



## SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

*Product name:* **SILA-TEK 3500**  
*Manufacturer:* **KRETETEK INDUSTRIES**  
**66 RIVER ROAD**  
**HUDSON, NH 03051**  
*Telephone:* **855-573-8383**  
*In case of emergency call:* **800-424-9300**  
**CHEMTREC**

### 2. HAZARDS IDENTIFICATION

GHS Classification: Skin Irrit. 2  
Eye Irrit. 2

Hazards summary: Alkaline. Irritation to eyes and skin.

Hazard pictogram:



Signal word: Warning

Hazard statements:

H315: Causes skin irritation  
H319: Causes serious eye irritation.

Precautionary statements:

P262: Do not get in eyes, on skin, or on clothing.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Chemical and Common Name</i>	<i>CAS Registry Number</i>	<i>Wt. %</i>	<i>OSHA PEL</i>	<i>ACGIH TLV</i>
Water	7732-18-5		Not Established	Not Established
Silicic acid, sodium salt; Sodium silicate	1344-09-8		Not Established	Not Established

### 4. FIRST AID MEASURES

*Eye:* Irrigate with eyewash solution or clean water, holding eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

*Skin:* Wash affected skin with plenty of water. If symptoms develop, obtain medical attention.

*Inhalation:* Remove patient from exposure, keep warm and at rest. Obtain medical attention.

*Ingestion:* Do not induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain medical attention.

*Most important symptoms and effects, both acute and delayed:* Alkaline. Irritating to eyes and skin. The toxicity of sodium silicate is dependent on the silica to alkali ratio and on the pH.

*Indication of any immediate medical attention and special treatment needed:* Obtain medical attention.

## 5. FIRE FIGHTING MEASURES

*Extinguishing Media:* *Suitable extinguishing media:* Compatible with all standard fire fighting techniques. *Unsuitable extinguishing media:* none known.

*Special hazards arising from the substance or mixture:* Not applicable. Aqueous solution. Non-combustible.

*Advice for fire-fighters:* None.

## 6. ACCIDENTAL RELEASE MEASURES

*Personal precautions, protective equipment and emergency procedures:* Wear suitable protective clothing. Wear eye/face protection.

*Environmental Precautions:* Do not allow to enter drains, sewers or watercourses. Advise authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

*Methods and materials for containment and cleaning up:* Caution – spillages may be slippery. Contain spillages with sand, earth or any suitable absorbent material. Transfer to a container for disposal or recovery.

*Also See Section 8*

## 7. HANDLING AND STORAGE

*Precautions for safe Handling:* Avoid contact with eyes, skin and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eye wash facilities should be readily available.

See also section 8

*Conditions for Safe Storage, including an incompatibilities:* Keep at a temperature not exceeding 50°C.

*Do not allow material to freeze. Provide an adequate bund wall. Unsuitable containers:* Aluminum. See *Also section 10.*

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

*Control parameters:* Silicate acid, sodium salt: No Occupational Exposure Limit assigned. An exposure limit of 2mg/m<sup>3</sup> (15 min TWA) is recommended by analogy with sodium hydroxide (UK EH40).

*Exposure controls:* Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

*Appropriate engineering controls:* Engineering methods to prevent or control exposure are preferred. Methods include process or personal enclosure, mechanical ventilation (dilution and local exhaust) and control of process conditions.

*Personal protection, respiratory protection:* Respiratory protection not normally required. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS (G) 53.

*Eye/Face protection:* Chemical goggles (EN 166)

*Skin protection:* Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3, level 6 breakthrough time (>480min). Wear suitable overalls.

*Environmental Exposure Controls:* The primary hazard of sodium silicate is the alkalinity. Avoid release to the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Appearance:</i>	Liquid, almost colorless.
<i>Odor:</i>	Odorless.
<i>Odor Threshold (ppm):</i>	N/A
<i>pH:</i>	Alkaline
<i>Freezing point:</i>	N/A
<i>Melting point:</i>	N/A
<i>Boiling point: °C:</i>	100
<i>Solubility in water:</i>	Soluble

## 10. STABILITY AND REACTIVITY

*Chemical stability:* Stable

*Possibility of hazardous reactions:* When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis. Aqueous solutions will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react violently if in contact with acids. Can react violently if in contact with acids. Can react with sugar residues to form carbon monoxide.

*Hazardous decomposition products:* None known.

## 11. TOXICOLOGICAL INFORMATION

*Acute Toxicity, Ingestion:* Lithium compounds may damage the central nervous system. A large dose may have the following effects: Headaches, nausea, dizziness, convulsions, kidney damage.

*Inhalation:* Mist is irritant to the respiratory tract.

*Skin Contact:* Repeated and/or prolonged skin contact may cause slight irritation.

*Eye Contact:* Liquid or mist may cause discomfort and mild irritation.

*Skin corrosion/irritation:* Irritating to skin

*Serious eye damage/irritation:* Irritating to eyes

*Sensitization:* Not sensitizing

*Mutagenicity:* No data

*Carcinogenicity:* IARC, NTP, OSHA, ACGIH do not list this product or any components thereof as known or suspected carcinogen.

*Reproductive toxicity:* Lithium compounds – teratogenic effects have been observed in laboratory animals.

*Other information:* Lithium compounds – no data.

## 12. ECOLOGICAL INFORMATION

*Toxicity:* Lithium compounds – no data

*Persistence and degradability:* Inorganic. Soluble silicates, upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.

*Bio accumulative potential:* Inorganic. The substance has no potential for bioaccumulation.

*Mobility in soil:* N/A

*Results of PBT and vPvB assessment:* Not classified as PBT or vPvB.

*Other adverse effects:* The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

## 13. DISPOSAL CONSIDERATIONS

*Waste treatment methods:* Disposal should be in accordance with local, state, or national legislation.

## 14. TRANSPORT INFORMATION

*DOT UN Status:* This material is not regulated hazardous material for transportation.

*Environmental hazards:* Not classified as marine pollutant

*Special precautions for user:* No special packaging requirements. Unsuitable containers: aluminum.

## 15. REGULATORY INFORMATION

*Safety, health and environmental regulations/legislation specific for the substance or mixture:*

*TSCA Inventory Status:* Reported/included

*AICS Inventory Status:* Reported /included

*DSL/NDSL Inventory Status:* Reported/included

*German Water Hazard Classification VwVwS:* Product ID number 1314, WGK class 1 (low hazard to water)

*SARA TITLE III:* This material is not listed as a Toxic Chemical subject to the reporting requirements of SARA TITLE III § 313 and 40 C.F.R. Part 372. Hazard Categories under SARA Title III § 311/312: Acute

## 16. OTHER INFORMATION

Disclaimer: the information contained herein is based on the data available and is believed to be accurate, however, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.