

# PURE GASES

## HALOCARBON-12 CCl<sub>2</sub>F<sub>2</sub> (Dichlorodifluoromethane)

**General Characteristics:** A colorless, non-flammable and non-corrosive gas. Has an ether-like odor in high concentrations. Decomposes at high temperatures to toxic substances.

**Health Hazards:** A simple asphyxiant in high concentrations.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>C.P.</b> Min. Purity 99.9% (Liquid Phase)	<sup>1</sup> DRD <sup>1</sup> DRE LB	22.7 kg 13.6 kg 340 g	Single-stage high purity regulator, refer to page 140  High purity lecture bottle regulator, refer to page 146

### TECHNICAL INFORMATION

Molecular Weight.....	120.9	Dot Name.....	Dichlorodifluoromethane
Specific Volume.....	3.13CF/lb	UN No.....	UN1028
Fire Potential.....	Non-flammable	Dot Class.....	2.2
TLV-TWA.....	1000 ppm (ACGIH 1991-1992)	Dot Label.....	Non-flammable Gas
CGA Valve.....	N/A	Cas Registry.....	75-71-8
LB.....	180	Cylinder Pressure @ 70°F.....	70.2 psig

<sup>1</sup>Size DRD & DRE are non-returnable containers with 1/4 inch flare outlet.

## HALOCARBON-13 CClF<sub>3</sub> (Chlorotrifluoromethane)

**General Characteristics:** A colorless, non-flammable and non-corrosive gas. Decomposes at high temperatures to toxic substances.

**Health Hazards:** A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>C.P.</b> Min. Purity 99.9% (Liquid Phase)	044 016 LB	30 kg 10 kg 340 g	Single-stage high purity regulator, refer to page 133  High purity lecture bottle regulator, refer to page 146

### TECHNICAL INFORMATION

Molecular Weight.....	104.5	Dot Name.....	Chlorotrifluoromethane
Specific Volume.....	3.5CF/lb	UN No.....	UN1022
Fire Potential.....	Non-flammable	Dot Class.....	2.2
TLV-TWA.....	None established	Dot Label.....	Non-flammable Gas
CGA Valve.....	660	Cas Registry.....	75-72-9
LB.....	180	Cylinder Pressure @ 70°F.....	456.9 psig

## HALOCARBON-13B1 CBrF<sub>3</sub> (Bromotrifluoromethane)

**General Characteristics:** A colorless, non-flammable and non-corrosive gas. Decomposes at high temperatures to toxic substances.

**Health Hazards:** A simple asphyxiant at high concentrations.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>C.P.</b> Min. Purity 99.7% (Liquid Phase)	044 016 LB	30 kg 10 kg 340 g	Single-stage high purity regulator, refer to page 140  High purity lecture bottle regulator, refer to page 146

### TECHNICAL INFORMATION

Molecular Weight.....	148.9	Dot Name.....	Bromotrifluoromethane
Specific Volume.....	2.6CF/lb	UN No.....	UN1009
Fire Potential.....	Non-flammable	Dot Class.....	2.2
TLV-TWA.....	1000 ppm (ACGIH 1991-1992)	Dot Label.....	Non-flammable Gas
CGA Valve.....	660	Cas Registry.....	75-63-8
LB.....	180	Cylinder Pressure @ 70°F.....	189 psig