



**HI-VALLEY CHEMICAL**  
LABORATORY PRODUCTS

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**SAFETY DATA SHEET**

Hi Valley Chemical

**Sodium Silicate**

**1 PRODUCT AND COMPANY IDENTIFICATION**

**Supplier Details:** High Valley Products, Inc.  
1134 West 850 North  
Centerville, Utah 84014

**Emergency:** PERS: 800-633-8253

**Phone:** 801-295-9591

**Email:** sales@hvchemical.com

**Web:** www.hvchemical.com

**2 HAZARDS IDENTIFICATION**

**Classification of the Substance or Mixture**

**GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):**  
Health, Skin corrosion/irritation, 2  
Health, Serious Eye Damage/Eye Irritation, 2 A

**GHS Label Elements, Including Precautionary Statements**

**GHS Signal Word:** **WARNING**

**GHS Hazard Pictograms:**



**GHS Hazard Statements:**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation

**GHS Precautionary Statements:**

P262 - Do not get in eyes, on skin, or on clothing.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients:**

Cas#	%	Chemical Name
1344-09-8	40%	Sodium Silicate
7732-18-5	60%	Water

**4 FIRST AID MEASURES**

**Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin Contact:** Promptly flush skin with water until all chemical is removed. Get medical attention if needed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.

**Ingestion:** Do NOT induce vomiting. Rinse mouth with water. Give 200-300 mL (half a pint) of water to drink. Seek immediate medical attention

## 5 FIRE FIGHTING MEASURES

Extinguishing media  
Suitable extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture  
No data available

Advice for firefighters  
Wear self-contained breathing apparatus for firefighting if necessary.

Further information  
No data

## 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**  
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**  
Do not let product enter drains.

**Methods and materials for containment and cleaning up:**  
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## 7 HANDLING AND STORAGE

**Handling Precautions:** Avoid contact with eyes, skin, or clothing.  
Avoid breathing vapors or mist.  
Use adequate ventilation.

**Storage Requirements:** Store in cool/dry area. Keep container tightly closed.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Personal Protective Equipment:** Personal protective equipment

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min  
Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min  
Material tested: Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection: No special protective equipment required.

Control of environmental exposure: Prevent product from entering drains.

## Exposure Guidelines

Water (7732-18-5) [60%] : no data available

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## PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	No data available
Physical State:	Liquid
Odor:	Odorless
Odor Threshold:	No data available
Solubility:	No data available
Spec Grav./Density:	No data available
Viscosity:	No data available
Boiling Point:	No data available
Freezing/Melting Pt.:	No data available
Flash Point:	No data available
Partition Coefficient:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
pH:	No data available
Evap. Rate:	No data available
Auto-Ignition Temp:	No data available
Decomp Temp:	No data available
UFL/LFL:	No data available

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## STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	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 aluminium, 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 with sugar residues to form carbon monoxide.
Materials to Avoid:	aluminium, 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 with sugar residues to form carbon monoxide.

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## TOXICOLOGICAL INFORMATION

Acute toxicity	
Ingestion	All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw
Inhalation	Mist is irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity.
Inhalation	LC50 (rat) >2.06 g/m <sup>3</sup>
Skin Contact	Material will cause irritation. Dermal LD50 (rat) >5000 mg/kg bw
Eye Contact	Material will cause irritation.
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/irritation	Irritating to eyes.
Sensitisation	Not sensitising.
Mutagenicity	No evidence of genotoxicity. In vitro/in vivo negative.
Carcinogenicity	No structural alerts.
Reproductive toxicity	No evidence of reproductive toxicity or developmental toxicity.
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified. NOAEL oral (rat) >159 mg/kg bw/d
Aspiration hazard	Not classified

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**ECOLOGICAL INFORMATION**

**Toxicity** Fish (Brachydanio rerio) LC50 (96 hour) 1108 mg/l Aquatic invertebrates: (Daphnia magna) EC50 (48 hour) 1700 mg/l

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

**Bioaccumulative potential** Inorganic. The substance has no potential for bioaccumulation.

**Mobility in soil** Not applicable.

**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.

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**DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations.

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**TRANSPORT INFORMATION**

Non DOT regulated

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**REGULATORY INFORMATION**

Component (CAS#) [%] - CODES

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Silicic acid, sodium salt (1344-09-8) [40%] TSCA

Water (7732-18-5) [60%] TSCA

Regulatory CODE Descriptions

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TSCA = Toxic Substances Control Act

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**OTHER INFORMATION**

**Disclaimer:**

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