

MATERIAL SAFETY DATA SHEET

SYnL-1
November 3, 2005

CLAY MINERALS SOCIETY SAFETY DATA SHEET

1. Product and Company Information

Manufacturer: Clay Minerals Society
Source Clays Repository
P.O.Box 460130, Aurora,
Colorado 80046-0130
USA.

Web: <http://www.clays.org>

Information Phone Number: (303) 680-9002

HMIS Hazard Rating

	HEALTH	1
	FLAMMABILITY	0
	REACTIVITY	0
	PERSONAL PROTECTION	X

Product Name: SYnL-1

MSDS Date of Preparation: 11/7/05

Generic Name: Laponite RD, Synthetic layered silicate, Hydrus Sodium Lithium Magnesium Silicate

2. Hazards Identification

Synthetic layered silicate.

EMERGENCY OVERVIEW

Excessive inhalation of dust may cause lung injury with symptoms of shortness of breath and reduced pulmonary function.

Potential Health Effects:

Eye: Contact may cause mechanical irritation with redness, tearing and pain.

Skin: May cause drying of the skin

Inhalation: Inhalation of high concentrations of dust may cause mucous membrane and respiratory irritation.

Ingestion: Swallowing large amounts may cause gastrointestinal irritation.

Chronic Hazards: Excessive inhalation of dusts may cause lung injury with symptoms including shortness of breath and reduced pulmonary lung function.

Carcinogen Status: None of the components of this product is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

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Medical Conditions Aggravated by Exposure: Persons with pre-existing respiratory disorders may be at an increased risk from exposure.

3. Composition/Information of Ingredients

Chemical Name	CAS#	%
Laponite RD (Hydrous Sodium Lithium Magnesium Silicate)	53320-86-8	95-100

4. First Aid Measures

Eye: Flush immediately with large amounts of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Avoid rubbing the eyes as this may increase irritation. If irritation persists get medical attention.

Skin: No first aid is normally needed. Wash exposed skin with soap and water after use. If irritation or rash develops get medical attention. Use skin lotion if dryness occurs.

Inhalation: No first aid normally needed. If irritation develops, remove person from source of exposure to fresh air. If symptoms persist get medical attention.

Ingestion: Clear material from mouth. No harmful effects are expected from a small ingestion. If large amounts are swallowed, get medical attention.

5. Firefighting Measures

Flashpoint: Not Applicable

Autoignition Temperature: Not Applicable

Lower Explosion Limit: Not Applicable

Upper Explosion Limit: Not Applicable

Extinguishing Media: This product is not combustible. Use any media that is appropriate for the surrounding fire.

Special Fire Fighting Procedures: Wear positive pressure, self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards: None known. Wet product may create a slipping hazard.

Combustion Products: None known.

6: Accidental Release Measures

Wear appropriate protective clothing and equipment. Sweep up or vacuum, avoiding the creation of airborne dust, and collect into a suitable container for disposal.

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7. Handling and Storage

Handling: Avoid generating and breathing dust. Avoid eye contact. Use with adequate ventilation. If clothing becomes contaminated, remove and launder before re-use. Wash thoroughly after handling.

Storage: Store in a dry area. Contact with water or high humidity may cause caking.

8. Exposure Controls / Personal Protection

Chemical Name	Exposure Limits
Laponite RD (Hydrous Sodium Lithium Magnesium Silicate)	5 mg/m ³ (respirable) OSHA PEL-TWA 15 mg/m ³ (total dust) OSHA PEL-TWA

Ventilation: General ventilation should be adequate for normal use. For operations where the TLV may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

Respiratory Protection: None needed under normal use conditions. For operations where the exposure limit may be exceeded, a NIOSH approved high efficiency particulate respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Skin Protection: None needed for normal use.

Eye Protection: None needed for normal use. For dusty conditions, safety glasses or goggles can be used.

Other Protective Equipment: None needed for normal use.

9. Physical and Chemical Properties

Boiling Point: Not Applicable

Specific Gravity: 0.7-1.3

Melting Point: Fuses at 900°C

% Volatile: Not Applicable

Vapor Pressure: Not Applicable

Evaporation Rate (Butyl Acetate=1): Not Applicable

Vapor Density(Air=1): Not Applicable

pH: 9.7 2% dispersion in water

% Solubility in Water: Insoluble – forms gel

Octanol/Water Partition Coefficient: Not Applicable

Odor/Appearance: White powder with no odor.

10. Stability and Reactivity

Stability: Material is stable.

Incompatibility/Conditions to Avoid: Avoid generating dust. Avoid contact with strong acids.

Hazardous Reactions-Decomposition Products: None known.

Hazardous Polymerization: Will not occur.

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11. Toxicological Information

Low acute oral toxicity: LD50 oral rat >8 g/kg.

12. Ecological Information

No ecotoxicity data is available at this time.

13. Disposal Considerations

Dispose in accordance with federal, state and local regulations

14. Transport Information

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not Regulated

ID Number: N/A

Hazard Class: N/A

Packing Group: N/A

Markings: N/A

Label: N/A

Air - IATA/ICAO

Shipping Description: Not Regulated

ID Number: None

Hazard Class: None

Packing Group: None

Marking: None

Label: None

15. Regulatory Information

U.S. Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA) Reportable Quantity:

This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills as required under federal, state and local regulations.

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 Hazard Categories: None

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313: None

California Proposition 65: This product contains no materials regulated under California Proposition 65.

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory or exempt from notification requirements.

Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List or exempt from notification requirements.

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Canadian WHIMIS Classification: Not a controlled product.

European Inventory of Commercial Chemical Substances: All of the components of this product are listed on the EINECS Inventory or exempt from notification requirements.

EU Labeling Classification and R & S Phrases: Not Classified as Dangerous.

Australian Inventory of Chemical Substances: All of the components of this product are listed on the AICS Inventory or exempt from notification requirements.

16. Other Information

NFPA Ratings:

Health: 1 Flammability: 0 Reactivity: 0

HMIS Ratings:

Health: 1 Flammability: 0 Reactivity: 0