SECTION 1: IDENTIFICATION

Product Name: Glycol Ether PPH

CAS Number: 770-35-4

Chemical Name: 1-Phenoxy-2-propanol

Synonyms: Propylene glycol phenyl ether

Uses: Laboratory chemicals, Synthesis of substances

Company
Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
Suite #C
Seattle WA 98109, USA

Business Contact
Customer Service: 1-866-282-3384
info@silverfernchemical.com

24 Hour Emergency Contact
Infotrac 800-535-5053
Outside USA & Canada 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

Warning

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):
Eye irritation (Category 2A), H319

Hazard Statements:
H319 Causes serious eye irritation

Precautionary Statements:
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
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.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Content (W/W)</th>
<th>Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>770-35-4</td>
<td>100%</td>
<td>1-Phenoxy-2-propanol</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: 113 °C (235 °F) - closed cup

Lower/Upper explosion limit: Lower explosion limit: 0.8 %(V)

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment and Clean-Up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal

Personal Protection: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions: Do not let product enter drains.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Storage: Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Combustible liquids

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protective Equipment (PPE)
**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection:** impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**General safety and hygiene measures:** Do not let product enter drains. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Form: clear, liquid. Color: Light yellow</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Melting point/freezing Point</strong></td>
<td>Melting point/range: 11 °C (52 °F)</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>243 °C (469 °F) - lit.</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>113 °C (235 °F) - closed cup</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Lower explosion limit: 0.8 %(V)</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>0.01 hPa (0.01 mmHg) at 20 °C (68 °F)</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>1.064 g/cm3 at 20 °C (68 °F)</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>15.1 g/l at 20 °C (68 °F)</td>
</tr>
<tr>
<td><strong>Partition Coefficient:</strong></td>
<td>Log Pow: 1.41</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td></td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>480 °C (896 °F) at 1,013 hPa (760 mmHg)</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>no data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>21.4 mm2/s -</td>
</tr>
<tr>
<td><strong>Explosive properties:</strong></td>
<td>no data available</td>
</tr>
</tbody>
</table>
Surface tension: ca.67.8 mN/m at 20 °C (68 °F)

SECTION 10: STABILITY AND REACTIVITY

Conditions to avoid: no data available

Substances to avoid: Strong oxidizing agents

Hazardous reactions: no data available

Decomposition products: no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:
LD50 Oral - Rat - male and female - > 2,000 mg/kg
LC50 Inhalation - Rat - male and female - 4 h - > 5.4 mg/l
LD50 Dermal - Rat - male and female - > 2,000 mg/kg

Skin corrosion/irritation:
Skin – Rabbit, Result: No skin irritation - 4 h

Serious eye damage/eye irritation:
Eyes – Rabbit, Result: Irritating to eyes.

Respiratory or skin sensitization:
Guinea pig, Result: Does not cause skin sensitisation

Germ cell mutagenicity:
Hamster, ovary, Result: negative
Mouse, male and female, Result: negative

Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity:
Reproductive toxicity - Rabbit – Oral, Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system.

Specific target organ toxicity - single exposure:
No data available

Specific target organ toxicity - repeated exposure:
No data available

Additional information:
Repeated dose toxicity: Rat - male and female - Oral - NOAEL : 477.5 mg/kg. RTECS: UB8886500
SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 280 mg/l
Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 370 mg/l
Toxicity to algae: Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

Biodegradability: aerobic - Exposure time 28 d Result: 72 % - Readily biodegradable

Bioaccumulative Potential: Does not bioaccumulate

Other: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal of substance: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

Container disposal: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US): Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

SARA 302 Components:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:
Acute Health Hazard

Massachusetts Right To Know Components:
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components:
1-Phenoxypropan-2-ol CAS-NO.770-35-4

New Jersey Right To Know Components:
1-Phenoxypropan-2-ol CAS-NO.770-35-4
California Prop. 65 Components:
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

**HMIS Rating**
- Health hazard: 2
- Chronic Health Hazard: 
- Flammability: 1
- Physical Hazard: 0

**NFPA Rating**
- Health hazard: 2
- Fire Hazard: 1
- Reactivity Hazard: 0

**DISCLAIMER OF RESPONSIBILITY**

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

Revision Date: 8/10/2015

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