Material Safety Data Sheet: Montmorillonite

1. Identification of the substance/preparation and the company

   Substance: Montmorillonite / Bentonite

   Application: Drying Agent

   Company: IMPAK Corporation
   13700 South Broadway
   Los Angeles, CA 90061

2. Composition/Information of ingredients

   Natural Calcium Bentonite

   Bentonite,
   Weight %: >90
   CAS No.: 1302-78-9
   Hazard symbols: --
   R-phrases: --

   Index No.: --
   EINECS No.: 238-878-4

   Quartz
   Weight %: 2
   CAS No.: 14808-60-7
   Hazard symbols: --
   R-phrases: --

   Index No.: --
   EINECS No.: 238-878-4

   Cristobalite
   Weight %: 2
   CAS No.: 14464-46-1
   Hazard symbols: --
   R-phrases: --

   Index No.: --
   EINECS No.: 238-455-4

3. Hazards Identification

   Hazard description
   Not applicable

4. First-aid measures

   After inhalation take the patient into the fresh air. In the event of contact with the skin, rinse off with water and soap. Contamination of the eyes must be treated by thorough irrigation with water, with the eyelids held open. Eventually a doctor (or eye specialist) should be consulted. If product is swallowed consult a doctor if necessary.
5. **Fire-fighting measures**

Suitable extinguishing media: No restriction in fire situations. Product is not combustible.
For reasons of security unsuitable extinguishing media: None.
Special risk due to the substance or the preparation itself, its combustion products or the gas being produced: None
Special protective equipment when fighting fires: Firemen have to wear self-contained breathing apparatus.
Further Information: None.

6. **Accidental release measures**

Precautionary measures regarding persons: Avoid the formation of dust, if necessary siphoning the production off locally.
Use the personal protective equipment listened in Charter 8
Environmental protection measures: No special measures required.
Methods for cleaning up/taking up: Take up spilled product with an industrial vacuum cleaner.
Further information: None.

7. **Handling and Storage**

Handling

Information on safe handling: Avoid the formation of dust, if necessary siphoning the product off locally. Take precautionary measures against static discharges.
Information on fire and explosion prevention: none.

Storage

Requirements on storerooms and containers: none
Information on common storage: Observe the rules contained in the VCI concept for separate/common storage. Observe the official regulations.
Further information on storage conditions: Keep in sealed containers in a dry place.
Storage class according to VCI (Association of the German Chemical Industry): 13

8. **Exposure controls/personal protection**

For exposure controls see Chapter 15

Respiratory protection: Respiratory equipment with filter type P according to DIN EN 143
Hand protection: gloves
Eye protection: goggles

9. **Physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Granular</td>
</tr>
<tr>
<td>Color</td>
<td>brownish - grey</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>PH Value</td>
<td>7-8 (in suspension at 10% in water)</td>
</tr>
<tr>
<td>Melting point</td>
<td>not determined</td>
</tr>
<tr>
<td>Inflammability</td>
<td>no</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>not applicable</td>
</tr>
<tr>
<td>Spontaneous flammability</td>
<td>no</td>
</tr>
<tr>
<td>Fire-promoting</td>
<td>no</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

Condition to avoid: none known
Substances to avoid: none known
Hazardous decomposition products: none known
Further information: none

11. Toxicological Information

Toxicological studies on the product are not yet available
Practical experience
Dehydration in case of prolonged skin contact
Quartz (incl. Cristobalite and Tridymite) is known as substance causings silicosis to humans

12. Ecological information

Ecotoxilogical data is not available

13. Disposal Considerations

Unused material: reuse if possible. Address manufacturer.
or
May be disposed of in approved landfills provided local regulations are observed

14. Transport information

Properties: no
Explosive limits: not applicable
Vapor pressure: not relevant
Bulk density: 800 to 950 kg/m3
Solubility in water: < 20 g/l
Fat solubility: not determined
Partition coefficient
n-octanol/water: not determined

10. Stability and reactivity

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Substances to avoid: none known
Hazardous decomposition products: none known
Further information: none

11. Toxicological Information

Toxicological studies on the product are not yet available
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14. Transport information

GGVSE: --
RID/ADR: --
Warning sign: Hazard No. --
ADNR: --
GGVsee/IMDG Code: --
ICAO-TI/IATA-DGR: --
Declaration for land shipment: --
Declaration for sea shipment: --
Declaration of shipment by air: --
Other information: Not dangerous cargo. Keep separated from foodstuffs
15. Regulatory information

No labeling is required in accordance with the EEC directives.

German regulations
TRGS 900 “Atmospheric Threshold Value”:
14808-60-7 Quartz
threshold: 0,15 mg/m³ A
Note remarks

Handling restrictions: none
Major accidents regulations: not listed in the appendices
Regulations on flammable liquids: not applicable

Technical Instruction on Air Pollution Control:
Figure 5.2.1
Total dust

Water pollution class (WGK): not harmful to water
Observe national regulations

16. Other Information

The presented safety data sheet has been altered.
The reason for the alteration is as follows: revised text (see chapter 1, 2, 4, 5, 6, 7, 8, 11, 12, 14, 15, 16)

The data here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties, or performance.