

PURE GASES

HALOCARBON-14 CF₄ (Tetrafluoromethane)

General Characteristics: A colorless, nonflammable, and odorless gas.
Health Hazards: A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ULSI GRADE Min. Purity 99.999%		- See Electronic Gases Section -	
C.P. GRADE Min. Purity 99.99% (Liquid Phase)	044	70 lbs	Double-stage high purity regulator, refer to page 136
	016	11 lbs	High purity lecture bottle regulator, refer to page 148
	LB	0.1 lb	

TECHNICAL INFORMATION

Molecular Weight	88.005	Dot Name	Tetrafluoromethane
Specific Volume	4.4CF/lb	UN No.	UN1982
Fire Potential	Nonflammable	Dot Class	2.2
TLV-TWA	None established	Dot Label	Nonflammable Gas
CGA Valve	320	Cas Registry	75-73-0
LB	180		

HALOCARBON-22 CHClF₂ (Chlorodifluoromethane)

General Characteristics: A colorless, nonflammable, liquefied, and odorless gas.
Decomposes at high temperatures to toxic substances.
Health Hazards: Narcotic at high concentrations.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
C.P. GRADE Min. Purity 99.9% (Liquid Phase)	¹ DRD	50 lbs	Single-stage high purity regulator, refer to page 142
	¹ DRE	30 lbs	High purity lecture bottle regulator, refer to page 148
	LB	0.75 lb	

TECHNICAL INFORMATION

Molecular Weight	86.47	Dot Name	Chlorodifluoromethane
Specific Volume	4.4CF/lb	UN No.	UN1018
Fire Potential	Nonflammable	Dot Class	2.2
TLV-TWA	1000 ppm (ACGIH 1991-1992)	Dot Label	Nonflammable Gas
CGA Valve	N.A.	Cas Registry	75-45-6
LB	180	Cylinder Pressure @ 70°F	121.4 psig

¹Size DRD & DRE are nonreturnable container with 1/4 inch flare outlet.

HALOCARBON-23 CHF₃ (Fluoroform)

General Characteristics: A colorless, nonflammable, and liquefied gas.
Health Hazards: Causes dizziness in high concentrations.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ULSI GRADE Min. Purity 99.999%		- See Electronic Gases Section -	
C.P. GRADE Min. Purity 99.95% (Liquid Phase)	044	70 lbs	Single-stage high purity regulator, refer to page 136
	016	11 lbs	High purity lecture bottle regulator, refer to page 148
	LB	0.5 lb	

TECHNICAL INFORMATION

Molecular Weight	70.014	Dot Name	Trifluoromethane
Specific Volume	5.5CF/lb	UN No.	UN1984
Fire Potential	Nonflammable	Dot Class	2.2
TLV-TWA	None established	Dot Label	Nonflammable Gas
CGA Valve	660	Cas Registry	75-46-7
LB	180	Cylinder Pressure @ 70°F	635 psig