

PURE GASES

HYDROGEN CHLORIDE HCl

General Characteristics: A colorless, nonflammable, liquefied gas with a penetrating odor. Fumes in moist air. Corrosive in the presence of moisture.

Health Hazards: Toxic. Attacks the mucous membranes and the eyes. Causes lung damage. Has a penetrating odor warning.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ELECTRONIC GRADE Min. Purity 99.995%	- See Electronic Gases Section -		
TECHNICAL GRADE Min. Purity 99.0% (Liquid Phase)	044	60 lbs	Stainless-steel high purity single-stage regulator, refer to page 144
	016	20 lbs	
	008	10 lbs	Stainless-steel lecture bottle regulator, refer to page 149
	LB	0.5 lb	

TECHNICAL INFORMATION

Molecular Weight	36.46	UN No.	UN1050
Specific Volume	10.6CF/lb	Dot Class	2.3
Fire Potential	Nonflammable	Dot Label	Poison Gas, Corrosive
TLV-TWA	5 ppm (ACGIH 1991-1992)	Cas Registry	7647-02-0
CGA Valve	330	Recommended Shelf Life	6 months
LB	180	Cylinder Pressure @ 70°F	613 psig
Dot Name	Hydrogen Chloride, Anhydrous		

HYDROGEN FLUORIDE HF

General Characteristics: A colorless, nonflammable, and liquefied gas with a penetrating odor

Health Hazards: Toxic. Attacks the eyes and mucous membranes

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
HP GRADE Min. Purity 99.9% (Liquid Phase)	008	9 lbs	Stainless-steel high purity single-stage regulator, refer to page 144 Stainless-steel lecture bottle regulator, refer to page 149
	003	3.5 lbs	

TECHNICAL INFORMATION

Molecular Weight	20.0	Dot Name	Hydrogen Fluoride, Anhydrous
Specific Volume	19.2CF/lb	UN No.	UN1052
Fire Potential	Nonflammable	Dot Class	8
TLV-TWA	3 ppm (ACGIH 1991-1992)	Dot Label	Corrosive, Poison
CGA Valve	670	Cas Registry	7783-06-4
LB	110	Cylinder Pressure @ 70°F	0.9 psig

¹Size 003 = 4"(o.d) x 16" (h)

HYDROGEN IODIDE HI

General Characteristics: A colorless, nonflammable, and liquefied gas with a penetrating odor, Corrosive.

Health Hazards: Toxic. Attacks the eyes and mucous membranes, can cause lung damage.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
HP GRADE Min. Purity 99.8% (Liquid Phase)	LB	0.75 lb	Stainless-steel lecture bottle regulator, refer to page 149

TECHNICAL INFORMATION

Molecular Weight	127.91	Dot Name	Hydrogen Iodide, Anhydrous
Specific Volume	3.0CF/lb	UN No.	UN2197
Fire Potential	Nonflammable	Dot Class	2.2
TLV-TWA	None established	Dot Label	Nonflammable Gas
LB	180	Cas Registry	10034-85-2
		Cylinder Pressure @ 70°F	95 psig