

# PURE GASES

## ACETYLENE C<sub>2</sub>H<sub>2</sub>

**General Characteristics:** A colorless, flammable gas with an odor similar to garlic. Shipped and stored in dissolved acetone. Can decompose spontaneously if pressure exceeds 15 PSIG.  
**Health Hazards:** A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>INSTRUMENTAL GRADE</b> Min. Purity 99.8%	<sup>1</sup> 380	330 CF	Single-stage high purity regulator, refer to page 142 Flash back arrestor, refer to page 158
	<sup>2</sup> Portable	39 CF	

### TECHNICAL INFORMATION

Molecular Weight .....	26.038	UN No. ....	UN1001
Specific Volume .....	14.7CF/lb	Dot Class .....	2.1
Fire Potential .....	2.5 - 80% in Air	Dot Label .....	Flammable Gas
CGA Valve .....	510	Cas Registry .....	74-86-2
LB .....	N.A.	Cylinder Pressure @ 70°F .....	250 psig
Dot Name .....	Acetylene, Dissolved		

<sup>1</sup>Size 380 = 12" (o.d.) x 42" (h)

<sup>2</sup>Size Portable = 6" (o.d.) x 22" (h)

## AIR

**General Characteristics:** A colorless, nonflammable and odorless gas.  
**Health Hazards:** Non hazardous at atmospheric pressure.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>ULTRA ZERO</b> THC < 0.1 ppm, CO <sub>2</sub> < 1 ppm CO < 1 ppm, H <sub>2</sub> O < 3 ppm	049	310 CF	Double-stage high purity regulator, refer to page 137  High purity lecture bottle regulator, refer to page 148
	044	232 CF	
	016	88 CF	
	008	38 CF	
<b>VEHICLE EMISSION ZERO</b> THC < 1 ppm, CO < 1 ppm CO <sub>2</sub> < 400 ppm, NO <sub>x</sub> < 0.1 ppm	049	310 CF	
	044	232 CF	
	016	88 CF	
	008	38 CF	
	Meets Federal Register Specification Title 40 CFR 86. 114-78		
<b>ZERO GRADE</b> THC < 1 ppm	049	310 CF	
	044	232 CF	
	016	88 CF	
	008	38 CF	
	LB	2 CF	
<b>CO<sub>2</sub> FREE</b> Total Carbon Dioxide Equivalent < 5 ppm	044	232 CF	
	016	88 CF	
<b>DRY GRADE</b> Dew Point - 80°F (8 ppm)	049	310 CF	
	044	232 CF	
	016	88 CF	
	LB	2 CF	

### TECHNICAL INFORMATION

Molecular Weight .....	28.96	Dot Name .....	Air, Compressed
Specific Volume .....	13.3CF/lb	UN No. ....	UN1002
Fire Potential .....	Nonflammable	Dot Class .....	2.2
CGA Valve .....	590	Dot Label .....	Nonflammable Gas
LB .....	180	Cas Registry .....	25635-88-5