# Safety Data Sheet

**Phenol Developing Solution**

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME:</th>
<th>Phenol Developing Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTHER/Generic Names:</td>
<td>CLI Phenol Developing Solution</td>
</tr>
<tr>
<td>PART NUMBER:</td>
<td>1067 (22 oz.)</td>
</tr>
<tr>
<td>PRODUCT USE:</td>
<td>Developing solution for Phenol Surface &amp; Skin Swypes™, and Permea-Tec™ Sensors</td>
</tr>
<tr>
<td>MANUFACTURER:</td>
<td>Colormetric Laboratories, Inc. (CLI)</td>
</tr>
<tr>
<td></td>
<td>1261A Rand Road</td>
</tr>
<tr>
<td></td>
<td>Des Plaines, IL 60016</td>
</tr>
</tbody>
</table>

**FOR MORE INFORMATION CALL:**

(Monday-Friday, 9:00am-4:00pm)

1-847-803-3737

1-847-803-3739 (fax)

Email: clilabs@clilabs.com

**IN CASE OF EMERGENCY CALL:**

(24 Hours/Day, 7 Days/Week)

1-800-424-9300 (CHEMTREC)

## 2. HAZARD(S) IDENTIFICATION

**EMERGENCY OVERVIEW:** This product is a light yellow liquid with a slight alcohol/ammonia odor. The product may cause temporary irritation in sensitive individuals. Repeated exposure may lead to irritation. Can be irritating to skin, nose, and throat causing headaches, dermatitis, and possible blindness (with ingestion).

**ROUTES OF ENTRY:** Inhalation, Skin and/or Eye contact, Ingestion

**POTENTIAL HEALTH EFFECTS**

<table>
<thead>
<tr>
<th>SKIN CONTACT:</th>
<th>May cause irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYE CONTACT:</td>
<td>May cause irritation and redness</td>
</tr>
<tr>
<td>INGESTION:</td>
<td>May be harmful if swallowed</td>
</tr>
<tr>
<td>INHALATION:</td>
<td>Mild irritation</td>
</tr>
</tbody>
</table>

**ACUTE HEALTH HAZARDS:** Irritating to eyes, nose, throat; headache, vomiting; blindness; dermatitis

**TARGET ORGANS:** Eyes, skin, respiratory system, central nervous system, blood, kidneys

*No ingredients are listed by OSHA, IARC, or NTP, EPA as known or suspected carcinogens*
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Amount</th>
<th>CAS Number</th>
<th>Hazardous</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>15%</td>
<td>67-56-1</td>
<td>No</td>
<td>200 ppm</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Ammonia</td>
<td>1%</td>
<td>7664-41-7</td>
<td>Yes</td>
<td>50 ppm</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

SKIN CONTACT: Wash off with soap and water.
EYE CONTACT: Flush with plenty of water
INGESTION: Do not induce vomiting. Consult a physician
INHALATION: Remove to fresh air
ADVICE TO PHYSICIAN: Treat symptomatically

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLAMMABILITY OF PRODUCT: Non-flammable
FLASH POINT: Not applicable
AUTOIGNITION TEMPERATURE: Not applicable
UPPER FLAME LIMIT: Not applicable
LOWER FLAME LIMIT: Not applicable

HMIS HAZARD CLASSIFICATION

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 1
PROTECTION: 1

EXTINGUISHING MEDIA:
Dry chemical

SPECIAL FIRE FIGHTING PROCEDURES:
None required

HAZARDOUS DECOMPOSITION PRODUCTS:
None known

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE:

Containment Procedures: Use personal protective equipment. Ensure adequate ventilation.
Cleanup Procedures: Use wet mop to clean spill. Rinse area with water. Consult state and federal EPA requirements.
7. HANDLING AND STORAGE

RECOMMENDED STORING CONDITIONS:
Stable under normal room-temperature conditions. Protect from freezing and avoid excessive heat.

SHELF LIFE:
Indefinite

HANDLING:
Avoid contact with eyes and skin. Do not swallow. Avoid breathing vapors and/or prolonged skin contact. Wear approved respirator if vapor is irritating. Wash thoroughly after handling. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:
Local exhaust ventilation is recommended to effectively remove and prevent build-up of vapors.

VENTILATION:
Use in well-ventilated areas

RESPIRATORY PROTECTION:
Not required. Wear approved respirator if vapor is irritating

EYE PROTECTION:
Safety glasses

SKIN PROTECTION:
Vinyl or latex gloves recommended

OTHER PROTECTIVE EQUIPMENT:
None necessary

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Substance</th>
<th>NIOSH</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>200 ppm TWA (262 mg/m³)</td>
<td>200 ppm TWA (260 mg/m³)</td>
<td>200 ppm TWA (262 mg/m³)</td>
</tr>
<tr>
<td>Ammonia</td>
<td>25 ppm TWA (18 mg/m³)</td>
<td>50 ppm TWA (35 mg/m³)</td>
<td>25 ppm TWA (17 mg/m³)</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE:</td>
<td>Light yellow</td>
</tr>
<tr>
<td>PHYSICAL STATE:</td>
<td>Liquid</td>
</tr>
<tr>
<td>MOLECULAR WEIGHT:</td>
<td>Varies</td>
</tr>
<tr>
<td>CHEMICAL FORMULA:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ODOR:</td>
<td>Slight alcohol/ammonia odor</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (water = 1.0)</td>
<td>0.98</td>
</tr>
<tr>
<td>pH:</td>
<td>11.1</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER (weight %):</td>
<td>Miscible</td>
</tr>
<tr>
<td>BOILING POINT:</td>
<td>Not available</td>
</tr>
<tr>
<td>MELTING POINT:</td>
<td>Not available</td>
</tr>
<tr>
<td>FREEZING POINT:</td>
<td>Not available</td>
</tr>
<tr>
<td>VAPOR PRESSURE:</td>
<td>Not available</td>
</tr>
<tr>
<td>VAPOR DENSITY (air = 1.0):</td>
<td>Not available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:
Thermally stable at typical use temperatures

INCOMPATIBILITIES:
Strong oxidizers, acids, bleach

HAZARDOUS DECOMPOSITION PRODUCTS:
None known

HAZARDOUS POLYMERIZATION:
None

CONDITIONS TO AVOID (POLYMERIZATION):
None

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA

Acute oral toxicity: Methanol – LD50 rat: 5628 mg/kg
Acute inhalation toxicity: Methanol – LC50 rat: 64000 ppm (4 hours)
Acute dermal toxicity: Methanol – LD50 rabbit: 15800 mg/kg

Acute oral toxicity: Ammonia – N/A
Acute inhalation toxicity: Ammonia – LC50 rat: 7338-11590 ppm (1 hour), 2000 ppm (4 hours)
Acute dermal toxicity: Ammonia – N/A

Carcinogenic effects:
IARC Carcinogen List: Not listed
NTP Carcinogen List: Not listed
ACGIH Carcinogen List: Not listed
EPA Carcinogen List: Not listed

12. ECOLOGICAL INFORMATION

TOXICITY:
Not available
13. DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORT INFORMATION

This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations.

15. REGULATORY INFORMATION

Not available.

16. OTHER INFORMATION

CURRENT ISSUE DATE: 1/1/2015

Questions about the information found on this MSDS should be directed to:

Colormetric Laboratories, Inc. (CLI)
1261A Rand Road        Des Plaines, IL 60016

Phone: (847) 803-3737        Fax: (847) 803-3739
Email: clilabs@clilabs.com

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