

# PURE GASES

## HYDROGEN SELENIDE H<sub>2</sub>Se

- See Electronic Gas Section page 94 -

## HYDROGEN SULFIDE H<sub>2</sub>S

**General Characteristics:** A colorless, flammable and liquefied gas with a detectable odor.

**Health Hazards:** Toxic. Causes headaches, discomfort, diarrhea and breathing paralysis. Warning: the sense of smell is anesthetized quickly by hydrogen sulfide.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>C.P.</b> Min. Purity 99.5% (Liquid Phase)	044	27.2 kg	Stainless-steel high purity single-stage regulator, refer to page 142  Stainless-steel lecture bottle regulator, refer to page 147
	016	9.1 kg	
	010	5.0 kg	
	LB	227 g	
<b>TECHNICAL</b> Min. Purity 99.0% (Liquid Phase)	044	27.2 kg	
	016	9.1 kg	

### TECHNICAL INFORMATION

Molecular Weight.....	34.1	Dot Name.....	Hydrogen Sulfide, Liquefied
Specific Volume.....	11.2CF/lb	UN No.....	UN1053
Fire Potential.....	4.0 - 44% in Air	Dot Class.....	2.3
TLV-TWA.....	10 ppm (ACGIH 1991-1992)	Dot Label.....	Poison Gas, Flammable Gas
CGA Valve.....	330	Cas Registry.....	7783-06-4
LB.....	180	Cylinder Pressure @ 70°F.....	252 psig

## ISOBUTANE i-C<sub>4</sub>H<sub>10</sub>

**General Characteristics:** A colorless, flammable and liquefied gas with a faint odor.

**Health Hazards:** A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>RESEARCH</b> Min. Purity 99.99% CO <sub>2</sub> < 10 ppm, H <sub>2</sub> O < 5 ppm, N <sub>2</sub> < 10 ppm, O <sub>2</sub> < 10 ppm, Other HC < 50 ppm	18 LP	7.7 kg	Single-stage high purity regulator, refer to page 140  High purity lecture bottle regulator, refer to page 146
	010	3.5 kg	
	LB	170 g	
<b>INSTRUMENTAL</b> Min. Purity 99.5% (Liquid Phase)	110 LP	52.7 kg	
	18 LP	7.7 kg	
	010	3.5 kg	
<b>C.P.</b> Min. Purity 99.0% (Liquid Phase)	110 LP	52.7 kg	
	18 LP	7.7 kg	
	010	3.5 kg	
	LB	170 g	

### TECHNICAL INFORMATION

Molecular Weight.....	58.12	Dot Name.....	Isobutane
Specific Volume.....	6.5CF/lb	UN No.....	UN1969
Fire Potential.....	1.8 - 8.4% in Air	Dot Class.....	2.1
TLV-TWA.....	None established	Dot Label.....	Flammable Gas
CGA Valve.....	510	Cas Registry.....	75-28-5
LB.....	180	Cylinder Pressure @ 70°F.....	31 psig