



Division of The BOC Group, Inc.

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MATERIAL SAFETY DATA SHEET

Welding Consumables
and Related Products
Conforms to OSHA 1910.1200

IDENTIFICATION

PRODUCT NAME: Liquified Petroleum Gas
w/Metyl Acetylene-Propadiene

CHEMICAL FAMILY: Gas Mixture

SYNONYMS: MAPP Gas, Metyl Acetylene-
Propadiene Mixture

DOT HAZARD CLASS: Flammable Gas

CAS NUMBER: None

DOT IDENTIFICATION NUMBER: UN 1075

FORMULA: C₃H₄ + Alkane + Alkene
Hydrocarbons

CHEMTREC: 800-424-9300

HEALTH HAZARD DATA

<u>HAZARDOUS INGREDIENTS</u>	<u>CAS</u>	<u>WT %</u>	<u>TLV (ACGIH)</u>	<u>PEL (OSHA)</u>
Methyl Acetylene-Propadiene	74-99-7	44	1000 ppm	1000 ppm
Liquified Petroleum Gas	None	56	1000 ppm	1000 ppm

SYMPTOMS OF EXPOSURE:

A Central Nervous System Depressant and Irritant. Inhalation of low concentrations will cause excitement, 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 possibly death.

TOXICOLOGICAL PROPERTIES:

Repeated exposures to tolerable levels has not shown delerious 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.

PHYSICAL DATA

Boiling Range: -54° to -10°F

Liquid Density @ 60°F: 4.68 lbs/Gal

Vapor Pressure : 97 psig @ 70°F

Gas Density 0.110 lb/ft³ @ 70°F

Specific Gravity 60/60°F: 1.48 (Gas) 0.571 (Liquid)

Solubility in Water: Slight

Freezing Point: -184°F

Appearance and Odor: Colorless gas with characteristic unpleasant odor.

FIRE/EXPLOSION HAZARDS 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.

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:

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 present 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.

SPECIAL PROTECTION INFORMATION

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

Respiratory protection is not normally required. Do not enter area of high MAPP concentration until first purging with 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.

SPECIAL PRECAUTIONS

Special Labeling Information:

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

Special Handling Recommendations:

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when connecting cylinder to lower pressure (<250 psig) piping or systems. Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.

Special Storage Recommendations:

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area of non-combustible construction away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 130°F (54°C). Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated. Use a "first in-first out" inventory system to prevent full cylinders being stored for excessive periods of time. Post "No Smoking or Open Flames" signs in the storage or use area. There should be no sources of ignition in the storage or use area.

Special Packaging Recommendations:

This fuel gas should not be handled or used in metals which form acetylides such as copper, silver, magnesium or their alloys.

Other Recommendations or Precautions:

Earth-ground and bond all lines and equipment associated with the fuel gas system. Electrical equipment should be non-sparking or explosion proof. Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipment of a compressed gas cylinder which has not been filled by the owner or with his (written) consent is a violation of Federal Law (49CFR).