

# The Clay Minerals Society

## Safety Data Sheet

### 1. Identification

**Trade name:** Optigel SH, Synthetic Hectorite  
**Product code:** SYnH-1  
**Recommended use:** Raw material  
**Restrictions on use:** None known  
**Supplier:** The Clay Minerals Society  
The Source Clays Repository  
3635 Concorde Pkwy, Suite 500  
Chantilly, VA 20151-1110 - United States of America  
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**Issue date:** 03/09/2020

### 2. Hazard(s) identification

**Classification:**

Not classified as a hazardous chemical

**GHS US labeling:**

No labeling applicable

### 3: Composition/Information on ingredients

Component	CAS-No.	Amount (%)
Lithium Magnesium Sodium Silicate	53320-86-8	100

### 4. First-aid measures

**Inhalation:** Move the affected person to the fresh air. Get medical attention if symptoms occur.

**Skin:** Gently wash with plenty of soap and water. Get medical advice if skin irritation persists.

**Eyes:** Rinse eyes with water as a precaution. Get medical attention if irritation develops and persists.

**Ingestion:** Call a poison center or a doctor if you feel unwell.

**Most important symptoms:** May cause respiratory irritation.

**Immediate medical attention and special treatment, if necessary:** Not required.

### 5. Fire-fighting measures

**Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable extinguishing media:** None.

**Specific Hazards Arising from the Chemical:** This product is not classified as flammable or combustible.

**Special protective equipment and precautions for fire-fighters:** Do not attempt to take action without suitable protective equipment.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Wear suitable protective clothing. Avoid contact with eyes, skin and clothing.

**Methods and material for containment and cleaning up:** Mechanically recover the product. Minimize generation of dust. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

## 7. Handling and storage

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin and clothing. Wash hands with water and soap. Ensure adequate ventilation.

**Storage conditions:** No special storage required.

## 8. Exposure controls/personal protection

### Exposure guidelines:

Lithium Magnesium Sodium Silicate	None established
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**Appropriate engineering controls:** Provide adequate general and local exhaust ventilation.

**Environmental exposure controls:** Avoid creating or spreading dust. Avoid release to the environment.

### Personal protective equipment:

**Hand protection:** Wear suitable gloves

**Eye protection:** Use suitable eye protection

**Skin and body protection:** Wear suitable protective clothing

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

## 9. Physical and chemical properties

**Appearance:** Powder, white.

<b>Physical state</b>	: Solid	<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Color</b>	: white	<b>Vapor pressure</b>	: No data available
<b>Odor</b>	: None	<b>Relative vapor density at 20 °C</b>	: No data available
<b>Odor threshold</b>	: No data available	<b>Relative density</b>	: 2.2
<b>pH</b>	: No data available	<b>Solubility</b>	: No data available
<b>Melting point</b>	: No data available	<b>Log Pow</b>	: No data available
<b>Freezing point</b>	: Not applicable	<b>Auto-ignition temperature</b>	: Not applicable
<b>Boiling point</b>	: No data available	<b>Decomposition temperature</b>	: No data available
<b>Flash point</b>	: Not applicable		
<b>Relative evaporation rate (butyl acetate=1)</b>	: No data available		

**Viscosity, kinematic** : Not applicable

**Explosive properties** : No data available

**Viscosity, dynamic** : No data available

**Oxidizing properties** : No data available

**Explosion limits** : Not applicable

## 10. Stability and reactivity

**Reactivity:** The product is non-reactive under normal conditions of use, storage and transport.

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** No dangerous reactions known under normal conditions of use.

**Conditions to avoid:** None known.

**Incompatible materials :** None known.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

**Inhalation:** May cause minor irritation to the respiratory tract and to other mucous membranes.

**Skin:** May cause slight irritation to the skin. Prolonged or repeated contact may cause skin to become dry.

**Eyes:** Contact may cause mechanical irritation and possible injury. May cause minor eye irritation.

**Ingestion:** None under normal conditions.

**Carcinogenicity:** Not classified

Lithium Magnesium Sodium Silicate: This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.

**Germ cell mutagenicity:** Not classified

**Reproductive toxicity:** Not classified

**Numerical measures of toxicity:** Oral rat LD50- > 2000 mg/kg; Dermal rabbit LD50- > 2000 mg/kg;

**The following are the toxicity values for the components:**

Lithium Magnesium Sodium Silicate: Oral rat LD50- > 2000 mg/kg; Dermal rabbit LD50- > 2000 mg/kg;

**Skin corrosion/irritation** Not classified

**Serious eye damage/irritation** Not classified

**Respiratory or skin sensitization** Not classified

**STOT-single exposure** Not classified

**STOT-repeated exposure** Not classified

## 12. Ecological information

**Ecology - general:** The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:**

No data available

**13. Disposal considerations**

**Regional legislation (waste):** Dispose of in accordance with applicable federal, state, and local regulations.

**14. Transport information****Department of Transportation (DOT)**

Not regulated for transport

**Transport by sea**

Not regulated for transport

**Air transport**

Not regulated for transport

**15. Regulatory information**

**SARA Section 313 - Emission Reporting:** Not subject to reporting requirements of the United States SARA Section 313

**CERCLA Section 103:**

This product is not subject to reporting under CERCLA. However, many states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA 302:**

Not applicable

**SARA Section 311/312 Hazard Classes:** Refer to Section 2 for OSHA Hazard Classification.

**California Proposition 65:**

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

**TSCA:** All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

**16. Other information**

Revision date : 03/09/2020

**NOTICE**

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. The company listed in Section 1 shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.