



Safety Data Sheet

1. Product Identifier and Company Identification

Product name	: Silicate of Soda	
HBCC SDS number	: CS13000	
Synonym	: Liquid Sodium Silicate	
Product use and Restrictions	: Refer to label or call	
Manufacturer	: Corporate Headquarters	Corporate Safety & Compliance
Contact Address	Hill Brothers Chemical Company 1675 North Main Street Orange, California 92867 714-998-8800 800-821-7234	Hill Brothers Chemical Company 7121 West Bell Road, Suite 250 Glendale, Arizona 85308 623-535-9955 - Office 623-535-9944 - Fax
Emergency telephone Number (Chemtrec)	: 800-424-9300	
Website	: http://hillbrothers.com	

2. Hazard Identification

Classification : Acute Toxicity; Oral: Category 5
Acute Toxicity; Inhalation: Category 3
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 2A
Specific Target Organ Toxicity (Single Exposure): Category 3

Signal Word : DANGER

Pictogram(s) :



Hazard Statements : H303: May be harmful if swallowed.
H331: Toxic if inhaled.
H316: Causes mild skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.

Precautionary Statements

Response : P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311: Call a POISON CENTER or doctor.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P312: Call a POISON CENTER or doctor if you feel unwell.

Prevention : P261: Avoid breathing dust, fumes, gas, mists, vapours, and spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear eye protection and face protection.

Storage : P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal : P501: Dispose of contents/container in accordance with local, regional, national, and international regulations.

3. Composition/Information on Ingredients

CAS Number	Ingredient Name	Weight %
1344-09-8	Sodium Silicate	<40%
7732-18-5	Water	>60%

4. First Aid Measures

Summary of First Aid Measures

Ingestion : Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. If available, give several glasses of milk (if there is no allergy to milk). If vomiting occurs spontaneously, keep airway clear. Get medical attention immediately.

Inhalation : If symptoms are present get person out of area to fresh air. Get medical attention immediately.

Skin : Wash with plenty of water for at least 15 minutes. Remove soiled clothing and footwear. Wash clothing before reuse. Footwear should be cleaned before reuse. Get medical attention immediately if symptoms are present.

Eyes : Flush material and get medical attention immediately. Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. Again get medical attention immediately.

Medical Conditions : N/A

Effects of Overexposure : Dusts and mist are irritating to mucous membranes of the respiratory tract, mouth, throat, esophagus and stomach. Irritating to eyes and skin. May cause corneal damage.
Chronic: The chronic local effect may consist of multiple areas of superficial

destruction of the skin or of primary irritant in varying degrees of irritation to the respiratory tract tissues.

Summary of Acute Health Hazards : N/A

Ingestion : A strong alkaline irritant. May cause severe irritation and possible tissue destruction to mucous membranes of the mouth, throat, esophagus and stomach.

Inhalation : Exposure to mist or spray may cause coughing, sneezing, or other symptoms of upper respiratory tract irritation. Severe exposure may result in lung tissue damage.

Skin : Causes severe irritation. Dries to form a glass film which can cut skin.

Eyes : Can cause severe irritation and possible corneal damage if not treated.

Note to Physicians : N/A

Summary of Chronic Health : N/A

5. Fire Fighting Measures

Extinguishing : This product is non-combustible. Water spray, dry chemical, CO₂, or foam may be used in areas where this product is stored.

Special Exposure Hazards : N/A

Special Protective : Protective clothing for skin and eye protection should be worn.

Fire Fighting Procedures : N/A

NFPA Rating : Health - 2
Flammability - 0
Instability - 0



0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Uniform Fire Code Rating : N/A

6. Accidental Release Measures

- Personal Precautions** : Floors and other surfaces may be slippery.
- Emergency Procedures** : N/A
- Methods of Containment And Clean-Up** : If a material is spilled or released, steps should be taken to contain liquids and prevent discharge to streams or sewers systems. Spills or releases should be reported, if required, to the appropriate local, state and federal regulatory agencies. Do not flush to sewer.

7. Handling and Storage

- Safe Handling** : Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until cleanup has been completed.
- Storage** : Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid).
- Work/Hygienic Practices** : Wash thoroughly after handling or contact as exposure can cause burns which are not immediately painful or visible. Wash soiled clothing and dry before reuse. Keep container closed. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.
- Ventilation** : Where engineering controls are not feasible, and where mist or spray may be generated use adequate local exhaust ventilation.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits :

Chemical Name: Sodium Silicate, Liquid				
Exposure Limits (TWAs) in Air				
CAS Number	Chemical	ACGIH TLV	OSHA PEL	STEL
1344-09-8	Sodium Silicate	N/A	N/A	N/A

Protective Equipment :
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection : Face shield and goggles or chemical goggles should be worn.

Respiratory : Use NIOSH/MSHA approved respirator where mist or spray may be generated.

9. Physical and Chemical Properties

Appearance: Clear to cloudy, viscous liquid	Odor: Slightly soapy odor
Odor Threshold: N/A	pH: 11 – 12.5
Melting Point/Freezing Point: -1° C (30° F)	Initial Boiling Point/Range: 102° C (216° F)
Flash Point: Non-flammable	Evaporation Rate (BuAc=1): N/A
Flammability: N/A	Lower/Upper Explosive Limit: N/A
Vapor Pressure (mmHg): N/A	Vapor Density (Air=1): N/A
Specific Gravity: 1.3 – 1.5	Solubility in Water: 100%
Decomposition Temperature: N/A	Density at 25°C (77°F): 10.8 - 12.5 lbs/gal
Volatility: N/A	Loose Bulk Density: N/A
Molecular Weight: N/A	---

10. Stability and Reactivity

Reactivity	: N/A
Chemical Stability	: Stable
Possibility of Hazardous Reactions or Polymerizations	: Hazardous Polymerization will not occur
Conditions to Avoid	: N/A
Incompatible Materials	: Fluorine, mineral acids, organic acids, organic materials. May produce hydrogen gas on prolonged contact with metals. Gels when mixed with acids. Solution is strong base; reacts with acids, organic anhydrides, alkylene oxides, epichlorohydrin, aldehydes, alcohols, glycols, , phenols, cresols, caprolactam solution. Attacks chemically active metals.
Hazardous Decomposition Products	: N/A

11. Toxicological Information

Acute and Chronic Effects : N/A

Routes of Exposure

Inhalation	: Yes
Ingestion	: Yes
Skin	: Yes
Eyes	: Yes

Symptoms related to Physical, Chemical & Toxicological Characteristics : N/A

Numerical Measures of Toxicity : Sodium silicate:
Oral rat LD₅₀: > 1960 mg/kg;
Skin rabbit LD₅₀: > 4640 mg/kg;
Standard Draize Test: skin rabbit 500 mg/24H severe; eye rabbit 10 mg/24h severe.

Chronic Toxicity : N/A

Carcinogenicity : N/A

Product Name: Sodium Silicate, Liquid					
ACGIH	IARC	EPA	NIOSH	NTP	OSHA
	No			No	No

TARGET ORGANS : N/A

12. Ecological Information

Ecotoxicity : Environmental Toxicity:
Sodium Silicate:
96 Hr LC₅₀ Lepomis macrochirus: 301-478 mg/L;
96 Hr LC₅₀ Brachydanio rerio: 3185 mg/L [semi-static];
96 Hr EC₅₀ Daphnia magna 216 mg/L.

Persistence and Degradability : N/A

Bioaccumulative Potential : N/A

Product/Ingredient	Log _{pow}	BCF	Potential
-	-	-	-

Mobility in Soil : N/A

13. Disposal Considerations

Disposal of Container : Clean-up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials are regulated and action to handle spilled or released materials must meet the applicable rules. Check your appropriate Federal, State or Local regulations.

14. Transport Information

This product is not regulated under DOT as a hazardous material, substance or dangerous good.

15. Regulatory Information

SARA 302 Extremely Hazardous Substances (EHS) : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) under Section 302 of EPCRA.

SARA 304 Extremely Hazardous Substances (EHS) Release Notification : No chemical in this product is listed as an Extremely Hazardous Substance (EHS) which, if released to the environment in quantities at or above the substance's Reportable Quantity (RQ), would require reporting to the SERC and LEPC under Section 304 of EPCRA.

SARA 311/312 Hazards :

SARA 311/312 Hazards				
Acute	Chronic	Flammability	Pressure	Reactivity
Yes	No	No	No	No

SARA 313 Reportable Chemicals : No chemical in this product is subject to annual emissions, transfers, or waste management reporting under the Community-Right-to-Know provisions of EPCRA Section 313, also known as the Toxic Release Inventory (TRI) Report or Form R.

CERCLA Hazardous Substances : No chemical in this product is listed as a CERCLA hazardous substance subject to the National Response Center (NRC) release reporting requirements.

Clean Air Act (CAA) Section 112(r) Air Pollutants : No chemical in this product is listed as an air pollutant under the U.S. Clean Air Act, Section 112(r) (40 CFR 61).

California Prop 65 Chemicals : This product does not contain any chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

Hazard Label Warning : This product does not require hazard label warnings.

TSCA (Toxic Substances Control Act) : All chemical substances in this product are listed on the U.S. TSCA Inventory List.

ACRONYMS:

CAS # – Chemical Abstract Services Registry Number

CFR – Code of Federal Regulations

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

EPCRA – Emergency Planning and Community Right-to-Know Act

LEPC – Local Emergency Planning Committee

SERC – State Emergency Response Commission

16. Other Information

Revision date : 05/29/2015
Supersedes : 03/17/2009
First Issue : 04/10/1989

Chemical Family/Type : Solicic Acid, Sodium Salt

Section(s) changed since last revision : MSDS to First Issue SDS Conversion

IMPORTANT! Read this SDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This SDS has been prepared in accordance with the Globally Harmonized System of Chemical and Labeling of Chemicals (GHS) Fifth Edition and the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The SDS information is based on sources believed to be reliable. Available data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control; **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks and exercise appropriate precautions for protection of employees and others prior to use.