Form Number: 0056-1296
Product Identity: MAPP® Gas (0916-0009)

SECTION I: Material Description

Chemical Name: Liquified Petroleum Gas w/Methyl Acetylene-Propadiene
Chemical Formula: C₃H₄ + Alkane + Alkene Hydrocarbons

SECTION II: Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>Weight %</th>
<th>(Specific Chemical Identity)</th>
<th>PPM OSHA PEL</th>
<th>PPM ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Acetylene Propadiene</td>
<td>44</td>
<td>74-99-7</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Liquidfied Petroleum Gas</td>
<td>56</td>
<td></td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

SECTION III: Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Range:</td>
<td>-54° to -10°F</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>97 psig @ 70°F</td>
</tr>
<tr>
<td>Specific Gravity 60/60°F:</td>
<td>1.48 (Gas), 0.571 (Liquid)</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>-184°F</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic unpleasant odor</td>
</tr>
<tr>
<td>Liquid Density @ 60°F:</td>
<td>4.68 lbs/gal</td>
</tr>
<tr>
<td>Gas Density:</td>
<td>0.110 lb/R³ @ 70°F</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Slight</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Colorless gas</td>
</tr>
</tbody>
</table>

SECTION IV: Fire and Explosion Data

Flash Point (Method Used): 144°F (Closed Cup)
Auto Ignition Temperature: 850°F
LEL: 3.0%
UEL: 11.0%
Extinguishing Media: Water fog, dry chemical foam
Electrical Classification: Class 1, Group not specific

Special Fire Fighting Procedures: DO NOT extinguish. Keep cylinder cool with water fog. If flame is extinguished, remove all sources of ignition and allow contents to vent. Increase ventilation to prevent flammable mixture formation.

Unusual Fire and Explosion Hazards: Gas is heavier than air and may travel a considerable distance to a source of Ignition.

SECTION V: Health Hazard Data

Symptoms or Exposure: A central nervous system depressant and irritant. Inhalation of low concentrations will cause excitement and/or disorientation. Contact with liquid will cause frostbite, irritation or blindness. Being a simple asphyxiant, inhalation at high concentrations so as to exclude an adequate supply of oxygen to the lungs will cause unconsciousness and possible death.
Toxicological Properties: Repeated exposures to tolerable levels has not shown delirious effects. The major property is the exclusion of an adequate supply of oxygen to the lungs.

Recommended First Aid Treatment: Prompt medical attention is mandatory in all cases of overexposure to this fuel gas mixture. Rescue personnel should be equipped with self-contained breathing apparatus and be cognizant of extreme fire and explosion hazard.

Inhalation: Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. Unconscious persons should be moved to an uncontaminated area, given mouth-to-mouth resuscitation and supplemental oxygen. Further treatment should be symptomatic and supportive.

Dermal Contact or Frostbite: Remove contaminated clothing and flush affected areas with lukewarm water. DO NOT use hot water.

Hazardous Mixtures of Other Liquids, Solids or Gases: Produces acetylides when in contact with silver, magnesium, or copper alloys above 65% copper.

SECTION VI: Reactivity Data

Stability: Stable

Incompatibility (Materials to Avoid): Natural rubber, copper alloys above 65% copper, silver, mercury, halogens, acids, metallic sodium potassium, potassium permanganate.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None

SECTION VII: Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: Evacuate all personnel from affected area. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs. If leak is in container or container valve, contact the closest supplier location.

WARNING: Any leaks of MAPP® gas presents great danger of explosion or fire. Keep all sources of ignition away.

Waste Disposal Method: DO NOT attempt to dispose of waste or unused quantities. Return in the shipping container properly labeled, with valve protection cap in place to supplier for proper disposal.

SECTION VIII: Special Protection Information

Personal Protective Equipment and Apparel: Leather gloves and aprons when welding, cutting or brazing. Safety glasses with filter lenses, shade #4 or darker.

Respiratory Protection: Respiratory protection is not normally required. DO NOT enter area of high MAPP® concentration until first purging with an inert gas and then ventilating with air.

Local Exhaust: Provide local exhaust or mechanical ventilation if welding or cutting in confined areas. Use air supplied respirator for extreme confined areas where TLV's may be exceeded when welding, cutting or brazing.

SECTION IX: Special Precautions

Special Labeling Information

DOT Shipping Name: Liquefied Petroleum Gas/Methyl Acetylene-propadiene
DOT Shipping Label: Flammable gas
DOT Hazard Class: Flammable gas
Identification No.: UN 1075