

Bentonite Powder**SECTION 1. IDENTIFICATION**

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|--------------------------------------|--|
| Product Identifier | Bentonite Powder |
| Other Means of Identification | None |
| Product Code(s) | BE1210, BE1215 |
| Product Family | Inorganic Solid |
| Recommended Use | Industrial. |
| Restrictions on Use | None known. |
| Supplier Identifier | Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995 |
| Emergency Phone No. | CANUTEC CANADA, 613-996-6666, 24 Hours |
| SDS No. | 0913 |

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Skin irritation - Category 2; Serious eye damage - Category 1; Carcinogenicity - Category 2

Label Elements

Signal Word:
Danger

Hazard Statement(s):

Causes skin irritation.
Causes serious eye damage.
Suspected of causing cancer.

Precautionary Statement(s):

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and skin thoroughly after handling.

Response:

IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTRE or doctor.

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IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Storage:

Store in a well-ventilated place. Keep cool.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

| Chemical Name | CAS No. | % | Other Identifiers |
|------------------------------------|------------|------------|---|
| Silica, quartz | 14808-60-7 | 1 - 5 | Crystallized silicon dioxide, Quartz silica |
| Calcium oxide | 1305-78-8 | 0.3 - 1 | Burnt lime, Calcium monoxide |
| Potassium oxide (K ₂ O) | 12136-45-7 | 0.12 - 0.7 | Dipotassium monoxide |
| Silica, cristobalite | 14464-46-1 | 0.1 - 1 | Crystalline silicon dioxide cristobalite |
| Silica, tridymite | 15468-32-3 | 0.1 - 1 | Crystalline silicon dioxide, Tridymite |
| Titanium dioxide | 13463-67-7 | 0.06 - 0.1 | Brookite, Titanic acid anhydride, Titanium Peroxide |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Contact physician immediately.

Ingestion

Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment

Special Instructions

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

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Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn. Closed containers may rupture violently when heated releasing contents.

Not known to generate any hazardous decomposition products in a fire.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapours or gases. Fight fire from a safe distance or a protected location. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials. Eliminate all ignition sources if safe to do so.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Flush spill area.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating dusts. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Wash hands thoroughly after handling this material.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated. Store in the original, labelled, shipping container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Chemical Name | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|-----------------------|--------------------|------|--------------------|---------|-----------|-----|
| | TWA | STEL | TWA | Ceiling | 8-hr TWA | TWA |
| Silica, quartz | 0.025 mg/m3 A2 | | 0.1 mg/m3 | | | |
| Calcium oxide | 2 mg/m3 | | 5 mg/m3 | | | |
| Silica, cristobalite | 0.025 mg/m3 A2 | | 10 mg/m3 | | | |
| Titanium dioxide | 10 mg/m3 A4 | | 10 mg/m3 | | | |
| Silica, tridymite | Not established | | 10 mg/m3 | | | |
| Potassium oxide (K2O) | Not established | | Not established | | | |

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety

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shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Safety glasses with side shields are recommended to prevent eye contact. Use full face-shield and chemical safety goggles when there is potential for contact. Contact lenses should not be worn when working with this material.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|--|--|
| Appearance | Grey powder. |
| Odour | Musty |
| Odour Threshold | Not available |
| pH | 9 - 11 |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not available |
| Flash Point | Not applicable |
| Evaporation Rate | Not applicable |
| Flammability (solid, gas) | Will not burn. |
| Upper/Lower Flammability or Explosive Limit | Not applicable (upper); Not applicable (lower) |
| Vapour Pressure | Not applicable |
| Vapour Density (air = 1) | Not applicable |
| Relative Density (water = 1) | 2.65 |
| Solubility | Insoluble in water; Not available (in other liquids) |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not applicable |
| Auto-ignition Temperature | Not applicable |
| Decomposition Temperature | Not available |
| Viscosity | Not available (kinematic); Not available (dynamic) |
| Other Information | |
| Physical State | Solid |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Sunlight. Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

Strong acids (e.g. hydrochloric acid), water, strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

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Corrosive gases.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact.

Acute Toxicity

| Chemical Name | LC50 | LD50 (oral) | LD50 (dermal) |
|----------------------|--|---------------------|---------------|
| Silica, quartz | Not available | 500 mg/kg (rat) | Not available |
| Calcium oxide | Not available | Not available | Not available |
| Silica, cristobalite | Not available | Not available | Not available |
| Titanium dioxide | > 6820 mg/m ³ (rat) (4-hour exposure) | > 25000 mg/kg (rat) | > 10000 mg/kg |
| Silica, tridymite | Not applicable | Not available | Not available |

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Irritation

Causes eye damage.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Ingestion

No information was located.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause irritation of the respiratory system. May cause respiratory tract injury. May cause silicosis.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|------------------------------------|---------------|----------------|------------------|------------|
| Silica, quartz | Group 1 | A2 | Known carcinogen | |
| Calcium oxide | Not evaluated | Not designated | Not Listed | |
| Silica, cristobalite | Group 1 | A2 | Known carcinogen | |
| Titanium dioxide | Group 2B | A4 | Not Listed | Not Listed |
| Silica, tridymite | Not evaluated | Not Listed | Known carcinogen | |
| Potassium oxide (K ₂ O) | Not Listed | Not designated | Not Listed | Not Listed |

Key to Abbreviations

Group 1 = Carcinogenic to humans.

A2 = Suspected human carcinogen.

Group 2B = Possibly carcinogenic to humans.

A4 = Not classifiable as a human carcinogen.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL.

Tridymite (CAS# 15468-32-3) - Not specifically listed on the DSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

Tridymite (CAS# 15468-32-3) - Not specifically listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Alphachem Limited

Phone No. (905)-821-2995

Date of Preparation February 14, 2017

Date of Last Revision February 14, 2017

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Black Hills Bentonite Co database.

Disclaimer This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since

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