

# 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 GRADE</b> Min. Purity 99.8% HD < 3000 ppm, H <sub>2</sub> < 100 ppm, N <sub>2</sub> < 1 ppm, H <sub>2</sub> O < 1 ppm O <sub>2</sub> < 1 ppm, THC < 1 ppm	044	500 L	Double-stage high purity regulator, refer to page 137  High purity lecture bottle regulator, refer to page 148
	016	2100 L	
	008	1000 L	
	<sup>1</sup> D2	200 L	
	LB	50 L	
<b>ULTRA HIGH PURITY</b> Min. Purity 99.5% HD < 5000 ppm, H <sub>2</sub> < 100 ppm, N <sub>2</sub> < 5 ppm, H <sub>2</sub> O < 5 ppm O <sub>2</sub> < 1 ppm, THC < 1 ppm	044	5000 L	
	016	2100 L	
	008	1000 L	
	<sup>1</sup> D2	200 L	
	LB	50 L	

### TECHNICAL INFORMATION

Molecular Weight .....	4.03	Dot Name .....	Compressed Gas NOS
Specific Volume .....	96.2CF/lb	UN No. ....	UN1954
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 Gases Section –

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

– See Halocarbon 12 –

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

– See Electronic Gases Section –

## 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 GRADE</b> Min. Purity 99.5% (Liquid Phase)	LP239	125 lbs	Stainless-steel high purity single-stage regulator, refer to page 144 Stainless-steel lecture bottle regulator, refer to page 149
	LP26	10 lbs	
	LB	0.375 lb	

### 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