SECTION 1 - Identification

1.1 Product Identifier
Product Name • CARPOL® SP-477 Polyol
Synonyms • Sucrose Propoxylated Polyol

1.2 Recommended Use of the Chemical and Restrictions on Use
Recommended Use • Component of Polyurethane
Restrictions on Use • Industrial use only

1.3 Details of the Supplier of the Safety Data Sheet
Manufacturer • Carpenter Co.
5016 Monument Ave.
Richmond, Virginia 23230
(804) 233-0606

1.4 Emergency Telephone
Chemtrec • (800) 424-9300 (24-hr number)

SECTION 2 - Hazards Identification

2.1 Classification of the Substance or Mixture
This material is not classified as hazardous under the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.2 GHS Label Elements
This material is not classified as hazardous under the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.3 Hazards Not Otherwise Classified
None identified

SECTION 3 - Composition/Information on Ingredients

3.1 Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Identifier</th>
<th>% (weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyether Polyol</td>
<td>CAS# 9049-71-2</td>
<td>100</td>
</tr>
</tbody>
</table>

3.2 Mixtures
Material does not meet the criteria of a mixture according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
SECTION 4 - First Aid Measures

4.1 Description of First Aid Measures

By route of inhalation  • Remove victim to fresh air.
By route of dermal contact  • Wash thoroughly with soap and water.
By route of eye contact  • Flush with plenty of water.
By route of ingestion  • If victim is conscious, give 1 to 2 glasses of water. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most Important Symptoms and Effects, Acute and Chronic

Refer to Section 11 Toxicological Information.

4.3 Indication of Immediate Medical Attention and Special Treatment If Needed

Treat symptomatically and supportively.

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media  • Dry chemical, foam, carbon dioxide, water fog or fine spray.

Unsuitable Extinguishing Media  • Do not use direct water spray. May spread fire.

5.2 Special Hazards Arising From the Substance or Mixture

• May produce oxides of carbon on combustion. Smoke may be toxic and/or irritating.

5.3 Special Protective Actions for Firefighters

• Responding personnel must wear positive-pressure, self-contained breathing apparatus (SCBA) and protective firefighting clothing. Spray cool water on fire exposed containers to reduce risk of rupture.

SECTION 6 - Accidental Release Measures

6.1. Personal Precautions, Protective Equipment, and Emergency Procedures

• Isolate the area. Keep unauthorized people away. Do not touch or walk through the spilled material. Spilled material may be slippery. Ensure adequate ventilation in enclosed area. Eliminate all ignition sources. Use protective equipment appropriate for the size of the spill.

6.1. Environmental Precautions

• Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

6.3 Methods and Materials for Containment and Clean Up
Methods
- Stop leak, dam spill, and transfer liquid into a suitable container.
- Collect residue with absorbent and transfer into a suitable container for proper disposal.

Materials
- Inert absorbent (sand, earth or similar).

6.4 Reference to Other Sections
- Refer to Section 8 for exposure control and personal protective equipment information.
- Refer to Section 12 for ecological information.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling
- Keep containers tightly closed when not in use.
- Do not eat, drink, or smoke in working area.
- Avoid contact with eyes and minimize contact with skin.
- Use good safety and industrial hygiene practices.
- Wash thoroughly after handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities
Storage
- Store materials in a cool, dry place. Do not transport with oxidizers.

Incompatibilities
- Oxidizing materials, strong alkalis and acids, Isocyanates.

SECTION 8: Exposure Controls/ Personal Protection

8.1 Control Parameters
Exposure Limits/Guidelines
- None established.

8.2 Exposure Controls
Engineering Controls
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable exposure limits.

Eye/Face Protection
- Safety glasses with side shields. Chemical goggles if there is a significant risk of splashing.

Respiratory Protection
- None required under normal use. If product is heated or sprayed, appropriate respiratory protection may be needed.

Skin Protection
- Wear suitable working clothes and shoes.
• Depending on the potential for exposure, chemical resistant gloves may not be needed (e.g. incidental use). As with any chemical, skin contact should be minimized with good work practices and PPE where needed. Wear chemical resistant gloves appropriate for the intended use. Consult glove manufacturers for assistance in choosing appropriate gloves.

Ingestion
• Do not eat, drink or smoke in work area. Wash hands before eating or smoking.

Additional Protection Measures
• None

SECTION 9: Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid</td>
<td></td>
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</table>

| Appearance /Color     | Clear         |      |                |

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<thead>
<tr>
<th>General Properties</th>
<th>Boiling Point</th>
<th>Melting Point</th>
<th>pH</th>
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<table>
<thead>
<tr>
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<th>Water Solubility</th>
<th>Viscosity (at 25°C)</th>
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</table>

<table>
<thead>
<tr>
<th>Solvent Solubility</th>
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</table>

<table>
<thead>
<tr>
<th>Explosive Properties</th>
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<th>Vapor Pressure</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Evaporation Rate</th>
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<th>Vapor Density</th>
<th>No data available</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Volatiles (Vol.)</th>
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<th>VOC (Vol.)</th>
<th>No data available</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Flash Point</th>
<th>LEL</th>
<th>Flammability (solid, gas)</th>
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<td>&gt;200°F (PMCC)</td>
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<td>No data available</td>
</tr>
<tr>
<td></td>
<td>UEL</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Octanol/Water Partition Coefficient</th>
<th>No data available</th>
</tr>
</thead>
</table>

9.2. Other Information

No additional information available

SECTION 10: Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.
10.2 Chemical Stability
Stable under normal temperatures and pressures.

10.3 Possibility of Hazardous Reactions
No hazardous reactions if handled and stored as recommended.

10.4 Conditions to Avoid
Elevated temperatures

10.5 Incompatible Materials
Oxidizing materials, isocyanates.

10.6 Hazardous Decomposition Products
No data available.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute Toxicity

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS #</th>
<th>LD$_{50}$ oral</th>
<th>LD$_{50}$ dermal rabbit</th>
<th>LC$_{50}$ inhalation rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyether Polyol</td>
<td>9049-71-2</td>
<td>&gt;2000 mg/kg</td>
<td>&gt;2000 mg/kg</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation
- Based on available information, skin corrosion/irritation is not expected under normal conditions of use.

Serious Eye Damage/Irritation
- Based on available information, eye damage/irritation criteria are not met.

Respiratory or Skin Sensitization
- Based on available information, sensitization criteria are not met.

Germ Cell Mutagenicity
- Available studies have not indicated this material to be a mutagen.

Carcinogenicity
- This product does not contain any component that is considered a human carcinogen by IARC, ACGIH, OSHA or NTP.

Reproductive Toxicity
- No data available

Specific Target Organ Toxicity (single exposure)
- No data available

Specific Target Organ Toxicity (repeated exposure)
- No data available

Aspiration Hazard
- No data available

11.2 Potential Health Effects

Inhalation
Acute • Not expected to be a hazard due to low vapor pressure.
Chronic • None known.

Skin
Acute • None known.
Chronic • None known.

Eye
Acute • May cause mild irritation.
Chronic • None known.

Ingestion
Acute • Small amounts swallowed may cause gastrointestinal discomfort.
Chronic • None known.

SECTION 12: Ecological Information

12.1 Ecotoxicity
This product is not expected to cause significant effects in the aquatic environment.

12.2 Persistence and Degradability
No data available

12.3 Bioaccumulative Potential
No data available

12.4 Mobility in Soil
No data available

12.5 Other Adverse Effects
No data available

SECTION 13: Disposal Considerations

13.1 Waste Disposal Method

Product Waste
• Do not dump into any sewers, on the ground, or into any body of water.
• All disposal methods must be in compliance with Federal, State/Provincial, and local regulations.

Packaging Waste
• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport Information

U.S. DOT
Not regulated as hazardous for shipment.
SECTION 15: Regulatory Information

15.1 Regulatory Status
SARA 311/312: None reportable.
SARA 313: None reportable.

15.2 US State Regulations
STATE RIGHT-TO-KNOW: To the best of our knowledge, this product contains no chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. (California Health and Safety Code Section 25249.6).

15.3 Canadian Regulations
DSL: All components of this product are listed on, or exempt from the DSL.

WHMIS Information: Not a “Controlled Product” under WHMIS.

15.4 International Inventories*
United States: All components of this product are listed on the TSCA inventory.
Australia: All components of this product are listed on the AICS.
China: All components of this product are listed on the IECSC.
Japan: All components of this product listed on the ENCS.
Korea: All components of this product are listed on the ECL.
Philippines (PICCS): All components of this product are listed on the PICCS.

*=Although a chemical may be listed on a country’s inventory, it may not indicate a hazard or regulatory control for use.

SECTION 16: Other Information

16.1 HMIS AND NFPA RATINGS

<table>
<thead>
<tr>
<th>HMIS Classification</th>
<th>NFPA Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 0</td>
<td>Health: 0</td>
</tr>
<tr>
<td>Flammability: 1</td>
<td>Flammability: 1</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td>Instability: 0</td>
</tr>
<tr>
<td></td>
<td>Special: None</td>
</tr>
</tbody>
</table>

16.2 EU CLP Relevant Phrase
Not classified

16.3 Preparation By
I.H. Department

16.4 Preparation Date
November 1, 2011

16.5 Last Revision Date

February 17, 2015

16.6 Disclaimer/Statement of Liability

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