

PURE GASES

DIMETHYL ETHER (CH₃)₂O

General Characteristics: A colorless, flammable and liquefied gas with an ether-like odor.

Health Hazards: Has an anesthetic effect in high concentrations. Contact with a liquid can cause cold burns.

| GAS GRADE/PURITY SPEC. | CYLINDER SIZE | CONTENTS | EQUIPMENT RECOMMENDATIONS |
|--|---------------|----------|--|
| C.P. Min. Purity 99.8% (Liquid Phase) | 044 | 20 kg | Single-stage high purity regulator, refer to page 140 |
| | 016 | 9.0 kg | |
| | 002 | 0.9 kg | High purity lecture bottle regulator, refer to page 146 |
| | LB | 227 g | |

TECHNICAL INFORMATION

| | | | |
|-----------------------|------------------|-------------------------------|----------------|
| Molecular Weight..... | 46.07 | Dot Name..... | Dimethyl Ether |
| Specific Volume..... | 8.4CF/lb | UN No..... | UN1033 |
| Fire Potential..... | 3.4 - 27% in Air | Dot Class..... | 2.1 |
| TLV-TWA..... | None established | Dot Label..... | Flammable Gas |
| CGA Valve..... | 510 | Cas Registry..... | 115-10-6 |
| LB..... | 180 | Cylinder Pressure @ 70°F..... | 62.3 psig |

ETHANE C₂H₆

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

Health Hazards: A simple asphyxiant.

| GAS GRADE/PURITY SPEC. | CYLINDER SIZE | CONTENTS | EQUIPMENT RECOMMENDATIONS |
|---|---------------|----------|--|
| RESEARCH Min. Purity 99.99% (Liquid Phase) CO/CO ₂ < 5 ppm, H ₂ O < 5 ppm, N ₂ < 5 ppm, O ₂ < 2 ppm, Other HC < 50 ppm | 044 | 14.5 kg | Double-stage high purity regulator, refer to page 134 |
| | 016 | 4.5 kg | |
| | 010 | 3.6 kg | High purity lecture bottle regulator, refer to page 146 |
| | LB | 113 g | |
| C.P. Min. Purity 99.5% (Liquid Phase) CO/CO ₂ < 30 ppm, H ₂ O < 10 ppm, N ₂ < 100 ppm, O ₂ < 25 ppm, Other HC < 4000 ppm | 044 | 14.5 kg | |
| | 016 | 4.5 kg | |
| | 010 | 3.6 kg | |
| | LB | 113 g | |

TECHNICAL INFORMATION

| | | | |
|-----------------------|--------------------|-------------------------------|--------------------|
| Molecular Weight..... | 30.07 | Dot Name..... | Ethane, Compressed |
| Specific Volume..... | 12.8CF/lb | UN No..... | UN1033 |
| Fire Potential..... | 3.0 - 12.4% in Air | Dot Class..... | 2.1 |
| TLV-TWA..... | None established | Dot Label..... | Flammable Gas |
| CGA Valve..... | 350 | Cas Registry..... | 74-84-0 |
| LB..... | 180 | Cylinder Pressure @ 70°F..... | 544 psig |

ETHYL CHLORIDE C₂H₅Cl

General Characteristics: A colorless, flammable and liquefied gas with an ether-like odor.

Health Hazards: A simple asphyxiant. Has an anesthetic effect in high concentrations. Forms toxic products upon combustion or heating.

| GAS GRADE/PURITY SPEC. | CYLINDER SIZE | CONTENTS | EQUIPMENT RECOMMENDATIONS |
|---|---------------|----------|--|
| C.P. Min. Purity 99.7% (Liquid Phase) | 016 | 11.3 kg | Stainless-steel high purity single-stage regulator, refer to page 142 |
| | LB | 227 g | |
| | | | Stainless-steel lecture bottle regulator, refer to page 147 |

TECHNICAL INFORMATION

| | | | |
|-----------------------|----------------------------|-------------------------------|----------------|
| Molecular Weight..... | 64.5 | Dot Name..... | Ethyl Chloride |
| Specific Volume..... | 6.0CF/lb | UN No..... | UN1037 |
| Fire Potential..... | 3.8 - 15.4% in Air | Dot Class..... | 2.1 |
| TLV-TWA..... | 1000 ppm (ACGIH 1991-1992) | Dot Label..... | Flammable Gas |
| CGA Valve..... | 510 | Cas Registry..... | 75-00-3 |
| LB..... | 180 | Cylinder Pressure @ 70°F..... | 5.3 psig |