

# MEA Safety Data Sheet : Bentonite/Sand Mix

Version	Prepared by	Date	Details
1.0	TD	161031	Approved

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## Read and understand SDS before use of product.

### 1. Identification

GHS product identifier: Bentonite/ Sand mixture. MEA2017, MEA2014, BPIN 100202, Trubond MW.  
This product contains respirable free crystalline silica. Respirable free crystalline silica dust is classified as a HAZARDOUS CHEMICAL.

Recommended use of product: to be mixed with water and used as slurry in installation of soil moisture monitoring sensors.

In case of an emergency, contact **Poisons Information Centre 13 11 26**

### 2. Hazard identification

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work Health and Safety regulations Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Signal word: **DANGER**

## DO NOT BREATHE DUST

Carcinogen - Category 1  
STOT (Specific Target Organ Toxicity) Repeated exposure - Category 2

Hazard statement and codes  
H350 May cause cancer by inhalation  
H373 May cause damage to organs through prolonged or repeated exposure by inhalation  
Pictogram: health hazard



Do not handle until the SDS has been read and understood. Do not eat or drink or smoke while handling this product.  
Keep out of the reach of children.  
Seek medical advice if you feel unwell.

High and repeated exposure and inhalation of dust containing respirable free crystalline silica may cause cancer and damage to organs.

### 3. Composition

In the Bentonite/Sand mixture, the fraction of the hazardous material within the Bentonite (Trubond MW), respirable free crystalline silica is < 1.5%.

The remaining 98.5%+ of the mixture is made up of ingredients determined not to be hazardous.

The CAS (Chemical Abstract Service) number for Bentonite is 1302-78-9

### 4. First Aid Measures

**Inhalation:** If inhaled, remove the infected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention. First Aider should avoid breathing in dust.

**Ingestion:** Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

**Skin:** Wash affected area thoroughly with soap and water. If symptoms develop, seek medical attention.

**Eye contact:** If in eyes, hold eyelids apart and flush the eyes continuously with cool running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist, seek medical attention.

**First Aid Facilities:** Eyewash and normal washroom facilities.

**Advice to Doctor:** Treat symptomatically

**Other information:** For advice in an emergency, contact Poisons Information Centre 13 11 26 or doctor at once.

### 5. Firefighting measures

Suitable extinguishing media: Use extinguishing media suitable for the surrounding combustible materials.

Hazards from Combustion Products: Non-combustible material.

Specific Hazardous Arising from the chemical: This material is non-combustible. Heating can cause expansion or decomposition leading to rupture of container. Packaging may burn under fire conditions.

Decomposition temperature: Not available.

Precautions relating to fire situation: Fire Fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool heat exposed containers.

### 6. Accidental release measures

Increase ventilation. Evacuate unprotected personnel. Wear sufficient respiratory protection and clothing to prevent exposure. Dampen spilled material with water to avoid air borne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled plastic containers for disposal. Dispose of wastes according to the applicable regulations.

If contamination of sewers or waterways occurs, inform the local water and waste management authorities in accordance with local regulations.

### 7. Handling and storage

Precautions for safe handling.

Use only in well ventilated area. Keep containers sealed when not in use. Prevent the build-up of dust in the atmosphere. Avoid breathing dust, avoid skin or eye contact. Do not eat, drink or smoke while handling this product. Wash hands thoroughly after use. Do not handle until the safety instructions have been read and understood.

Conditions for storage.

Store in a secure, cool, dry, well ventilated place, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable regulations.

## 8. Exposure controls/personal protection

Occupational exposure limit values: No exposure value assigned for this material by Safe Work Australia.

Time Weighted Average (TWA) of Crystalline silica ppm mg/m<sup>3</sup> = 0.1

TWA : The average airborne concentration of a particular substance when calculated over a normal 8 hour working day, for 5 day week.

Short Term Exposure Limit (STEL): The average air borne concentration (of undiluted Bentonite) over a 15 minute period should not be exceeded at any time during a normal 8 hour workday.

Australian airborne contaminants exposure standard can be accessed from [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)

No biological limit values allocated.

Appropriate Engineering Controls: This product should be used with local exhaust ventilation system, drawing solid/dust away from worker's breathing zone.

Respiratory protection: If engineering controls are not sufficient, an approved P1/P2 respirator with replaceable dust filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZ 1715, Selection, Use, and Maintenance of respiratory Protective Devices: and AS/NZ 1716, Respiratory protective devices, in order to make any necessary changes for individual circumstances.

Eye protection: Safety glasses with side shields or chemical goggles should be worn. Eye protection devices should conform to AS/NZ 1337- Eye Protection for Industrial Applications.

Hand protection: Wear gloves of impervious material. Reference should be made to AS/NZ2161:1- Occupational protective gloves - selection use and maintenance.

Body protection: Suitable protective work wear eg: cotton long sleeve garment closed at neck and wrists is recommended. Chemical apron is recommended where large quantities are handled.

## 9. Physical and chemical properties

- Appearance: Light pink, off white powder
- Odour: None
- Odour threshold: None
- pH: 7-9 (20% aqueous slurry)
- Melting point /freezing point: Not available
- Initial boiling point and boiling range: Not applicable
- Flash Point: Not applicable
- Evaporation rate: Not available
- Flammability: Not combustible
- Upper/lower flammability or explosive limits: Not applicable
- Vapour pressure: Not applicable
- Vapour density: Not applicable
- Solubility: Insoluble. Forms colloidal suspension in water with strong thixotropic properties
- Partition co-efficient: n-octanol/water: Not available
- Auto ignition temperature: Not applicable
- Decomposition temperature: Not available
- Viscosity: Not available

## 10. Stability and reactivity

Hazardous polymerization will not occur.

Stable under normal conditions of storage and handling.

Avoid extremes of temperature and dust accumulation.

## 11. Toxicological information

No toxicological data is available for this product.

Ingestion of large amounts of this product may irritate the gastric tract, causing nausea and vomiting.

When ingested, Bentonite can swell several times in volume and produce intestinal obstruction.

Inhalation of dust may irritate the respiratory system. Chronic exposure by inhalation may aggravate pre-existing upper respiratory and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

May be irritating to the skin. Symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

May be irritating to the eyes. Symptoms may include redness, itching and tearing.

Not expected to be a respiratory sensitiser.

Not expected to be skin sensitiser.

Not considered to be a mutagenic hazard.

Respirable crystalline silica is classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans by inhalation. May cause cancer by inhalation.

Not considered to be toxic to reproduction.

## 12. Ecological information

Prevent this material from entering waterways, drains and sewers.

## 13. Disposal considerations

The disposal of spilled or waste materials must be done in accordance with applicable local and national regulations.

## 14. Transport information

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code for transport by sea.

Not classified as IMDG (International Maritime Dangerous Goods Code) Marine pollutant.

## 15. Regulatory information

Classified a Hazardous according to the GHS including WHS regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons.

## 16. Other information

Date SDS prepared: October 31st 2016

To be reviewed no later than: October 2021.

References:

- Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice
- Globally Harmonised System for classification and labelling of chemicals.
- Safework SA
- Guidance on the Classification of Hazardous Chemicals under the WHS regulations

Please note:

The information contained in this SDS is believed to be accurate and reliable. Since we cannot control the different conditions under which our product may be used, each user should review these recommendations in the context of their intended application and undertake their own risk assessment in relation to the handling and use of this product. MEA accepts no liability for damage or injury caused from the use of this information or product it relates to.

END OF SDS.