65 (consolidated text of the provisions for compulsory insurance against accidents at work and occupational diseases) ;
D. Decree no. 475/82 and subsequent amendments (Implementation of Council Directive 89/686/EEC of 21/12/1989 on the approximation of the laws of Member States relating to personal protective equipment) ;
Law no. 52 of 03/02/1997 ;
Ministerial Decree 28/04/1997 ;
Ministerial Decree 04/04/1997 ;
Ministerial Decree 07/09/2002 (Implementation of Directive 2001/58/EC) ;
D. Decree No. 65 of 14/03/2003 (Implementation of Directives 1999/45/EC and 2001/60/EC) ;
D. Decree no. 152/2006 and subsequent amendments (environmental

standards);

D. Decree 81 /2008 and subsequent amendments (implementation of Art. 1 of the law 03/08/2007 on the protection of health and safety in the workplace).

15.2 Chemical Safety Assessment (CSA)

Has not been processed a chemical safety assessment for the mixture and the substances it contains.

16. Other Informations.

16.1 Abbreviations

EC ₅₀ :	median effective concentration.
LC ₅₀ :	median lethal concentration.
LD ₅₀ :	median lethal dose.
NOEC:	no observable effect concentration.
PNEC:	predicted no-effect concentration.
OEL:	occupational exposure limit.
PBT:	persistent, bioaccumulative, toxic chemical.
vPvB:	very persistent, very bioaccumulative chimica.
STEL:	short-term exposure limit.
TWA:	time weighted average.
OIM:	International Maritime Organization.
IMDG:	International Maritime Dangerous Goods.
IATA:	International Air Transport Association.
ADR/RID:	Agreement on road transport of dangerous good / regulations of the international transport of dangerous goods by rail.
SCOEL:	Scientific Committee on Occupational Exposure Limits.
CSAH:	Scientific Committee on Human Nutrition.

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16.6 Bibliografia

- Directive 1999/45/CE and subsequent amendments;
- Directive 67/548/CEE and subsequent amendments;
- Regulation (CE) 1907/2006 of the European Parliament (REACH);
- Regulation (CE) 1272/2008 of the European Parliament (CLP);
- Regulation (CE) 790/2009 of the European Parliament (I Atp. CLP);
- Regulation (CE) 453/2010 of the European Parliament;
- The Merck Index. Ed. 10;
- Handling Chemical Safety;
- Niosh - Registry of Toxic Effects of Chemical Substances;
- INRS - Fiche Toxicologique;
- Patty - Industrial Hygiene and Toxicology;
- N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 1989;
- Web Page ECHA Agency.

Release declaration:

This safety data sheet (SDS) are based on the legal provisions contained in the REACH Regulation (EC/1907/2006) and its subsequent amendments and additions. The information contained herein is based on information in the MSDS of the raw materials that make up the product and on our knowledge at the date indicated above . It refers solely to the product indicated and constitutes no guarantee of particular quality.

We will not release any representation or warranty as to the accuracy, reliability and completeness of the data contained in this MSDS . The company assumes no liability for damages to persons or property that may result from use of the product other than that for which it was intended . The SDS does not replace but complements the lyrics or the rules that regulate the activity of use. The user has full responsibility for the precautions that are necessary for the use that will do the preparation. This MSDS cancels and replaces any preceding release.

Indications of changes to the previous version of the SDS : review of the entire document.

This SDS is available in electronic format on the website : www.diasen.com .