Section 1: Product and Company Identification

Cee Kay Supply, Inc
5835 Manchester Avenue
Saint Louis, MO 63110
www.CeeKay.com
(314) 644-3500

Product Code: Propylene

Section 2: Hazards Identification

Hazard Classification:
Flammable (Category 1)
Gases Under Pressure

Hazard Statements:
Contains gas under pressure; may explode if heated
Extremely flammable gas

Precautionary Statements
Prevention:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Response:
Eliminate all ignition sources if safe to do so.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Storage:
Protect from sunlight.
Store in well-ventilated place.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Substance</th>
<th>Chemical Family</th>
<th>Trade Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPYLENE</td>
<td>Hydrocarbons, Aliphatic, Unsaturated</td>
<td>PROPENE; METHYLETHENE; METHYLETHYLENE; 1-PROPYLENE; 1-PROPENE; UN 1077; C3H6</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

<table>
<thead>
<tr>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Note to Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.</td>
<td>Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.</td>
<td>If a large amount is swallowed, get medical attention.</td>
<td>If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.</td>
<td>For inhalation, consider oxygen.</td>
</tr>
</tbody>
</table>

Section 5: Fire Fighting Measures

<table>
<thead>
<tr>
<th>Suitable Extinguishing Media</th>
<th>Products of Combustion</th>
<th>Protection of Firefighters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide, regular dry chemical Large fires: Flood with fine water spray.</td>
<td>Toxic, irritating gases</td>
<td>▪ Any self-contained breathing apparatus with a full facepiece. ▪ Any self-contained breathing apparatus with a full facepiece.</td>
</tr>
</tbody>
</table>

Section 6: Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal Precautions</th>
<th>Environmental Precautions</th>
<th>Methods for Containment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for Cleanup</td>
<td>Other Information</td>
<td></td>
</tr>
<tr>
<td>Evacuate area. Contact emergency personnel</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Section 7: Handling and Storage

<table>
<thead>
<tr>
<th>Handling</th>
<th>Storage</th>
</tr>
</thead>
</table>
Section 8: Exposure Controls/Personal Protection

**Exposure Guidelines**

**PROPYLENE: 500 ppm ACGIH TWA**

**Engineering Controls**

Handle only in fully enclosed systems.

<table>
<thead>
<tr>
<th>Eye Protection</th>
<th>Skin Protection</th>
<th>Respiratory Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.</td>
<td>For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.</td>
<td>Any self-contained breathing apparatus with a full facepiece.</td>
</tr>
</tbody>
</table>

**General Hygiene considerations**

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Appearance</th>
<th>Color</th>
<th>Change in Appearance</th>
<th>Physical Form</th>
<th>Odor</th>
<th>Taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>Clear</td>
<td>Colorless</td>
<td>N/A</td>
<td>Gas</td>
<td>Faint gasoline-like odour</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Flammability</th>
<th>Partition Coefficient</th>
<th>Autoignition Temperature</th>
<th>Upper Explosive Limits</th>
<th>Lower Explosive Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>-162 F (-108 C)</td>
<td>Not available</td>
<td>223.87 (log = 2.35) (estimated from water solubility)</td>
<td>851 F (455 C)</td>
<td>0.111</td>
<td>0.02</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Freezing Point</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Specific Gravity</th>
<th>Water Solubility</th>
<th>pH</th>
<th>Odor Threshold</th>
<th>Evaporation Rate</th>
<th>Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>-53 F (-47 C)</td>
<td>-301 F (-185 C)</td>
<td>7828 mmHg @ 21.1 C</td>
<td>1.5 (Air=1)</td>
<td>Not applicable</td>
<td>0.45</td>
<td>Not applicable</td>
<td>Not available</td>
<td>Not applicable</td>
<td>0.140 cP @ -40 C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Molecular Weight</th>
<th>Molecular Formula</th>
<th>Density</th>
<th>Weight per Gallon</th>
<th>Volatility by Volume</th>
<th>Volatility</th>
<th>Solvent Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.08</td>
<td>C-H3-C-H-C-H2</td>
<td>1.7855 g/L</td>
<td>Not available</td>
<td>100%</td>
<td>Not applicable</td>
<td>Soluble: Alcohol, ether, acetic acid</td>
</tr>
</tbody>
</table>

**Section 10: Stability and Reactivity**

<table>
<thead>
<tr>
<th>Stability</th>
<th>Conditions to Avoid</th>
<th>Incompatible Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>May polymerize. May react on contact with air, heat, light or water.</td>
<td>May polymerize. May react on contact with air, heat, light or water.</td>
<td>Oxidizing materials, halo carbons, halogens, acids, water, nitrogen oxides</td>
</tr>
</tbody>
</table>

**Hazardous Decomposition Products**

Miscellaneous decomposition products

**Possibility of Hazardous Reactions**

May polymerize. Avoid contact with heat, light, air, water or incompatible materials. Polymerizes with evolution of heat.

**Section 11: Toxicology Information**

<table>
<thead>
<tr>
<th>Acute Effects</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>Not available</td>
<td>Tearing, nausea, vomiting, symptoms of drunkenness, suffocation, convulsions, coma</td>
<td></td>
</tr>
</tbody>
</table>
**Eye Irritation**
Liquid: frostbite, blurred vision

**Skin Irritation**
Liquid: blisters, frostbite

**Sensitization**
Central nervous system depression, difficulty breathing, POSSIBLE MUTAGEN

### Chronic Effects

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>Mutagenicity</th>
<th>Reproductive Effects</th>
<th>Developmental Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC: Human Inadequate Evidence, Animal Inadequate Evidence, Group 3; ACGIH: A4 - Not Classifiable as a Human Carcinogen</td>
<td>Available.</td>
<td>Available.</td>
<td>No data</td>
</tr>
</tbody>
</table>

### Section 12: Ecological Information

#### Fate and Transport

<table>
<thead>
<tr>
<th>Eco toxicity</th>
<th>Persistence / Degradability</th>
<th>Bioaccumulation / Accumulation</th>
<th>Mobility in Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish toxicity: Not available Invertibrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available</td>
<td>Relatively non-persistent in the environment. Moderately volatile from water.</td>
<td>0.40 (estimated from water solubility)</td>
<td>Leaches through the soil or the sediment at a slow rate.</td>
</tr>
</tbody>
</table>

### Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

### Section 14: Transportation Information

**U.S. DOT 49 CFR 172.101**

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>ID Number</th>
<th>Hazard Class or Division</th>
<th>Packing Group</th>
<th>Labeling Requirements</th>
<th>Passenger Aircraft or Railcar Quantity Limitations</th>
<th>Cargo Aircraft Only Quantity Limitations</th>
<th>Additional Shipping Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene</td>
<td>UN1077</td>
<td>2.1</td>
<td>Not applicable</td>
<td>2.1</td>
<td>Forbidden</td>
<td>150 kg</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Canadian Transportation of Dangerous Goods**

<table>
<thead>
<tr>
<th>Shipping Name</th>
<th>UN Number</th>
<th>Class</th>
<th>Packing Group / Risk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene</td>
<td>UN1077</td>
<td>2.1</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Section 15: Regulatory Information

**U.S. Regulations**

<table>
<thead>
<tr>
<th>CERCLA Sections</th>
<th>SARA 355.30</th>
<th>SARA 355.40</th>
</tr>
</thead>
</table>

**SARA 370.21**

<table>
<thead>
<tr>
<th>Acute</th>
<th>Chronic</th>
<th>Fire</th>
<th>Reactive</th>
<th>Sudden Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
SARA 372.65
PROPYLENE

OSHA Process Safety
Not regulated.

State Regulations
CA Proposition 65
Not regulated.

Canadian Regulations
WHMIS Classification
A, B1.

National Inventory Status

<table>
<thead>
<tr>
<th>US Inventory (TSCA)</th>
<th>TSCA 12b Export Notification</th>
<th>Canada Inventory (DSL/NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on inventory.</td>
<td>Not listed.</td>
<td>Listed on inventory.</td>
</tr>
</tbody>
</table>

Section 16: Other Information

NFPA Rating

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard