

# PURE GASES

## METHANE CH<sub>4</sub>

**General Characteristics:** A colorless, odorless, and flammable gas.

**Health Hazards:** A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>RESEARCH GRADE</b> Min. Purity 99.995% Principle Impurities: Air < 20 ppm, C <sub>2</sub> H <sub>6</sub> < 1 ppm, CO < 1 ppm, H <sub>2</sub> O < 5 ppm, CO <sub>2</sub> < 1 ppm, C <sub>2</sub> H <sub>2</sub> < 20 ppm	049	360 CF	Double-stage high purity regulator, refer to page 137  High purity lecture bottle regulator, refer to page 148
	044	300 CF	
	016	100 CF	
	LB	2 CF	
<b>ULTRA HIGH PURITY</b> Min. Purity 99.99%	049	360 CF	
	044	300 CF	
	016	100 CF	
	LB	2 CF	
<b>C.P. GRADE</b> Min. Purity 99.0%	049	360 CF	
	044	300 CF	
	016	100 CF	
	LB	2 CF	
<b>TECHNICAL GRADE</b> Min. Purity 98.0%	049	360 CF	
	044	300 CF	
	016	100 CF	

### TECHNICAL INFORMATION

Molecular Weight .....	16.04	Dot Name .....	Methane, Compressed
Specific Volume .....	23.80CF/lb	UN No. ....	UN1971
Fire Potential .....	5.0 - 15.4% in Air	Dot Class .....	2.1
TLV-TWA .....	None established	Dot Label .....	Flammable Gas
CGA Valve .....	350	Cas Registry .....	74-82-8
LB .....	180		

## METHYL BROMIDE CH<sub>3</sub>Br

**General Characteristics:** A colorless, poisonous, odorless, and liquefied gas.

**Health Hazards:** Toxic. Attacks the central nervous system and will result in dizziness, nausea, and headaches. Contact with skin causes burns.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>C.P. GRADE</b> Min. Purity 99.5%	E47	50 lbs	Single-stage high purity regulator, refer to page 142  High purity lecture bottle regulator, refer to page 148
	E10	10 lbs	
	LB	1 lb	

### TECHNICAL INFORMATION

Molecular Weight .....	94.94	Dot Name .....	Methyl Bromide
Specific Volume .....	4.1CF/lb	UN No. ....	UN1062
Fire Potential .....	10 - 16% in Air	Dot Class .....	2.3
TLV-TWA .....	5 ppm (ACGIH 1991-1992)	Dot Label .....	Poison Gas, Flammable Gas
CGA Valve .....	330	Cas Registry .....	74-83-9
LB .....	180	Cylinder Pressure @ 70°F .....	13 psig