



1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Kim Mud
Product Family Blend of polysaccharide polymers, with calcium carbonate and calcium lignosulfonate
Supplier Engenium Chemicals Corp., 4333 - 46th Avenue S.E. , Calgary, Alberta , T2B-3N5, 403-279-8545
Emergency Contact Information CANUTEC, 613-996-6666 or *666 on a cellular phone (Canada Only), 24 Hours / Day
Use Drilling mud additive

2. HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation Some individuals may develop a respiratory allergenic response after repeated exposure.
Skin Contact Not irritating. Skin absorption not likely. May cause slight transient irritation.
Eye Contact EYE IRRITANT. Can cause redness, and irritation.
Ingestion Not harmful.
Effects of Long-Term (Chronic) Exposure RESPIRATORY SENSITIZER. May cause asthma or an asthma-like reaction in some people. In sensitized people, exposure to a very small amount of product can cause symptoms including wheezing, difficult breathing, sneezing and runny or blocked nose. Can cause death. Symptoms can develop immediately following exposure or hours later. Repeated exposure will make the reaction worse.
Carcinogenicity No information was located.
Teratogenicity / Embryotoxicity No information was located.
Reproductive Toxicity No information was located.
Mutagenicity No information was located.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %	Other Identifiers
GUAR GUM	9000-30-0	15 - 40	
Silica, quartz	14808-60-7	0.1 - 1	

Notes Concentrations are expressed in % weight/weight.

4. FIRST AID MEASURES

First Aid Procedures

Inhalation Move victim to fresh air. If victim is experiencing asthma-like symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. If breathing is difficult, trained personnel should administer emergency oxygen. Seek medical attention if irritation develops or persists.
Skin Contact Wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 5 minutes. Seek medical attention if irritation develops or persists.
Eye Contact Do not allow victim to rub eyes. Immediately flush the contaminated eye(s) with lukewarm,

gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Seek medical attention if irritation develops or persists.

Ingestion

Have victim rinse mouth with water. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. If breathing is difficult, trained personnel should administer emergency oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration (AR). Seek medical attention.

5. FIRE FIGHTING MEASURES

Flammable Properties Does not burn.

Suitable Extinguishing Media Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media None known.

Specific Hazards Arising from the Chemical Aqueous solutions or powders that become wet render surfaces extremely slippery.

Protective Equipment and Precautions for Firefighters Avoid dust formation. Take precautionary measures against static discharges. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use the Personal Protective Equipment recommended in Section 8 of this MSDS.

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. Do not flush to drain.

Methods for Containment and Clean-up Stop or reduce leak if safe to do so. Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. After cleaning, flush away traces with water wet product may create a slipping hazard. Collect washing for disposal.

7. HANDLING AND STORAGE

Handling Avoid generating dusts. Do not breathe dust. Good house keeping is important to prevent accumulations of dust.

Storage Store in an area that is: well-ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity). Do not store in unlabeled containers. Store in a dry place. Store in tightly closed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
GUAR GUM	Not established	Not established	Not established	Not established	Not established	Not established
Silica, quartz	0.025 mg/m3	Not established	0.1 mg/m3	Not established	Not established	Not established

Engineering Controls General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

Personal Protective Equipment (PPE)

Eye/Face Protection Safety glasses with side shields are recommended to prevent eye contact.

Skin Protection Skin contact should be minimized through use of gloves and suitable long sleeved clothing

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(i.e., shirt and pants, coveralls) consideration must be given both to durability as well as permeation resistance.

Respiratory Protection Wear a NIOSH approved dust mask when required.

General Hygiene Considerations Do NOT eat, drink or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Tan powder.
Odour	Odourless
Odour Threshold	Not available
Boiling Point	Not available
Decomposition Temperature	Not available
Melting Point	Not available
Freezing Point	Not available
Relative Density (water = 1)	1.85
Solubility in Water	Dispersible
pH	7.5 (2% solution)
Partition Coefficient, n-Octanol/Water	Not available
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Evaporation Rate	Not available
Flash Point	Not applicable
Lower Flammable/Explosive Limit	Not applicable
Upper Flammable/Explosive Limit	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Normally stable.
Conditions to Avoid	Generation of dust. Water, moisture or humidity. Material will become very slippery when contacted with water.
Incompatible Materials	Strong oxidizing agents (e.g. perchloric acid). Acids.
Hazardous Decomposition Products	Oxides of Carbon.
Possibility of Hazardous Reactions	None known.

11. TOXICOLOGICAL INFORMATION

LC50/LD50 Values

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
GUAR GUM	Not available	6770 mg/kg (rat)	Not available
Silica, quartz	Not available	500 mg/kg (rat)	Not available

Skin Irritation/Corrosion

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No information was located.

Eye Irritation/Corrosion

Human experience shows mild irritation.

Respiratory and/or Skin Sensitization

Human experience shows severe asthma or asthma-like symptoms (respiratory sensitization) in rare cases following exposure at work.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
GUAR GUM	Not Listed	Not Listed	Not Listed	Not Listed
Silica, quartz	Group 1	A2	Known carcinogen	Not Listed

IARC:

Group 1 – Carcinogenic to humans.

A2 – Suspected human carcinogen.

Teratogenicity / Embryotoxicity

No information was located.

Reproductive Toxicity

No information was located.

Mutagenicity

No information was located.

12. ECOLOGICAL INFORMATION

General Comments Environmental information was not located.

Ecotoxicity Studies were not located.

Persistence and Degradability No information was located.

Bioaccumulation / Accumulation No information was located.

Mobility Studies are not available.

13. DISPOSAL CONSIDERATIONS

Recycle and reuse product, if possible. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

14. TRANSPORT INFORMATION

Shipping Information

Not regulated under Canadian TDG Regulations.

Other Transport Information

Special Shipping Information Not applicable

15. REGULATORY INFORMATION

Canada

WHMIS Classification

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Class D2A; D2B

D2A - Very Toxic (Carcinogenicity; Respiratory tract sensitization); D2B - Toxic (Eye irritant)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

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

All intentional components of this product are either on the DSL, the confidential DSL or notifications / import restrictions are in place.

USA

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

All ingredients are listed on the TSCA Inventory.

16. OTHER INFORMATION

MSDS Prepared By Product Safety Committee

Phone No. 403-279-8545

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Disclaimer To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.