



MATERIAL SAFETY DATA SHEET

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1-613-996-6666 – CANUTEC – Transportation Emergency
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NATURAL GEL (BENTONITE, HYDROGEL)

SECTION I: IDENTIFICATION OF PRODUCT

Proper Shipping Name: NaturalGel, (Bentonite, Hydrogel)
Product Name: NATURAL GEL (BENTONITE, HYDROGEL)
Chemical Family: Naturally occurring mineral
WHMIS Classification: D2A

Workplace Hazard: Potential carcinogen, contains free silica
Product Use: Clay viscosifier
TDG Classification: Not regulated
Packaging Group: Not applicable
PIN: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent	CAS Number	LD ₅₀ (Species/Route)	LC ₅₀ (Species/Route)
Crystalline Silica; Quartz	2-6	14808-60-7	-	-

SECTION III: TOXICOLOGICAL PROPERTIES

Route of entry: Skin Eye Contact Inhalation Ingestion

Effects of acute exposure: Mechanical irritant to the eyes. Possible drying of skin resulting in dermatitis. May cause irritation to the upper respiratory tract.

Effects of chronic exposure: This product contains crystalline silica. Breathing silica containing dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Chronic inhalation may cause silicosis, a progressive, disabling and sometimes fatal lung disease. Chronic inhalation exposure to crystalline silica quartz has been observed to cause lymph node effects, kidney effects and auto-immune disease.

Exposure limits:
ACGIH-TLV Quartz, crystalline silica 0.05 mg/m³

Irritancy of product: Mechanical irritant to the eyes. May cause irritation to the upper respiratory tract.

Sensitization to product: Not available

Carcinogenicity: Bentonite is not listed by ACGIH, IARC, NTP or OSHA. Crystalline silica, when inhaled from occupational sources, is considered as a human carcinogen by IARC (Class 1) and by NTP. ACGIH classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

Reproductive toxicity: No information available

Tetratogenicity: No information available

Mutagenicity: Crystalline silica has been shown to cause mutagenic effects in human cells in-vitro.

Name of toxicological synergistic products: No information available



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SECTION IV: FIRST AID MEASURES

Skin contact: If irritation occurs, or when shift ends, wash with soap and water until clean.

Eye contact: Flush with gently flowing warm water until particles are removed. If irritation persists, contact a physician.

Inhalation: Move to area free from dust. If symptoms or irritation persist contact physician. Inhalation may aggravate existing respiratory illness.

Ingestion: No first aid required; material is non-toxic.

SECTION V: PHYSICAL DATA

Physical state: Solid.

Appearance and odour: Light tan to grey powder; no odour

Odour threshold: Not applicable

Specific gravity (°C): 2.45 - 2.55

Vapor pressure (mmHG): Not applicable

Vapor density (Air=1): Not applicable

Evaporation rate: Not applicable

Boiling point (°C): Not applicable

Melting point (°C): ~1450

pH (%): 8.0 – 10.0 (5% aqueous suspension)

Co-efficient of water/oil distribution: Not applicable



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SECTION VI: FIRE AND EXPLOSION DATA

Conditions of flammability: Not flammable

Means of extinguishing: Use media suitable for surrounding materials and packaging.

Flash point: Not applicable

Upper flammable limit: Not applicable

Lower flammable limit: Not applicable

Auto-ignition temperature: Not applicable

Hazardous combustion products: Not known

Explosion data-sensitivity to mechanical impact: Not applicable

Explosion data-sensitivity to static discharge: Not applicable

SECTION VII: REACTIVITY DATA

Chemically unstable (conditions): Stable.

Product incompatible with: None known

Conditions of reactivity: None known

Hazardous decomposition products: None know



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SECTION VIII: PREVENTATIVE MEASURES

Personal protective equipment: jllhjgklnIOSH/MSHA APPROVED RESPIRATORS FOR SILICA BEARING DUST. SAFETY GLASSES OR GOGGLES RECOMMENDED.

Specific Engineering Controls: Use local exhaust ventilation, process enclosure or other engineering to maintain PEL's/TLV's.

Procedures for leak/spills: Avoid breathing dust; wear an approved respirator. Vacuum up, if possible, to avoid generating airborne dust. Collect uncontaminated material for repackaging. Collect contaminated material in approved containers for disposal. Avoid adding water; the product will become extremely slippery when wet.

Waste disposal: Dispose of in accordance with federal, provincial and local regulations. This material may be suitable for landfill; check with local operator. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal.

Handling procedures and equipment: Avoid breathing dust; wear an approved respirator. Practice reasonable caution and personal cleanliness. Avoid eye contact. Clean spills promptly to avoid making dust

Storage requirements: Store in cool, dry area. Empty packages contain residual hazardous material and should be handled as if full.

Special shipping information: Not applicable

SECTION IX: PREPARATION

Date updated: March 28, 2008

Prepared by: Product Safety Committee

All the recommendations and suggestions herein concerning this product are based upon tests and data believed to be reliable, however it is the user's responsibility to determine the safety, toxicity and sustainability for their own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Q'Max Solutions Inc. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Q'Max Solutions Inc. assume any liability arising out of use by others. Nor is the information herein to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.