



# SAFETY DATA SHEET

## 1. Identification

**Material name:** ULTRASIL Li+ - 5 GAL PAIL  
**Material:** 059L 05

**Recommended use and restriction on use**

**Recommended use:** Additive  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

|                                   |             |
|-----------------------------------|-------------|
| Skin Corrosion/Irritation         | Category 1A |
| Serious Eye Damage/Eye Irritation | Category 1  |

#### Unknown toxicity - Health

|  |          |
|--|----------|
| Acute toxicity, oral                     | 0.0081 % |
| Acute toxicity, dermal                   | 4.04 %   |
| Acute toxicity, inhalation, vapor        | 15.04 %  |
| Acute toxicity, inhalation, dust or mist | 13.24 %  |

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Causes severe skin burns and eye damage.

**Precautionary Statements**

|   |   |
|---|---|
| <b>Prevention:</b>                                | Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.  |
| <b>Response:</b>                                  | IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor/... Specific treatment (see this label). Wash contaminated clothing before reuse. |
| <b>Storage:</b>                                   | Store locked up.  |
| <b>Disposal:</b>                                  | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.  |
| <b>Hazard(s) not otherwise classified (HNOC):</b> | None.   |

**3. Composition/information on ingredients****Mixtures**

| Chemical Identity   | CAS number | Content in percent (%)* |
|---------------------|------------|-------------------------|
| Potassium silicate  | 1312-76-1  | 5 - <10%                |
| Lithium silicate    | 12627-14-4 | 1 - <5%                 |
| Potassium hydroxide | 1310-58-3  | 0.1 - <1%               |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

|                      |   |
|----------------------|---|
| <b>Ingestion:</b>    | Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.                                     |
| <b>Inhalation:</b>   | Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.   |
| <b>Skin Contact:</b> | Call a physician or poison control center immediately. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Destroy or thoroughly clean contaminated shoes. |
| <b>Eye contact:</b>  | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.  |

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

**Symptoms:** Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

**7. Handling and storage**

**Precautions for safe handling:** Do not get in eyes. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

**8. Exposure controls/personal protection****Control Parameters****Occupational Exposure Limits**

| Chemical Identity   | Type    | Exposure Limit Values | Source                                  |
|---------------------|---------|-----------------------|---|
| Potassium hydroxide | Ceiling | 2 mg/m <sup>3</sup>   | US. ACGIH Threshold Limit Values (2011) |

None of the components have assigned exposure limits.

**Appropriate Engineering Controls** Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

**General information:** Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection:** Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

**Skin Protection**

**Hand Protection:** Use suitable protective gloves if risk of skin contact.

**Other:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.

**9. Physical and chemical properties**

**Appearance**

|  |   |
|--|---|
| <b>Physical state:</b>                                       | liquid  |
| <b>Form:</b>   | liquid  |
| <b>Color:</b>  | Colorless   |
| <b>Odor:</b>   | Mild  |
| <b>Odor threshold:</b>                                       | No data available.  |
| <b>pH:</b>   | 11.9 - 12.4   |
| <b>Melting point/freezing point:</b>                         | No data available.  |
| <b>Initial boiling point and boiling range:</b>              | No data available.  |
| <b>Flash Point:</b>  | No data available.  |
| <b>Evaporation rate:</b>                                     | Slower than Ether   |
| <b>Flammability (solid, gas):</b>                            | No  |
| <b>Upper/lower limit on flammability or explosive limits</b> |   |
| <b>Flammability limit - upper (%):</b>                       | No data available.  |
| <b>Flammability limit - lower (%):</b>                       | No data available.  |
| <b>Explosive limit - upper (%):</b>                          | No data available.  |
| <b>Explosive limit - lower (%):</b>                          | No data available.  |
| <b>Vapor pressure:</b>                                       | No data available.  |
| <b>Vapor density:</b>  | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| <b>Relative density:</b>                                     | 1.107   |
| <b>Solubility(ies)</b>                                       |   |
| <b>Solubility in water:</b>                                  | Soluble   |
| <b>Solubility (other):</b>                                   | No data available.  |
| <b>Partition coefficient (n-octanol/water):</b>              | No data available.  |
| <b>Auto-ignition temperature:</b>                            | No data available.  |
| <b>Decomposition temperature:</b>                            | No data available.  |
| <b>Viscosity:</b>  | No data available.  |

**10. Stability and reactivity**

|  |   |
|--|---|
| <b>Reactivity:</b>                         | No data available.  |
| <b>Chemical Stability:</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions:</b> | No data available.  |
| <b>Conditions to avoid:</b>                | Avoid heat or contamination.  |
| <b>Incompatible Materials:</b>             | Strong acids. Strong bases.   |
| <b>Hazardous Decomposition Products:</b>   | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

**11. Toxicological information****Information on likely routes of exposure**

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| <b>Skin Contact:</b> | Causes severe skin burns.   |
| <b>Eye contact:</b>  | Causes serious eye damage.  |
| <b>Ingestion:</b>    | May be ingested by accident. Ingestion may cause irritation and malaise.                      |

**Symptoms related to the physical, chemical and toxicological characteristics**

|                      |                    |
|----------------------|--------------------|
| <b>Inhalation:</b>   | No data available. |
| <b>Skin Contact:</b> | No data available. |
| <b>Eye contact:</b>  | No data available. |
| <b>Ingestion:</b>    | No data available. |

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)****Oral**

**Product:** ATEmix: 37,731.29 mg/kg

**Dermal**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s):**

Potassium silicate LD 50 (Rat): > 5,000 mg/kg

Lithium silicate LD 50 (Rat): > 5,000 mg/kg

**Inhalation**

**Product:** ATEmix: 99.19 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**



---

|                     |                                       |   |
|---------------------|---------------------------------------|---|
| Potassium silicate  | in vivo (Rabbit): Slightly irritating | Experimental result, Key study                |
| Lithium silicate    | in vivo (Rabbit): Not irritant        | Experimental result, Supporting study         |
| Potassium hydroxide | in vivo (Rabbit): Corrosive           | Experimental result, Weight of Evidence study |

**Serious Eye Damage/Eye Irritation****Product:** No data available.**Specified substance(s):**

Lithium silicate Rabbit, 24 - 72 hrs: Category 1

**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.



**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Potassium hydroxide LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 80 mg/l Mortality

##### Aquatic Invertebrates

**Product:** No data available.

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** No data available.

##### Toxicity to Aquatic Plants

**Product:** No data available.

### Persistence and Degradability

#### Biodegradation

**Product:** No data available.

#### BOD/COD Ratio

**Product:** No data available.

### Bioaccumulative potential

#### Bioconcentration Factor (BCF)

**Product:** No data available.

### Partition Coefficient n-octanol / water (log K<sub>ow</sub>)

**Product:** No data available.





**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

**13. Disposal considerations**

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

**14. Transport information**

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Potassium hydroxide      | 1000 lbs.                  |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Immediate (Acute) Health Hazards
- Skin Corrosion/Irritation
- Serious Eye Damage/Eye Irritation

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| Potassium hydroxide      | 1000 lbs.                  |

**SARA 311/312 Hazardous Chemical**

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| Potassium silicate       | 10000 lbs                          |
| Lithium silicate         | 10000 lbs                          |
| Potassium hydroxide      | 10000 lbs                          |

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act**

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations****Montreal protocol**

not applicable

**Stockholm convention**

not applicable

**Rotterdam convention**

not applicable

**Kyoto protocol**

not applicable

**VOC:**



Regulatory VOC (less water and exempt solvent) : 0 g/l  
VOC Method 310 : 0.00 %

**Inventory Status:**

|  |  |
|--|--|
| Australia AICS:                          | All components in this product are listed on or exempt from the Inventory.             |
| Canada DSL Inventory List:               | All components in this product are listed on or exempt from the Inventory.             |
| EINECS, ELINCS or NLP:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List:                       | All components in this product are listed on or exempt from the Inventory.             |
| China Inv. Existing Chemical Substances: | All components in this product are listed on or exempt from the Inventory.             |
| Korea Existing Chemicals Inv. (KECI):    | All components in this product are listed on or exempt from the Inventory.             |
| Canada NDSL Inventory:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory:                       | All components in this product are listed on or exempt from the Inventory.             |
| New Zealand Inventory of Chemicals:      | All components in this product are listed on or exempt from the Inventory.             |
| Japan ISHL Listing:                      | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing:             | One or more components in this product are not listed on or exempt from the Inventory. |

**16. Other information, including date of preparation or last revision**

Revision Date: 08/29/2017



EUCLID CHEMICAL

Version: 3.0  
Revision Date: 08/29/2017

---

**Version #:** 3.0

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.