7. Handling and Storage

Electrical Classification:
Class I, Group Not Specified.

Earth bond and ground all lines and equipment associated with the fuel gas system. Electrical equipment should be non-sparking and explosion proof.

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 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.

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 125° F (52° 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 from 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. This fuel gas should not be handled or used in metals which form acetylides, such as copper, silver, magnesium or their alloys.

For additional recommendations consult Compressed Gas Association Pamphlet P-1.

Never carry a compressed gas cylinder or a container of a gas in cryogenic liquid form in an enclosed space such as a car trunk, van or station wagon. A leak can result in a fire, explosion, asphyxiation or a toxic exposure.

8. Exposure Controls, Personal Protection

EXPOSURE LIMITS:

INGREDIENT	% VOLUME	PEL-OSHA [2]	TLV-ACGIH [3]	LD_{50}, OR LC_{50} Route/Species
Liquefied Petroleum Gas FORMULA: Mixture CAS: 68476-85-7 RTECS #: SE7545000	56.0	1000 ppm TWA	1000 ppm TWA	Not Available
Methyl Acetylene-Propadiene FORMULA: Mixture CAS: 59355-75-8 RTECS #: UK4920000	44.0	1000 ppm TWA	1000 ppm TWA 1250 ppm STEL	Not Available

[1] Refer to individual state of provincial regulations, as applicable, for limits which may be more stringent than those listed here.
[2] As stated in 29 CFR 1910, Subpart Z (revised July, 1, 1993).
[3] As stated in the ACGIH 1994-1995 Threshold Limit Values for Chemical Substances and Physical Agents.

ENGINEERING CONTROLS:
Provide local exhaust or mechanical ventilation if welding or cutting in confined areas. If this gas is handled routinely where the potential for leaks exists, all electrical equipment must be rated for use in potentially flammable atmospheres. Consult the National Electrical Code for details.

EYE/FACE PROTECTION:
Safety glasses with filter lenses, shade #4 or darker.

SKIN PROTECTION:
Leather gloves and apron when welding, cutting or brazing.

RESPIRATORY PROTECTION:
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.

9. Physical and Chemical Properties

PARAMETER	VALUE	UNITS
Physical state (gas, liquid, solid)	: Gas	
Vapor Pressure at 70° F	: 97	psia
Vapor density (Air = 1)	: Not Available	
Evaporation Point	: Not Available	
Boiling point	: -54 to -10	°F
	: -48 to -23	°C
Freezing point	: -184	°F
	: -120	°C
pH	: Not Available	
Specific gravity	: 0.571 (Liquid)	
Oil/water partition coefficient	: Not Available	
Solubility (H2O)	: Slight	
Odor threshold	: Not Available	
Odor and appearance	: A colorless gas with a characteristic, unpleasant odor.	