

PURE GASES

DEUTERIUM D₂

General Characteristics: A colorless, flammable and odorless gas.

Health Hazards: A simple asphyxiant.

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

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

DIBORANE B₂H₆

- See Electronic Gas Section page 73 -

DICHLORODIFLUOROMETHANE CCl₂F₂

- See Halocarbon 12 page 20 -

DICHLOROSILANE SiH₂Cl₂

- See Electronic Gas Section page 75 -

DIMETHYLAMINE (CH₃)₂NH

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 |
|------------------------|---------------|----------|---|
| ANHYDROUS | 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 |