



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

**Section 1. Identification**

**Product identifier**

**Product Identity**

Potassium Silicate

**Other means of identification**

Potassium silicate powder

**Relevant identified uses of the substance or mixture and uses advised against**

Agriculture

**Details of the supplier of the safety data sheet**

**Company Name**

Silver Fern Chemical, Inc.  
121 W. De La Guerra Street, Suite B  
Santa Barbara, CA 93101 USA  
Customer Service: 1-866-282-3384 /  
info@silverfernchemical.com  
Website - www.silverfernchemical.com

**Emergency**

**24 hour Emergency**

**Telephone No.**

Emergency telephone number  
Infotrac: 1-800-535-5053; Outside USA & Canada +1-352-  
323-3500

**Customer Service:**

**Section 2. Hazard(s) identification**

**Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)**

Metal corrosion;H290

May be corrosive to metals.

Skin corrosion/irritation category 1B;H314

Causes severe skin burns and eye damage.

Serious eye damage / eye irritation, category 1;H318

Causes serious eye damage.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

**Label elements**



**Danger**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**[Prevention]**

P234 Keep only in original packaging.

P260 Do not breathe dust, fume, mist, vapors or spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

**[Response]**

P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 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, doctor or physician.

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

**[Storage]**

P405 Store locked up.

P406 Store in a corrosive resistant, container with a resistant inner liner.

**[Disposal]**

P501 Dispose of contents or container in accordance with local and national regulations.

**Other hazards**

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

### Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Potassium silicate CAS Number: 1312-76-1 Synonyms: Silicic acid, potassium salt	80 - 100	Metal corrosion;H290 Skin corrosion/irritation category 1B;H314 Serious eye damage / eye irritation, category 1;H318	No data available

The actual concentration or concentration range is withheld as a trade secret.

\*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

### Section 4. First aid measures

#### Description of first aid measures

**General** In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes** Rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.



Silver Fern Chemical, Inc.  
**Safety Data Sheet**  
**Potassium Silicate**

Revision Date: 05/30/2025

**Most important symptoms and effects, both acute and delayed**

**Overview** No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.

**Eyes** Causes serious eye damage.

**Skin** Causes severe skin burns and eye damage.

**Section 5. Fire-fighting measures**

**Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Unsuitable extinguishing media: Do not use; water jet.

**Special hazards arising from the substance or mixture**

Hazardous decomposition: No hazardous decomposition data available.

Keep only in original packaging.

Do not breathe dust, fume, mist, vapors or spray.

**Advice for fire-fighters**

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

**ERG Guide No.**

154



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

**Section 6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Put on appropriate personal protective equipment (see section 8).  
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

**Environmental precautions**

Do not allow spills to enter drains or waterways.

**Methods and material for containment and cleaning up**

Sweep up or pick up.

**Section 7. Handling and storage**

**Precautions for safe handling**

Handle containers carefully to prevent damage and spillage.  
See section 2 for further details. - [Prevention]

**Conditions for safe storage, including any incompatibilities**

Incompatible materials: No available information  
See section 2 for further details. - [Storage]

**Specific end use(s)**

No available information



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

**Section 8. Exposure controls / personal protection**

**Control parameters**

**Exposure Limits**

CAS No.	Ingredient	Source	Value
1312-76-1	Potassium silicate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

**Exposure controls**

- Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
- Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
- Skin** Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.
- Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

**Section 9. Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Powder
<b>Color</b>	White
<b>Odor</b>	Odourless
<b>Melting point / freezing point</b>	> 1000
<b>Initial boiling point and boiling range</b>	No available information
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> No available information <b>Upper Explosive Limit:</b> No available information
<b>Flash Point</b>	°F °C, Test method: (Open/Close cup)
<b>Auto-ignition temperature</b>	No available information
<b>Decomposition temperature</b>	No available information
<b>pH</b>	Alkaline. 11-12
<b>Viscosity (cSt)</b>	No available information
<b>Solubility in Water</b>	Soluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	No available information
<b>Vapor pressure (Pa)</b>	No available information
<b>Relative Density</b>	No available information
<b>Vapor Density</b>	No available information
<b>Particle Characteristics</b>	---
<b>Evaporation rate (Ether = 1)</b>	No available information
<b>Oxidising properties</b>	No available information
<b>Explosive properties</b>	No available information

**Other information**

No other relevant information.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

## Section 10. Stability and reactivity

### Reactivity

Hazardous Polymerization will not occur.

### Chemical stability

Stable under normal circumstances.

### Possibility of hazardous reactions

No available information

### Conditions to avoid

Avoid high temperatures and contact with incompatible material

### Incompatible materials

No available information

### Hazardous decomposition products

No hazardous decomposition data available.

## Section 11. Toxicological information

### Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Potassium silicate - (1312-76-1)	No data available.	No data available.	No data available.	No data available.	No data available.

### Carcinogen Data

CAS No.	Ingredient	Source	Value
1312-76-1	Potassium silicate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;





Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

CAS No.	Ingredient	Source	Value
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

**Possible routes of entry:**No available information

**Symptoms and effects, both acute and delayed:**

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

**Eyes** Causes serious eye damage.

**Skin** Causes severe skin burns and eye damage.

**Section 12. Ecological information**

**Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Potassium silicate - (1312-76-1)	301.00, Lepomis macrochirus	500.00, Daphnia magna	No data available.



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L

**Persistence and degradability**

There is no data available on the preparation itself.

**Bioaccumulative potential**

No available information

**Mobility in soil**

No available information

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB/vPvM chemicals.

**Other adverse effects**

No available information

**Section 13. Disposal considerations**

**Waste treatment methods**

Observe all federal, provincial and local regulations when disposing of this substance.

**Section 14. Transport information**

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN1759	UN1759	UN1759
UN proper shipping name	Corrosive solids, n.o.s., (CHEMICAL NAME)	Corrosive solids, n.o.s., (CHEMICAL NAME)	Corrosive solids, n.o.s., (CHEMICAL NAME)
Transport hazard class(es)	Class:8 Sub Class:Not Applicable	Class:8 Sub Class:Not Applicable	Class:8 Sub Class:Not Applicable
Packing group	III	III	III

**Environmental hazards**

IMDG Marine Pollutant: No;



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Potassium Silicate

Revision Date: 05/30/2025

**Special precautions for user**

No available information

**Section 15. Regulatory information**

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

**Toxic Substance Control Act (TSCA)**

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0001312-76-1	Potassium silicate	Yes		ACTIVE

The following flags are used:

- Active - indicates commercial status designation of active
- E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
- F - indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - indicates a commenced Premanufacture Notice (PMN) substance.
- R - indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - indicates a substance that is identified in a final Significant New Uses Rule.
- SP - indicates a substance that is identified in a proposed Significant New Uses Rule.
- T - indicates a substance that is the subject of a final Section 4 test rule under TSCA.
- UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials
- XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
- Y1 - indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984 polymer exemption rule.
- Y2 - indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 Label Warning:**

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Mass RTK Substances (>1%) :**

(No Product Ingredients Listed)

**New Jersey RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

**OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA List II or Essential Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US DHS Chemical Facility Anti-Terrorism Standards (CFATS):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 311/312 Chemicals and RQs:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



**Silver Fern Chemical, Inc.**  
**Safety Data Sheet**  
**Potassium Silicate**

**Revision Date: 05/30/2025**

<b>Section 16. Other information</b>
--------------------------------------

**Revision Date**

05/30/2025

**DISCLAIMER OF RESPONSIBILITY**

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

The full text of the phrases appearing in section 3 is:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

**End of Document**