

PURE GASES

HYDROGEN SELENIDE H_2Se

– See Electronic Gases Section –

HYDROGEN SULFIDE H_2S

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
C.P. GRADE Min. Purity 99.5% (Liquid Phase)	044	60 lbs	Stainless-steel high purity single-stage regulator, refer to page 144 Stainless-steel lecture bottle regulator, refer to page 149
	016	20 lbs	
	008	9 lbs	
	LB	0.5 lb	
TECHNICAL GRADE Min. Purity 99.0% (Liquid Phase)	044	60 lbs	
	016	20 lbs	

TECHNICAL INFORMATION

Molecular Weight	34.08	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	110	Cylinder Pressure @ 70°F	252 psig

ISOBUTANE C_4H_{10}

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
RESEARCH GRADE Min. Purity 99.99% $O_2 < 10$ ppm, $N_2 < 10$ ppm, $H_2O < 5$ ppm, $CO_2 < 10$ ppm, Other HC < 50 ppm	E01	1 lb	Single-stage high purity regulator, refer to page 142 High purity lecture bottle regulator, refer to page 148
	LB	0.375 lbs	
INSTRUMENTAL GRADE Min. Purity 99.5% (Liquid Phase)	LP239	116 lbs	
	044	40 lbs	
	016	17 lbs	
	LB	0.375 lb	
C.P. GRADE Min. Purity 99.0% (Liquid Phase)	LP239	116 lbs	
	044	40 lbs	
	016	17 lbs	
	LB	0.375 lb	

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