

# Southern Lithoplate Inc.

## Safety Data Sheet

### Southern Litho 8N2 Replica NIR Developer

#### Section 1 - Chemical Product and Company Identification

**1.1 Product identifier:** Southern Litho 8N2 Replica NIR Developer

**1.2 Relevant identified uses of the substance or mixture and uses advised against:** For use in plating processes.

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

**Name:** Southern Lithoplate Inc.  
**Address:** 105 Jeffrey Way  
Youngsville, N.Carolina. 27596

**For information in North America, call:**  
919-556-9400

**1.4 For emergencies in the US, call CHEMTREC:**  
800-424-9300

#### Section 2 - Hazards Identification

**2.1 Classification of the Substance or Mixture**

**CLP /GHS Classification (1272/2008):**

<b>Physical:</b>	<b>Health:</b>	<b>Environmental</b>
Metal Corrosive Category 1	Skin Corrosion Category 1B Eye Corrosion Category 1	Non-Hazardous

**2.2 Label Elements:**

SDS Number: 8N2 REPLICA NIR DEVELOPER



**DANGER!**

Contains Silicic acid potassium salt, and Potassium hydroxide.

**Statements of Hazard**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage

**Precautionary Statements**

**Prevention**

P234 Keep only in original container.

P260 Do not breathe dusts or mists.

P264 Wash exposed skin thoroughly after handling.

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

**Response**

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER or doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P310 Immediately call a POISON CENTER or doctor.

P363 Wash contaminated clothing before reuse.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor.

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.

P390 Absorb spillage to prevent material damage.

**Storage**

P405 Store locked up.

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

**Disposal**

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

**2.3 Other Hazards:** None

## Section 3 - Composition, Information on Ingredients

### 3.1 Substances:

Chemical Name	CAS# / EINECS#	GHS Classification Regulation (EC) No 1272/2008	%
Non-hazardous Ingredients	Mixture	None	85 - 90
Silicic acid, potassium salt	1312-76-1/ 215-199-1	Met Corr. 1 (H290); Skin Corr. 1 (H314); Eye Corr. 1 (H318)	5 - <10
Potassium hydroxide	1310-58-3/ 215-181-3	Met. Corr. 1 (H290); Acute Oral Tox 4 (H302); Skin Corr. 1B (H314)	1 - <5
Sodium Metasilicate pentahydrate	10213-79-3/ 600-279-4	Met. Corr. 1 (H290); Eye Corr. 1 (H318); Skin Corr. 1B (H314); STOT SE 3 (H335)	1 - <3

See Section 16 for further information on GHS Classification.

## Section 4 - First Aid Measures

### 4.1 Description of First Aid Measures

**Eyes:** If contact occurs, immediately flush eyes with large quantities of water for at least 20 minutes, holding the eyelids apart. Get immediate medical attention.

**Skin:** If contact occurs, remove contaminated clothing. Immediately wash skin thoroughly with soap and water for at least 15 minutes. Get immediate medical attention. Launder clothing before re-use.

**Ingestion:** If the victim is fully conscious, have them rinse their mouth with water. Get immediate medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.

**Inhalation:** If inhaled, immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. Get immediate medical attention.

**Notes to Physician:** Treat symptomatically.

**4.2 Most important symptoms and effects, both acute and delayed:** Causes eye burns with the possibility of permanent corneal damage. Causes skin burns. Inhalation of mists causes respiratory irritation. Ingestion may cause gastrointestinal damage with nausea, vomiting and diarrhea.

**4.3 Indication of any immediate medical attention and special treatment needed:** Seek immediate medical attention for eye or skin contact, ingestion, or inhalation.

## Section 5 - Fire Fighting Measures

**5.1 Suitable (and Unsuitable) Extinguishing Media:** Use foam, dry chemical, or carbon dioxide.

**5.2 Specific Hazards Arising From the Chemical:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**5.3 Advice for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

## Section 6 - Accidental Release Measures

### **6.1 Personal Precautions, Protective Equipment, and Emergency**

**Procedures:** Evacuate spill area and keep unprotected personnel away. Wear appropriate protective clothing and equipment as described in Section 8.

**6.2 Environmental Precautions:** It is recommended to keep away from drains, surface and ground-water.

**6.3 Methods and Materials for Containment / Cleanup:** Absorb with an inert material. Collect into a suitable container for disposal. Rinse area with water. Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

**6.4 Reference to Other Sections:** Refer to Section 8 for protective equipment and Section 13 for disposal considerations.

## Section 7 - Handling and Storage

**7.1 Precautions for Safe Handling:** Prevent eye and skin contact. Avoid breathing mists or vapors. Use only with appropriate protective equipment. Launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking or using toilet facilities.

Empty containers retain product residue and may be hazardous. Do not cut, weld, drill, etc. containers, even empty. Do not reuse empty containers.

**7.2 Conditions for Safe Storage, Including Any Incompatibilities:** Corrosive to aluminum. Store in corrosive resistant container with a resistant inner liner. Protect containers from physical damage. Store in a cool, well-ventilated area away from acids and other incompatible materials. Keep out of the reach of children.

**7.3 Specific end use(s):** For use in plating processes.

## Section 8 - Exposure Controls, Personal Protection

### 8.1 Control Parameters:

Chemical Name	Exposure Limits
Non-hazardous Ingredients: United States Germany United Kingdom European Union	None established None established None established None established
Potassium silicate: United States Germany United Kingdom European Union	None established None established None established None established
Potassium hydroxide: United States Germany United Kingdom European Union	2 mg/m <sup>3</sup> Ceiling ACGIH-TLV None established 2 mg/m <sup>3</sup> STEL UK WEL None established
Sodium Metasilicate tetrahydrate: United States Germany United Kingdom European Union	None established None established None established None established

Note: If not listed above, refer to local regulations for specific country exposure limits.

### 8.2 Exposure Controls

**Engineering Controls:** General ventilation should be adequate for all normal use.

#### Personal Protective Equipment:

**Respiratory Protection:** For operations where exposure limits may be exceeded use a NIOSH approved respirator (mask) with appropriate eye protection. A full face piece respirator provides both eye and respiratory protection. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134, and all other applicable regulations; and good Industrial Hygiene practice.

**Gloves:** Wear appropriate impervious protective gloves to avoid skin exposure.

**Eyes:** Wear chemical splash goggles.

**Other Protective Equipment/Clothing:** Wear appropriate protective clothing to avoid skin exposure. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

## Section 9 - Physical and Chemical Properties

### 9.1 Information on basic Physical and Chemical Properties:

**Physical State:** Liquid

**Appearance:** Colorless

**Odor:** Odorless or slight musty odor.

**Odor Threshold:** Not available

**pH:** 12.0 -13.8 @ 20°C

**Freezing/Melting Point:** ~32°F (0°C)

**Initial Boiling Point/Range:** ~212°F (100°C)

**Flash Point:** Not applicable

**Evaporation Rate:** Not available

**Flammability (solid, gas):** Not applicable

**Flammability Limits:** LEL: Not applicable

UEL: Not applicable

**Vapor Pressure:** Not determined

**Vapor Density:** Not determined

**Relative Density:** 1.10-1.14

**Solubility In Water:** Soluble in water

**Coefficient Of Water/Oil Distribution:** Not determined

**Autoignition Temp:** Not Determined

**Decomposition Temperature:** Not available

**Viscosity:** Not Determined

**Volatile Organic Compounds (VOC):** None

**9.2 Other Information:** None

## Section 10 - Stability and Reactivity

**10.1 Reactivity:** Not normally reactive.

**10.2 Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:** Will react with acids and strong oxidizing agents.

**10.4 Conditions to Avoid:** Incompatible materials.

**10.5 Incompatibilities with Other Materials:** Acids and strong oxidizing agents. Corrosive to aluminum.

**10.6 Hazardous Decomposition Products:** Irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## Section 11 - Toxicological Information

### 11.1 Information on Toxicological Effects:

#### **Acute Hazards:**

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**Inhalation:** Mist and vapors may cause irritation to the eyes, mucous membranes and upper respiratory tract.

**Skin Contact:** Causes severe irritation and burns.

**Eye Contact:** Causes severe eye irritation, and burns. May cause permanent eye damage.

**Ingestion:** May cause mouth, throat, and gastrointestinal irritation.

**Chronic Effects:** None expected.

**Carcinogenicity Listing:** None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA.

### **Acute Toxicity Values:**

Calculated ATE for Product: ATE Oral: >2000 mg/kg  
ATE Skin: >2000 mg/kg

Non-Hazardous ingredients: Not acutely toxic.

Silicic acid, potassium salt: LD50 Oral Rat: >5000 mg/kg  
LD50 Skin Rat: >5000 mg/kg  
LC50 Inhalation Rat: >2.06 mg/L/4 hr.

Potassium hydroxide: LD50 Oral Rat: 333 mg/kg

Sodium Metasilicate petahydrate:  
LD50 Oral Rat: 1153 mg/kg  
LD50 Skin Rat: >5000 mg/kg

## Section 12 - Ecological Information

### **12.1 Ecotoxicity:**

Silicic acid, potassium salt: LC50 Leuciscus idus >146 mg/L/48 hr.  
EC50 Daphnia magna >146 mg/ L / 24 hr.

Sodium Metasilicate petahydrate:  
LC50: Brachydanio rerio 210 mg/L/96 hr

### **12.2 Persistence and Degradability:**

No data available.

### **12.3 Bio accumulative Potential:**

No data available.

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**12.4 Mobility in Soil:**

No data available.

**12.5 Results of PVT and vPvB assessment:** No data available

**12.6 Other Adverse Effects:** No data available

## Section 13 - Disposal Considerations

**13.1 Waste Treatment Methods:**

Dispose of in accordance with all local, state/provincial and federal regulations.

## Section 14 - Transport Information

	<b>14.1 UN Number</b>	<b>14.2 UN Proper Shipping Name</b>	<b>14.3 Hazard Class(s)</b>	<b>14.4 Packing Group</b>	<b>14.5 Environmental Hazards</b>
<b>US DOT</b>	UN1814	Potassium hydroxide solution	8	II	N/A
<b>Canadian TDG</b>	UN1814	Potassium hydroxide solution	8	II	N/A
<b>EU ADR/RID</b>	UN1814	Potassium hydroxide solution	8	II	N/A
<b>IMDG</b>	UN1814	Potassium hydroxide solution	8	II	N/A

**14.6 Special Precautions for User:** None

**14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not determined.

## Section 15 - Regulatory Information

**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture**

**U.S. REGULATIONS:**

**TSCA**

All ingredients are listed on the TSCA inventory.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.



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**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Section 103: Hazardous Substances and corresponding RQs**

Potassium Hydroxide: CAS# 1310-58-3: RQ 1,000 lbs. (454 Kg).

Final RQ for product 20,000 lbs. (9070 kg)

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Hazard Category (311/312):** Acute Health.

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

Potassium Hydroxide CAS# 1310-58-3 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**US. State Regulations**

**California Prop 65**

None of the chemicals in this product are listed.

**European/International Regulations**

**WGK (Water Danger/Protection)**

Potassium Hydroxide CAS# 1310-58-3: 1

**Canada - DSL/NDSL**

All components listed on DSL/NDSL

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

## Section 16 - Additional Information

**SDS Date of preparation/revision:** March 31, 2016

REVISION SUMMARY: Correction to EC / CAS #. Removal of EU Classifications.

**CLP /GHS Classification and H Phrases for Reference (See Section 3):**

H290 May be corrosive to metals.

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Acute Oral Tox 4 – Acute Oral Toxicity Category 4

Eye Corr. 1 – Eye Corrosion Category 1

Met. Corr. 1 – Corrosive to Metals Category 1

Skin Corr. 1 - Skin Corrosion Category 1

Skin Corr. 1B - Skin Corrosion Category 1B

STOT SE 3 – Specific Target Organ Toxicity: Single Exposure Category 3

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Southern Lithoplate Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Southern Lithoplate Inc. has been advised of the possibility of such damages.*