Southern Lithoplate Inc.

Safety Data Sheet

News Release Subtractive Developer

Section 1 - Chemical Product and Company Identification

1.1 Product identifier: NewsRelease Subtractive Developer

1.2 Relevant identified uses of the substance or mixture and uses advised against: For use in pre-press printing plate preparation processes.

1.3 Details of the supplier of the safety data sheet:

Name: Southern Lithoplate Inc.
Address: 105 Jeffrey Way
Youngsville, NC 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):

<table>
<thead>
<tr>
<th>Physical:</th>
<th>Health:</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hazardous</td>
<td>Eye Irritation Category 2A</td>
<td>Non-Hazardous</td>
</tr>
<tr>
<td></td>
<td>Carcinogen Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity – Repeat Exposure Category 2</td>
<td></td>
</tr>
</tbody>
</table>

EU Classification (67/548/EEC): Xi R36

2.2 Label Elements:
WARNING!

Statements of Hazard
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H373 May cause damage to liver, blood, and kidney through prolonged or repeated ingestion.

Precautionary Statements

Prevention
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe spray or mists.
P264 Wash exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective clothing, and eye protection.

Response
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention.
P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor.

Storage
P405 Store locked up.

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

3.2 Mixtures:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS# / EINECS#</th>
<th>EU Classification (67/548/EEC)</th>
<th>GHS Classification Regulation (EC) No 1272/2008</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-hazardous Ingredients</td>
<td>Mixture</td>
<td>Not Classified as Dangerous</td>
<td>Not Classified as Hazardous</td>
<td>72-84</td>
</tr>
<tr>
<td>Sodium Xylene Sulfonate</td>
<td>1300-72-7/215-090-9</td>
<td>Xi, R36</td>
<td>Eye Irrit. 2A (H319)</td>
<td>10-15</td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>100-51-6/202-859-9</td>
<td>Xn R20/22</td>
<td>Acute Oral Tox 4 (H302); Acute Inhal Tox 4 (H332); Eye Irrit. 2A (H319)</td>
<td>5-10</td>
</tr>
<tr>
<td>N,N-Diethanolamine</td>
<td>111-42-2 / 203-868-0</td>
<td>Xi, Xn, R22, R38, R41, R48/22</td>
<td>Acute Oral Tox 4 (H302); Skin Irrit. 2 (H315); Eye Corr. 1 (H318); STOT RE 2</td>
<td>1 - &lt;3</td>
</tr>
</tbody>
</table>
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 15 minutes, holding the eyelids apart. Get medical attention if irritation persists.

**Skin:** Rinse skin with plenty of water. If skin irritation or redness develops, seek medical attention.

**Ingestion:** Do not induce vomiting unless directed to by doctor or physician. If the victim is fully conscious, have them drink a glass of water. Get medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.

**Inhalation:** If symptoms of exposure develop, remove to fresh air. Seek medical attention if symptoms persist.

**Notes to Physician:** Treat symptomatically.

4.2 Most important symptoms and effects, both acute and delayed: Causes severe eye irritation. Inhalation of mists may cause mild respiratory irritation. Ingestion causes gastrointestinal irritation with nausea, vomiting and diarrhea. Repeated or prolonged ingestion may cause damage to liver, blood, and kidney. Contains components suspected of causing cancer.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention should not be required.

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, oxides of carbon and sulfur 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: Avoid eye and skin contact. Avoid breathing mists or vapors. Use only with appropriate protective equipment. 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: Store locked up.

7.3 Specific end use(s): For use in pre-press printing plate preparation processes.

Section 8 - Exposure Controls, Personal Protection

8.1 Control Parameters:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-hazardous Ingredients:</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>None established</td>
</tr>
<tr>
<td>Germany</td>
<td>None established</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>None established</td>
</tr>
<tr>
<td>European Union</td>
<td>None established</td>
</tr>
<tr>
<td>Sodium Xylene Sulfonate:</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>None established</td>
</tr>
<tr>
<td>Germany</td>
<td>None established</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>None established</td>
</tr>
<tr>
<td>European Union</td>
<td>None established</td>
</tr>
</tbody>
</table>
Benzyl Alcohol:
United States: 10 ppm TWA AIHA WEEL
Germany: None established
United Kingdom: None established
European Union: None established

N,N-Diethanolamine:
United States: 0.2 ppm TWA ACGIH TLV (Skin)
            (Inhalable fraction and vapor)
Germany: 1 mg/m$^3$ TWA, 1 mg/m$^3$ STEL DFG MAK
United Kingdom: 3 ppm TWA UK WEL
European Union: 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. 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 exposure.

### Section 9 - Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties:

**Physical State:** Liquid
**Appearance:** Clear to amber color
**Odor:** Not available
**Odor Threshold:** Not available
**pH:** 10.8 to 11.5
**Freezing/Melting Point:** $\sim 32^\circ F$
**Initial Boiling Point/Range:** $\sim 212^\circ F$
**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:** 1.06 to 1.07
**Solubility In Water:** Soluble
**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 strong oxidizing agents.  
**10.4 Conditions to Avoid:** Incompatible materials.  
**10.5 Incompatibilities with Other Materials:** Strong oxidizing agents.  
**10.6 Hazardous Decomposition Products:** During a fire, oxides of carbon and sulfur may be generated by thermal decomposition.

**Section 11 - Toxicological Information**

**11.1 Information on Toxicological Effects:**

**Acute Hazards:**

**Inhalation:** Mist and vapors may cause mild irritation to the upper respiratory tract.  
**Skin Contact:** No adverse effects expected from the normal use of this product.  
**Eye Contact:** Causes severe eye irritation.  
**Ingestion:** Ingestion causes gastrointestinal irritation with nausea, vomiting and diarrhea.  
**Chronic Effects:** Repeated or prolonged ingestion may cause damage to liver, blood, and kidney.

**Carcinogenicity Listing:** Diethanolamine is listed by IARC as 2B – Possibly carcinogenic to humans, and ACGIH as A3 – Confirmed animal carcinogen with unknown relevance to humans. None of the other 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.
Sodium xylene sulfonate: LD50 Oral Rat: >7000 mg/kg
LD50 Dermal Rabbit: >2000 mg/kg
LC50 Inhalation Rat: >6.41 mg/L/4 hr.

Benzyl Alcohol: LD50 Oral Rat: 1620 mg/kg
LC50 Inhalation Rat: >4.178 mg/L/4 hr.

N,N-Diethanolamine: LD50 Oral Rat: 1820 mg/kg

Section 12 - Ecological Information

12.1 Ecotoxicity:
Sodium xylene sulfonate: EC50 Daphnia magna >1020 mg/L/48 hr.
Benzyl Alcohol: LC50: Pimephales promelas (Fathead minnow)
460 mg/L/96 hr.
EC50 Daphnia magna >100 mg/L/48 hr.
N,N-Diethanolamine: LC50: Pimephales promelas (Fathead minnow)
1370 mg/L/96 hr.
EC50 Ceriodaphnia sp. 30.1 mg/L/48 hr.

12.2 Persistence and Degradability:
Sodium xylene sulfonate: Readily biodegradable
Benzyl Alcohol: Readily biodegradable
N,N-Diethanolamine: Readily biodegradable

12.3 Bio accumulative Potential:
N,N-Diethanolamine: BCF 2.3

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

<table>
<thead>
<tr>
<th></th>
<th>14.1 UN Number</th>
<th>14.2 UN Proper Shipping Name</th>
<th>14.3 Hazard Class(s)</th>
<th>14.4 Packing Group</th>
<th>14.5 Environmental Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
<td>N/A</td>
<td>Not classified for transport</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Canadian TDG</td>
<td>N/A</td>
<td>Not classified for transport</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>EU ADR/RID</td>
<td>N/A</td>
<td>Not classified for transport</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>IMDG</td>
<td>N/A</td>
<td>Not classified for transport</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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.

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
N,N-Diethanolamine CAS# 111-42-2: RQ 100 lbs. (45.4 Kg).
Final RQ for product 3,333 lbs. (1,515 kg)

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Hazard Category (311/312): Acute Health, Chronic Health
**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

N,N-Diethanolamine CAS# 111-42-2

**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:**
None of the chemicals in this product are 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**
Contains chemicals that are listed.

**European/International Regulations**

**WGK (Water Danger/Protection)**

N,N-Diethanolamine CAS# 111-42-2: 1
Benzyl Alcohol CAS# 100-51-6: 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:** April 02, 2015

**REVISION SUMMARY:** New SDS

**EU Classes and Risk Phrases for Reference (See Sections 2 and 3):**

Xi Irritant
Xn Harmful
R20/22 Harmful by inhalation and if swallowed.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**CLP /GHS Classification and H Phrases for Reference (See Section 3):**
- H302 Harmful if swallowed
- H315 Causes skin Irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H351 Suspected of causing cancer
- H373 May cause damage to liver, blood, and kidney through prolonged or repeated ingestion.
- H412 Harmful to aquatic life with long lasting effects.
- Acute Oral Tox 4 – Acute Oral Toxicity Category 4
- Acute Inhal Tox 4 – Acute Inhalation Toxicity Category 4
- Aqua. Chron. Tox 3 – Chronic Aquatic Toxicity Category 3
- Carc. 2 – Carcinogen Category 2
- Eye Corr. 1 – Eye Corrosion Category 1
- Eye Irrit. 2A – Eye Irritation Category 2A
- STOT RE 2 – Specific Target Organ Toxicity: Repeat Exposure Category 2

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.