

# PURE GASES

## DEUTERIUM D<sub>2</sub>

**General Characteristics:** A colorless, flammable and odorless gas.

**Health Hazards:** A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>RESEARCH</b>	044	5.0 m <sup>3</sup>	Double-stage high purity regulator, refer to page 134
Min. Chemical Purity 99.999%	016	2.1 m <sup>3</sup>	
Min. Isotopic Purity 99.8%	008	1.0 m <sup>3</sup>	High purity lecture bottle regulator, refer to page 146
CO <sub>2</sub> < 1 ppm, CO < 1 ppm,	D2	200 L	
HD < 3000 ppm, H <sub>2</sub> < 100 ppm,	LB	50 L	
H <sub>2</sub> O < 1 ppm, N <sub>2</sub> < 1 ppm,			
O <sub>2</sub> < 1 ppm, THC (as CH <sub>4</sub> ) < 1 ppm			

### TECHNICAL INFORMATION

Molecular Weight.....	4.03	Dot Name.....	Compressed Gas NOS
Specific Volume.....	.96.2CF/lb	UN No.....	1957
Fire Potential.....	4.9 - 75% in Air	Dot Class.....	2.1
TLV-TWA.....	None established	Dot Label.....	Flammable Gas
CGA Valve.....	350	Cas Registry.....	7782-39-0
LB.....	180		

<sup>1</sup>Size D2 (Non-Refillable) = 4" (o.d.) x 14" (h)

## DIBORANE B<sub>2</sub>H<sub>6</sub>

- See Electronic Gas Section page 73 -

## DICHLORODIFLUOROMETHANE CCl<sub>2</sub>F<sub>2</sub>

- See Halocarbon 12 page 20 -

## DICHLOROSILANE SiH<sub>2</sub>Cl<sub>2</sub>

- See Electronic Gas Section page 75 -

## DIMETHYLAMINE (CH<sub>3</sub>)<sub>2</sub>NH

**General Characteristics:** A colorless, flammable and liquefied gas with a high ammonia and fish-like odor.

**Health Hazards:** Toxic. Irritates the eyes and the mucous membranes. Can cause skin allergies.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
<b>ANHYDROUS</b>	044	18.1 kg	Stainless-steel high purity single-stage regulator, refer to page 142
Min. Purity 99.5%	016	6.8 kg	
(Liquid Phase)	LB	170 g	Stainless-steel lecture bottle regulator, refer to page 147

### TECHNICAL INFORMATION

Molecular Weight.....	45.08	Dot Name.....	Dimethylamine, Anhydrous
Specific Volume.....	8.6CF/lb	UN No.....	UN1032
Fire Potential.....	2.8 - 14.4% in Air	Dot Class.....	2.1
TLV-TWA.....	10 ppm (ACGIH 1991-1992)	Dot Label.....	Flammable Gas
CGA Valve.....	705	Cas Registry.....	124-40-3
LB.....	180	Cylinder Pressure @ 70°F.....	11 psig