EMERGENCY OVERVIEW: This product is a red transparent liquid.
Health Hazards: May be harmful if swallowed. May cause skin, eye and respiratory irritation.
Flammability Hazards: This product is not combustible in liquid form.
Reactivity Hazards: No data available.
Environmental Hazards: The environmental effects of this product have not been investigated, however release may cause long term adverse environmental effects.

US DOT Symbols: Not Regulated

EU and GHS Symbols:
Signal Word: Warning

2.1 EU Labeling and Classification:
This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.
EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:
Index Number:
208-401-4 is not listed in Annex I
203-905-0 is not listed in Annex I
Substances not listed either individually or in group entries must be self classified.

Components Contributing to Classification: Gluconic Acid, Glycol Ether EB

2.2 Label Elements:
GHS Hazard Classifications: Acute Toxicity (Oral) Category 4
Skin Irritation Category 2
Hazard Statements:
Eye Irritation Category 2A
H302 Harmful if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled
H315 Causes skin irritation
H319 Causes serious eye irritation
Precautionary Statements:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response Statements:
P301+P312 IF SWALLOWED: Call a POISON CENTER/Doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of water.
P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
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 advice/attention.
Storage Statements:
None.
Disposal Statements:
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Health Hazards or Risks From Exposure:
Symptoms of Overexposure by Route of Exposure:
The most significant routes of overexposure for this product are by contact with skin or eyes. The symptoms of overexposure are described in the following paragraphs.

Acute:
Inhalation: Mist or spray may cause irritation, cough, shortness of breath, or sore throat
Skin Contact: Contact may cause redness and irritation.
Eye Contact: May cause eye irritation.
Ingestion: May cause nausea, vomiting, diarrhea, and abdominal pain.

Chronic: No data available.
Target Organs:
Acute: Skin, Eyes, Respiratory
SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>WT%</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>Hazard Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gluconic Acid</td>
<td>10%</td>
<td>526-95-4</td>
<td>208-401-4</td>
<td>Skin Irrit. 2, Eye Irrit. 2A</td>
</tr>
<tr>
<td>Glycol Ether EB</td>
<td>2.5%</td>
<td>111-76-2</td>
<td>203-905-0</td>
<td>Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2</td>
</tr>
</tbody>
</table>

Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

Note: All WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250:2000

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye Contact: If product enters the eyes, flush with plenty of water or eye wash solution for several minutes. Remove contacts if present and easy to do. Seek medical attention if irritation persists.

Skin Contact: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

Inhalation: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

Ingestion: If product is swallowed, call physician or poison center immediately. If professional advice is not available, do not induce vomiting. Never induce vomiting or give dilutents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Medical Conditions Generally Aggravated By Exposure: Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact.

4.2 Symptoms and Effects Both Acute and Delayed: Exposure to skin and eyes may cause irritation.

4.3 Recommendations to Physicians: Treat symptoms and eliminate overexposure.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Fire Extinguishing Materials:

Use the following fire extinguishing materials: Water Spray: Yes
5.2 Unusual Fire and Explosion Hazards:
Irritating and toxic fumes may be produced at high temperatures. Use of water may result if the formation of a toxic aqueous solution. Do not allow run-off from fire fighting to enter drains or water courses.

Explosive Sensitivity to Mechanical Impact: No
Explosive Sensitivity to Static Discharge: No

5.3 Special Fire-Fighting Procedures:
- Incipient fire responders should wear eye protection.
- Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment.
- Isolate materials not yet involved in the fire and protect personnel.
- Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray.
- If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:
Use cautious judgment when cleaning up spill. Wear suitable protective clothing, gloves, and eye/face protection.

6.2 Environmental Precautions:
Construct a dike to prevent spreading. Keep out of sewers, storm drains, surface waters, and soils.

6.3 Spill and Leak Response:

**Small Spills:**
- Collect material via broom or mop. Place in tightly sealed containers for proper disposal.
- Approach spill areas with caution.
- If liquid was introduced, create a dike or trench to contain material.
- Soak up with absorbent material such as clay, sand or other suitable non-reactive material.

**Large Spills:**
- Place in leak-proof containers. Seal tightly for proper disposal.
- Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling:
To prevent eye contact under the foreseeable conditions of use, wear appropriate safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling.

7.2 Storage and Handling Practices:
Keep away from incompatible materials. Keep container closed when not in use and store in well ventilated area.

7.3 Specific Uses:
Non-corrosive, non-chloride accelerating admixture.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Parameters:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>OSHA PEL</th>
<th>NIOSH PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gluconic Acid</td>
<td>526-95-4</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Glycol Ether EB</td>
<td>111-76-2</td>
<td>TWA 50ppm (240mg/m3)</td>
<td>TWA 5ppm (24mg/m3)</td>
</tr>
</tbody>
</table>

8.2 Exposure Controls:

**Ventilation and Engineering Controls:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

**Respiratory Protection:** Not required for properly ventilated areas.
Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

**Eye Protection:**
Safety glasses or goggles are required. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**Hand Protection:**
Chemical resistant gloves are required to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**Body Protection:**
Use body protect appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee’s feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on Basic Physical and Chemical Properties:
- **Appearance (Physical State and Color):** Red Transparent Liquid
- **Odor:** None
- **Odor Threshold:** No data available
- **pH:** 4.0-5.0
- **Melting/Freezing Point:** No data available
- **Boiling Point:** 212°F (100°C)
- **Flash Point:** Not available
- **Evaporation Rate:** No data available
- **Flammability (Solid; Gas):** Not applicable
- **Upper/Lower Flammability or Explosion Limits:** Not data available
- **Vapor Pressure (mm Hg @ 20°C (68° F):** No data available
- **Vapor Density:** Heavier than air
**SpecEtch**

**Safety Data Sheet**

**Version 1**

**Relative Density:** No data available  
**Specific Gravity:** 1.05  
**Solubility in Water:** 100%  
**Weight per Gallon:** No data available  
**Partition Coefficient (n-octanol/water):** No data available  
**Auto-Ignition Temperature:** No data available  
**Decomposition Temperature:** No data available  
**Viscosity:** No data available  
**9.2 Other Information:** No data available

**SECTION 10 – STABILITY AND REACTIVITY**

**10.1 Reactivity:** This product is not reactive.  
**10.2 Stability:** Stable under conditions of normal storage and use.  
**10.3 Possibility of Hazardous Reactions:** Will not occur.  
**10.4 Conditions to Avoid:** Incompatibles.  
**10.5 Incompatible Substances:** Strong oxidizing agents, strong acids, strong bases.  
**10.6 Hazardous Decomposition Products:** Carbon dioxide and carbon monoxide may form when heated to decomposition.

**SECTION 11 – TOXICOLOGY INFORMATION**

**11.1 Information on Toxicological Effects:**

**Toxicity Data:**  

| Glycol Ether EB | 111-76-2 | LD50 Oral – Rat | 470 mg/kg |

**Suspected Cancer Agent:** Ingredients within this product are not found on one or more of the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are considered to be cancer-causing agents by these agencies.

**Irritancy:** This product is expected to cause irritation to the skin, eyes and respiratory system.

**Sensitization to the Product:** This product is not expected to cause skin sensitization.

**Germ Cell Mutagenicity:** This product contains ingredients that are suspected to be a germ cell mutagenic.

**Reproductive Toxicity:** This product is not expected to be a human reproductive toxicant.

**SECTION 12 – ECOLOGICAL INFORMATION**

**12.1 Toxicity:**  

| Glycol Ether EB | 111-76-2 | LC50 – Fish | 200 mg/l – 96h |

**12.2 Persistence and Degradability:** No specific data available on this product.  
**12.3 Bioaccumulative Potential:** No specific data available on this product.  
**12.4 Mobility in Soil:** No specific data available on this product.  
**12.5 Results of PBT and vPvB Assessment:** No specific data available on this product.
### 12.6 Other Adverse Effects:
No data available

### 12.7 Water Endangerment Class:
At present, there are no ecotoxicological assessments for this product.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods:
Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Australia, EU Member States and Japan.

### 13.2 EU Waste Code:
Not determined

## SECTION 14 - TRANSPORTATION INFORMATION

### 14.1 U.S. Department of Transportation (DOT) Shipping Regulations:
This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

<table>
<thead>
<tr>
<th>UN Identification Number:</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Hazard Class Number and Description:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>DOT Label(s) Required:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
| North American Emergency
  Response Guidebook Number: | Not applicable |

### 14.2 Environmental Hazards:
The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

### 14.3 Special Precaution for User:
None

### 14.4 International Air Transport Association Shipping Information (IATA):
Not regulated.

### 14.5 International Maritime Organization Shipping Information (IMO):
Not applicable

## SECTION 15 – REGULATORY INFORMATION

### 15.1 Safety, Health and Environmental Regulations Specific for the Substance or Mixture:
United States Regulations:

### U.S. SARA Reporting Requirements:
The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.
U.S. SARA 311/312:
Acute Health: Yes; Chronic Health: No; Fire: No; Reactivity: No
U.S. CERCLA Reportable Quantity:
None
U.S. TSCA Inventory Status:
The components of this product are listed on the TSCA Inventory or are exempted from listing.
Other U.S. Federal Regulations:
None known
California Safe Drinking Water and Toxic Enforcement Act (Proposition 66):
This product does not contain ingredients on the Proposition 65 Lists.

15.2 Canadian Regulations:
Canadian DSL/NDSL Inventory Status:
Components are DSL Listed, NDSL Listed and/or are exempt from listing
Other Canadian Regulations:
Not applicable
Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
Canadian WHMIS Classification and Symbols:
This product is Class B2, Flammable Liquid, and D2B, Materials causing other toxic effects, per WHMIS Controlled Product Regulations.

15.3 European Economic Community Information:
This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details.
Chemical Safety Assessment:
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 Australian Information for Product:
Components of this product are listed on the International Chemical Inventory list.

15.5 Japanese Information for Product:
Japanese Minister of International Trade and Industry (MITI) Status: The components of this product are not listed as Class I specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

15.6 International Chemical Inventories:
Listing of the components on individual country Chemical Inventories is as follows:
Australian Inventory of Chemical Substances (AICS): Listed
Korean Existing Chemicals List (ECL): Listed
Japanese Existing National Inventory of Chemical Substances (ENCS): Listed
Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed
U.S. TSCA: Listed