



GEO-SIL™
RESIST. PROTECT. LAST.

Geo-Sil™ Surface Treatment 100 (GS-ST-001) | SAFETY DATA SHEET | Version 1.0 | Revision Date: May 20, 2026
GHS Compliant per OSHA 29 CFR 1910.1200

SECTION 1 - IDENTIFICATION

Product Name:	Geo-Sil Surface Treatment
Product Code:	GS-ST-001
Intended Use:	Professional-grade Advanced Nano Mineral silicate surface treatment and conditioner for concrete, masonry, and mineral substrates. Mixed with deionized (DI) water prior to application.
Uses Advised Against:	Only use on porous cementitious/masonry/stone surfaces. DO NOT USE on non-mineral or incompatible substrates.

Manufacturer / Supplier Information

Address:	PO BOX 37324, Raleigh, NC 27627, United States
Phone:	(919) 238 - 3177
Email:	info@geosiltech.com
Website:	www.geosiltech.com
Emergency Contact:	CHEMTREC: 1-800-424-9300 (24-hour emergency response)

SECTION 2 - HAZARD IDENTIFICATION

GHS Classification • Classification of the Substance or mixture



Corrosion Exclamation Mark

Appearance: Clear Liquid Physical state: Liquid Odor: None

Hazard Class	Category
Skin Corrosion / Irritation	Category 1
Serious Eye Damage / Eye Irritation	Category 1
Flammability / Explosivity / Environmental Hazard	Not classified at use concentrations

GHS Pictograms



Health = 1

Fire = 0

Reactivity = 0

Classification System: NFPA Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Hazard Statements

- **H315:** Causes skin irritation.
- **H318:** Causes serious eye damage.
- **H335:** May cause respiratory irritation.

Precautionary Statements

Prevention:

- **P260:** Do not breathe mist/vapors.
- **P264:** Wash hands thoroughly after handling.
- **P270:** Do not eat, drink, or smoke when using this product.
- **P280:** Wear protective gloves, eye protection, and face shield.



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Response:

- **P301+P312:** IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
- **P302+P352:** IF ON SKIN: Wash with plenty of water.
- **P304+P340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- **P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P310:** Immediately call a POISON CENTER or doctor.

Disposal:

- **P501:** Dispose of contents/container in accordance with local regulations.

① **Additional Hazard Information**

This product is NOT classified as flammable, explosive, or environmentally hazardous at use concentrations. However, it is highly alkaline (pH ~11) and can cause damage to eyes and skin upon direct contact. Always dilute with deionized (DI) water as directed before application.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

This product is a mixture. Component information is provided below in accordance with GHS/OSHA HazCom 2012 requirements.

Chemical Name	CAS Number	Weight %	OSHA PEL	ACGIH TLV
Sodium Silicate (Water Glass)	1344-09-8	1-5%	N/E	N/E
Proprietary Silane/Siloxane Blend	Trade Secret	10-25%	N/E	N/E
Deionized Water	7732-18-5	~70%	N/A	N/A

Note: Exact ingredient percentages are proprietary. N/E = Not Established; N/A = Not Applicable; (C) = Ceiling value. This product is diluted with deionized (DI) water prior to use per application instructions.

SECTION 4 - FIRST AID MEASURES

Eye Contact

Immediately flush eyes with large amounts of water for **at least 15 minutes**, lifting upper and lower eyelids periodically to ensure thorough rinsing. Remove contact lenses if present. **Seek immediate medical attention.**

Skin Contact

Wash the affected area thoroughly with soap and water for **at least 15 minutes**. Remove contaminated clothing and footwear. If irritation persists or worsens, seek medical attention. Launder contaminated clothing before reuse.

Ingestion

⚠ Do NOT induce vomiting.

Rinse mouth thoroughly with water. If the person is conscious, give large amounts of water to drink. **Seek immediate medical attention.** Call CHEMTREC: 1-800-424-9300.

Most Important Symptoms and Effects

- Eye: Serious damage/irritation; potential permanent injury if untreated.
- Skin: Redness, irritation, possible chemical burns with prolonged exposure.
- Inhalation: Respiratory irritation, coughing, shortness of breath.
- Ingestion: Burning sensation in mouth and throat, nausea.

Note to Physician

Treat symptomatically. This product is strongly alkaline (pH ~11). Standard treatments for alkali exposure apply. No specific antidote. For eye injuries, ophthalmological examination is recommended.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Use media appropriate for the surrounding fire. Water, CO², dry chemical, and foam are all acceptable.



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Unsuitable Extinguishing Media:	None specifically identified.
Special Hazards Arising from the Chemical:	In a fire situation, this product may release irritating vapors. Thermal decomposition may produce sodium oxides and potassium oxides, which are irritating to the respiratory tract.
Protective Equipment for Firefighters:	Wear full protective gear and self-contained breathing apparatus (SCBA) in positive-pressure mode. Use standard firefighting protective clothing (bunker gear).

SECTION 6 -ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear appropriate PPE, including chemical-splash goggles, nitrile or neoprene gloves, a chemical-resistant apron, and boots. Avoid contact with skin and eyes. Evacuate unnecessary personnel from the spill area. Ensure adequate ventilation.

Environmental Precautions

Prevent entry into drains, sewers, surface water, or groundwater. Dike or berm large spills. Notify appropriate local, state, and federal authorities if a large spill reaches waterways or the environment.

Methods for Containment and Cleanup

- Absorb spill with inert material such as dry sand or vermiculite. Do **not** use sawdust or other combustible absorbents.
- Collect absorbed material in clearly labeled, sealed containers for proper disposal.
- Flush the affected area thoroughly with water following cleanup.
- Neutralize with dilute acid (e.g., dilute citric acid) if required before sewer disposal, per local regulations.

Regulatory Reporting

Report spills in accordance with all applicable local, state, and federal regulations. Contact the National Response Center (1-800-424-8802) if a reportable release to the environment occurs.

SECTION 7 -HANDLING AND STORAGE

Handling

- Avoid contact with eyes, skin, and clothing.
- Do not breathe mist or vapors during application.
- Use only with adequate ventilation or local exhaust.
- Wash hands thoroughly with soap and water after handling.
- **Do NOT mix with acids.** Mixing with strong acids may cause violent, exothermic reaction and release of heat and toxic vapors.
- Always dilute product with deionized (DI) water as directed in the Geo-Sil application instructions before use.
- Keep containers tightly closed when not in use to prevent contamination and moisture loss.

Storage

Storage Parameter	Requirement
Location	Cool, dry, well-ventilated area away from direct sunlight
Temperature Range	40°F - 110°F (4°C - 43°C) recommended
Freeze Protection	Protect from freezing; store above 35°F (2°C)
Incompatible Storage	Do not store near acids or acid-generating materials
Container Integrity	Keep containers tightly sealed when not in use
Access Control	Keep out of reach of children and unauthorized personnel

SECTION 8 -EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Use with local exhaust ventilation or in well-ventilated areas to minimize airborne mist or vapor concentrations. Ensure eyewash stations and emergency safety showers are readily accessible in work areas where this product is handled.

Personal Protective Equipment (PPE)



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PPE Type	Recommendation
Eye / Face	Chemical-splash goggles (ANSI Z87.1) or full-face shield. Safety glasses alone are NOT sufficient.
Skin / Hands	Nitrile or neoprene gloves with minimum 0.5 mm thickness. Inspect gloves for integrity before each use.
Body	Chemical-resistant apron or full-body coveralls made of chemical-resistant material.
Respiratory	Where ventilation is inadequate: NIOSH-approved N95 respirator or half-face respirator with P100 particulate filter. In confined spaces, use full-face SCBA.
Footwear	Chemical-resistant rubber or neoprene boots. Do not wear open-toed footwear.

Exposure Limits

Refer to **Section 3** for individual component occupational exposure limits (OSHA PEL and ACGIH TLV). No specific limits have been established for the mixture as a whole. Maintain concentrations below established limits for all individual ingredients.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
Appearance	Clear	Evaporation Rate	Similar to water
Color	Colorless to pale yellow	Flammability	Non-flammable
Odor	None.	Vapor Pressure	~17 mmHg at 68°F (20°C)
Odor Threshold	Not determined	Vapor Density	~1 (air = 1)
pH (concentrate)	~11	Relative Density	~1.3 g/mL (~9.7 lb/gallon)
Melting / Freezing Point	<32°F (0°C)	Solubility in Water	Completely miscible
Boiling Point	~212°F (100°C)	Partition Coefficient (n-octanol/water)	Not applicable
Flash Point	None (non-flammable)	Auto-ignition Temperature	Not applicable
Viscosity	Low, water-like	Decomposition Temperature	Not determined

SECTION 10 - STABILITY AND REACTIVITY

Conditions to Avoid:	Freezing temperatures, extreme heat, open flames, and contact with strong acids.
Incompatible Materials:	Strong acids (hydrochloric, sulfuric, nitric acid); aluminum, zinc, and tin metals (contact may cause hydrogen gas evolution). Do not mix with acid-based cleaners or descalers.
Hazardous Decomposition Products:	None
Possibility of Hazardous Reactions:	Reacts exothermically with strong acids. Do not mix with acids.
Hazardous Polymerization:	Will not occur.



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SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of Exposure

Skin contact, eye contact, inhalation of mist or vapors, and ingestion.

Acute Toxicity Data (Component-Based)

Parameter	Value	Basis
Oral LD50 (Sodium Silicate)	~1,960 mg/kg	Rat
Dermal LD50 (Mixture)	Not determined	—
Inhalation LC50 (Mixture)	Not determined	—

Health Hazard Summary

Toxicological Endpoint	Classification / Finding
Skin Corrosion / Irritation	Causes skin irritation - Category 1
Serious Eye Damage / Eye Irritation	Causes serious eye damage - Category 1
Respiratory / Skin Sensitization	Not classified as a sensitizer
Carcinogenicity	No components listed by IARC, NTP, or OSHA as carcinogens
Reproductive Toxicity	Not classified
STOT - Single Exposure	May cause respiratory irritation - Category 3
STOT - Repeated Exposure	Not classified
Germ Cell Mutagenicity	Not classified
Aspiration Hazard	Not applicable (aqueous solution)

SECTION 12 - ECOLOGICAL INFORMATION

Persistence / Degradability:	Primary components are inorganic and do not biodegrade in the conventional sense. Silicates are naturally occurring minerals widely present in the environment.
Bioaccumulative Potential:	Not expected to bioaccumulate. Inorganic silicates have low bioaccumulation potential.
Mobility in Soil:	Highly soluble; may leach into soil and groundwater if spilled in large quantities. Prevent large releases to soil.
Other Adverse Effects:	Avoid releasing large quantities to the environment. Neutralize before disposal if strongly alkaline.
CERCLA Regulatory Status:	Not listed as a hazardous substance under CERCLA.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with all applicable local, state, and federal regulations. Do not pour down drains or sewers in large quantities without prior neutralization. Small, diluted quantities may be disposed of in the sanitary sewer system in compliance with local municipal regulations. Consult your local Publicly Owned Treatment Works (POTW) before disposal.

Container Disposal

Empty containers may contain residual product. Rinse thoroughly with water at least three times before disposal. Do not reuse containers for food, beverages, or potable water. Recycle or dispose of containers per applicable regulations.



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Regulatory Guidance

Consult with local, state, and federal environmental agencies for specific disposal requirements. **RCRA:** This product is not classified as a hazardous waste under current RCRA criteria; however, spent or contaminated product may be subject to hazardous waste regulations. Verify with applicable authorities.

SECTION 14 - TRANSPORT INFORMATION

Parameter	Value
UN Number	Not regulated
UN Proper Shipping Name	Not regulated
Transport Hazard Class	Not regulated
Packing Group	Not applicable
DOT (US Road / Rail)	Not regulated as a hazardous material under 49 CFR
IATA (Air Transport)	Not restricted as a dangerous good
IMDG (Sea / Marine)	Not restricted as a dangerous good
Environmental Hazards	Not classified as a marine pollutant
Special Transport Precautions	Prevent leakage during transport; protect from freezing; ensure containers are securely sealed and upright

SECTION 15 - REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is classified as hazardous per **29 CFR 1910.1200** (HazCom 2012 / GHS). This SDS has been prepared in accordance with OSHA Hazard Communication Standard requirements.

SARA Title III (EPCRA)

Provision	Status
Section 302 - Extremely Hazardous Substances	Not listed
Section 311/312 - Hazard Categories	Immediate (Acute) Health Hazard
Section 313 - Reportable Chemicals	Not listed

Additional Regulatory Status

Regulation	Status / Notes
TSCA (Toxic Substances Control Act)	All ingredients are listed on the TSCA Inventory or are exempt from listing requirements.
CERCLA / SUPERFUND	No components are listed above reportable quantities.
California Proposition 65	This product does not contain chemicals known to the State of California to cause cancer or reproductive harm at concentrations that require a Proposition 65 warning.
State Right-to-Know	Sodium Silicate and Potassium Hydroxide may be listed in certain state right-to-know regulations. Verify compliance with applicable state requirements (e.g., MA, NJ, PA).
Canada - WHMIS 2015	Classified in accordance with Canadian Hazardous Products Regulations. This SDS meets WHMIS 2015 requirements.

SECTION 16 - OTHER INFORMATION



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Preparation Date:	May 20, 2026
Last Revision Date:	May 20, 2026
Version:	1.0
Revision Summary:	Initial release. All 16 GHS sections completed.

Key Abbreviations

Abbreviation	Definition	Abbreviation	Definition
GHS	Globally Harmonized System of Classification and Labelling of Chemicals	N/E	Not Established
OSHA	Occupational Safety and Health Administration	N/A	Not Applicable
ACGIH	American Conference of Governmental Industrial Hygienists	RCRA	Resource Conservation and Recovery Act
PEL	Permissible Exposure Limit	TSCA	Toxic Substances Control Act
TLV	Threshold Limit Value	SARA	Superfund Amendments and Reauthorization Act
CHEMTREC	Chemical Transportation Emergency Center	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DI	Deionized Water	EPCRA	Emergency Planning and Community Right-to-Know Act
SDS	Safety Data Sheet	WHMIS	Workplace Hazardous Materials Information System (Canada)
SCBA	Self-Contained Breathing Apparatus	STOT	Specific Target Organ Toxicity
PPE	Personal Protective Equipment		

Disclaimer

ⓘ Legal Notice

The information in this Safety Data Sheet is believed to be accurate and represents the best information available to Geo-Sil LLC at the time of preparation. Geo-Sil LLC makes no warranty, express or implied, with respect to this information and disclaims all liability for reliance upon it. Users are solely responsible for ensuring that the use of this product complies with all applicable laws, regulations, and standards in their jurisdiction. This document is subject to revision; always verify you have the current version before use.

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