

MATERIAL SAFETY DATA SHEET

BENTONITE POWDER

(In compliance with Regulations (EC) 1907/2006, (EC) 1272/2008 and (EC) 453/2010)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE OF THE COMPANY

1.1 Product identifier: Bentonite Powder – VSD-CEM-FBM-AFM-XSB

CAS number: 1302-78-9

Synonym: Montmorillonite

REACH registration number: Exempted from REACH registration in accordance with Annex V.7 since bentonite is a material which occurs in nature, and is not chemically modified.

Trade Names: PROLAT Bentonite powder

1.2 Relevant identified uses of the substance

Bentonite is used for drilling, foundry, civil engineering and animal feed products

1.3 Details of the supplier of the safety data sheet

PROLAT -
S.DIMOPOULOS & CO
XIROPIGADO, 19600
MANDRA ATTICA
TEL. +30 2105555276 - FAX. +30 2105558912
E-mail: info@prolat.gr
www.prolat.gr

1.4 Emergency telephone number: TEL. +30 2105555276 → Not available outside office hours

SECTION 2: HAZARDS IDENTIFICATION

2.1 Hazards for people and the environment

Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant), of ingestion.

2.2 Classification of the substance

Due to cryp. CS A-dust (DIN EN 15051-B) amounting to < 0.1% by weight, classification in accordance with Regulation (EC)1272/2008 is not required. No classification according to 67/548/EEC.

2.3 Label elements

Hazard pictogram: None
Signal word: None
Hazard statements: None
Precautionary statements: None

2.4 Other hazards

This product is an inorganic substance of natural origin and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Chemical characterization (individual substances):

Description: Bentonite is a natural material also known as Montmorillonite. It is originated from nature and pulverized without any chemical process. Bentonite CAS # is 1302-78-9 100.

Therefore there is no any toxicological data on ingredients.

3.2 Components CAS no

Bentonite CAS: 1302-78-9 100

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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Eye contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything

by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms and effects both acute and delayed

No acute and delayed symptoms and effects are observed.

4.3 Indication of any immediate medical attention and special treatment needed

No specific actions are required.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

No specific extinguishing media is needed.

5.2 Specific hazards arising from the substance:

Non-combustible. No hazardous thermal decomposition.

5.3 Advice for fire-fighters:

No specific actions are required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. If the atmosphere appears dusty, breathing apparatus must be worn.

6.2 Environmental precautions

No special requirements. See also section 12.

6.3 Methods and material for containment and cleaning up

Avoid dry sweeping and use water spraying or vacuum cleaning (minimum dust class M) for removal. Keep in closed containers, ready for disposal.

6.4 Reference for other sections

See sections 8 and 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment and see section 8. Handle packaged products carefully to prevent accidental bursting. Remove and wash soiled clothing.

Keep containers tightly closed. Ensure that dust-protection measures are in place during loading and unloading of containers.

7.3 Further information on storage conditions

Dry storage.

7.4 Notes on fire and explosion protection

No specific fire-precaution requirements.

7.2 Requirements for storage rooms and containers

7.5 Storage class

Non-combustible solids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Additional information on the design of technical plants

Adequate ventilation and extraction must be provided at processing machines and at locations where dust may form.

8.2 Ingredients with threshold limit values

If a concentration of $\leq 0.15 \text{ mg/m}^3$ (average value for one shift) is observed for cryp. CS A-dust, it is highly likely that employees will not suffer from any silicotic disease.

Activities performed in dusty atmospheres must be monitored: dust samples must be taken in accordance with EN 481 and TRGS 402/A-dust concentration of cryptocrystalline in accordance with BIA 8522 (FTIR)

8.3 Personal protective equipment

General precautions: Wash hands before breaks and at the end of a shift. Do not inhale dust. Do not eat or drink while working. Remove soiled clothing and wash it before wearing again.

Respiratory protection: If A-dust exceeds the concentration of 0.15 mg/m^3 cryp. CS, wear an appropriate fine-dust filter mask (FFP 2).

Hand protection: Not applicable

Eye protection: Safety glasses with side shields

Body protection: Not applicable

Hygiene measures: Keep street clothes and working garment separate.

8.4 Environmental exposure controls

No specific requirements

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Solid, powder
Colour: White to beige
Odour: Odourless
Odour threshold: Not relevant
pH: 5 – 8

Method: 400g/l water at 20°C

Melting point : NA

Density at 20°C: 0.8 g/cm³

Method: DIN ISO 787 Part 10

Form : Powder

Solubility in water at 20°C: Negligible

Method: DIN ISO 787 Part 8

Solubility in hydrofluoric acid: NA

9.2 Further information: NA

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Inert, not reactive

10.2 Chemical stability:

Chemically stable

10.3 Possibility of hazardous reactions:

No hazardous reactions

10.4 Conditions to avoid:

Not relevant

10.5 Incompatible materials:

No particular incompatibility

10.6 Hazardous decomposition products:

Not relevant

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute toxicity, oral, dermal, inhalation

Based on available data, the classification criteria are not met.

11.2 Skin corrosion/irritation

Based on available data, the classification criteria are not met.

11.3 Serious damage/eye irritation

Based on available data, the classification criteria are not met.

11.4. Respiratory/Skin sensitization

Based on available data, the classification criteria are not met.

11.5. Aspiration hazard

Based on available data, the classification criteria are not met.

11.6. Reproductive toxicity

Based on available data, the classification criteria are not met.

11.7. Germ cell mutagenicity

Based on available data, the classification criteria are not met.

11.8. Carcinogenicity

Based on available data, the classification criteria are not met.

11.9. STOT - single exposure

Based on available data, the classification criteria are not met.

11.10. STOT - repeated exposure

Prolonged inhalation of large amounts of cryp. CS A-dust (> 0.15 mg/m³) may lead to silicosis. Due to cryp. CS A-dust (DIN EN

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15051-B) amounting to < 0.1% by weight, classification in accordance with Regulation (EC) 1272/2008 is not required.

11.11. Further information: -

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Not relevant

Bentonite has no known harmful effects on the environment, nor are such effects to be expected.

12.2. Persistence and degradability:

Not relevant

12.3. Bioaccumulative potential:

Not relevant

12.4. Mobility in soil:

Negligible

12.5. Results of PBT and vPvB assessment:

Not relevant

12.6. Other adverse effects:

No specific adverse effects known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods: This material is not classified as hazardous waste according to Commission Decisions 2000/532/EC and 2001/118/EC.

Waste from residues/unused products:

Can be landfilled in compliance with local regulations. Where possible, recycling is preferred to disposal. The material should be stored in sealed containers to prevent the formation of dust.

Waste disposal code: It is not possible to define a waste disposal code for this product in accordance with the European Waste Catalogue as only the intended use by the consumer enables an assignment of

this. The waste disposal code must be defined in agreement with the regional disposal facility.

Waste name : Mineral waste

Obligation to produce supporting documents (Y/N): N

Empty packaging

Recommendation: Empty containers should be recycled, recovered or disposed of locally.

Caution: Dust may form when folding empty paper bags and big-bags. Ensure that appropriate health and safety measures are in place.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number:

Not relevant

14.2 UN proper shipping name:

Not relevant

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14.3 Transport hazard classes

ADR: Not classified

IMDG: Not classified

ICAO/IATA: Not classified

RID: Not classified

Not relevant

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

14.6 Special precautions for the user:

No special precautions

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental

regulations/legislation specific for the

substance: Nothing additionally known beyond the information which is given in the sections 2., 8., 11., 12.

15.2 Chemical safety assessment: Exempted

from REACH registration in accordance with Annex V.7.

SECTION 16: OTHER INFORMATION

Third-party materials If third-party materials not manufactured or supplied by PROLAT are used in conjunction with, or instead of PROLAT products, it is the customer's responsibility to obtain all technical data and other properties relating to these and other materials from the supplier or manufacturer, as well as all relevant information pertaining to them. No liability can be accepted in respect of the use of PROLAT products in conjunction with other materials.

Liability The information provided here is accurate and reliable to the best of PROLAT's knowledge and belief. However, no warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of the information provided for his own specific application.

Training Workers must be informed about the presence of cryp. CS A-dust and trained in the proper use and handling of this product as required under applicable regulations.