

MATERIAL SAFETY DATA SHEET – MSDS

SECTION 1: PRODUCT IDENTIFICATION AND OF THE COMPANY/UNDERTAKING

Chemical product identification: Natural Bentonite
Trade Name: Bentonite
Product use: Oil Refinery
Details of the supplier of the safety data sheet
Name: MAK Company
Address: Box No. 371473, Dubai, United Arab Emirates
Telephone: +971 55 559 0635
E-Mail: info@makfortrading.com

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Names: Bentonite

CAS No.: 1302-78-09

Mineral Ingredients: Smectite, Montmorillonite, Cristobalite, Dolomite, Quarts, Zeolite, Gypsum

Hazardous Ingredients

Crystalline Silica (Quartz, 14808 – 60 – 7) is present at < 5,0 % as a naturally occurring component not removed from the clay ore in processing. See Section 11 for further information.

SECTION 3: HAZARDS IDENTIFICATION

HMIS Rating:

Health = 1* (possible hazard from chronic exposure to dust, see Section 11)

Flammability = 0

Reactivity = 0

Personal Protective Equipment = E

EMERGENCY OVERVIEW:

Under normal usage or contained spills this material does not pose a significant emergency risk. This material is very slippery when wetted with water. Appropriate precautions should be taken to avoid slips and falls.

POTENTIAL HEALTH EFFECTS:

Eyes: May cause slight eye irritation. Direct contact should be avoided to prevent physical damage.

Skin: None known.

Inhalation: Short term exposure to high dust levels could cause minor irritation. Long term exposure to high concentrations of dust should be avoided due to the presence of quartz which can cause severe and permanent lung damage when inhaled. Control dust levels with engineering controls (local exhaust ventilation). Prevent dust inhalation with use of a NIOSH approved dust respirator if engineering controls are inadequate.

Carcinogenicity: IARC has classified crystalline silica as a human carcinogen.

Target Organs: Lungs

SECTION 4: FIRST AID MEASURES

Skin: Wash off with soap and water.

Eye: Flush with tepid water for 15 minutes. If irritation or pain persists, seek medical attention.

Inhalation: Remove person to fresh air. Seek medical attention if shortness of breath or irritation persists.

Ingestion: Could result in intestinal blockage. If large amounts are swallowed seek medical attention.

Notes to Physician: Mixture is orally non-toxic. See Section 11 for additional toxicological data.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint: Not applicable

Upper Explosive Limit: Not applicable

Lower Explosive Limit: Not applicable

Autoignition Temperature: Not applicable

Thin-film Ignition Temperature: Not applicable

Known or anticipated hazardous products of combustion: None

Basic fire fighting guidance: Not applicable

Extinguishing media: Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Wet down large spills with water mist to avoid generating excessive dust levels. Caution: This material is very slippery when wet. Appropriate precautions should be taken avoid slips and falls.

Clean-up procedures and equipment: Use of a dustless vacuum system or shoveling. Flushing with water is also an acceptable method. Avoid dry sweeping or other methods that may generate high dust concentrations. Wear NIOSH approved dust respirator.

SECTION 7: HANDLING AND STORAGE

Handling: Adequate ventilation is necessary in handling areas to prevent excessive airborne dust.

Storage: Store in closed containers in a dry area.

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

Engineering Controls:

Provide general or local ventilation adequate to maintain airborne levels below occupational exposure limits.

Personal Protection Equipment:

Eye/face: Use safety glasses or goggles.

Skin: None

Respiratory: Use a NIOSH approved, air purifying dust respirator if dust levels are above exposure limits.

Half-masks are usually sufficient for normal use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to light Grey Powder
Odor:	None
Physical State:	solid
pH:	7 - 8
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Boiling Point:	Not Applicable
Melting Point:	Not Applicable
Solubility in Water:	Negligible
Specific Gravity:	2 +/- 0.1 g/cm ³

SECTION 10: STABILITY AND REACTIVITY

Incompatibilities:	None
Conditions to avoid:	Not applicable
Stability:	This material is stable under normal storage and handling conditions.
Hazardous Polymerization:	Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

Over-exposure to Bentonite (long contact without protection) can cause lung silicosis, a progressive lung disease in humans. Health affects from exposure to Crystalline Silica occur only when it is inhaled.

Inhalation Effects: Crystalline Silica has been shown to cause silicosis and lung cancer. Crystalline Silica only causes these conditions when inhaled.

Skin Contact: Prolonged skin contact may lead to drying or cracking of the skin due to H₂O absorption properties of the clay.

Eye Contact: As with any dust, will be irritating to the eyes due to physical scratching.

Medical Conditions Aggravated: Respiratory disorders

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in a manner in accordance with local and federal regulations.
This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

SECTION 14: TRANSPORTATION INFORMATION

This material is not regulated by the Department of Transportation

SECTION 15: REGULATORY INFORMATION

Regulation: None

SECTION 16: OTHER INFORMATION

Additional Safety & Health Hazards:	Nothing particular
Notes of Physician:	None
Protective clothing & Equipment:	Wear long protective clothing with an apron to keep dust off clothes
Other Protective Equipment:	Wear appropriate clothing to prevent skin exposure
Other Hazardous Conditions of Handling Storage & Use:	Avoid prolonged exposure to dust, esp, when loading. Marks are recommended.
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