### **PURE GASES**

# ARSINE AsH<sub>3</sub>

#### - See Electronic Gases Section -

# **BORON TRICHLORIDE BCI**<sub>3</sub>

**General Characteristics:** A colorless, corrosive, and liquefied gas which is broken down by water to hydrogen chloride and boric acid. Penetrating odor. Forms white smoke in humid air.

**Health Hazards:** Toxic. Attacks eyes and the mucous membranes. Can cause lung damage.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ELECTRONIC GRADE Min. Purity 99.99%		- See Electronic	Gases Section -
C.P. GRADE Min. Purity 99.9% (Liquid Phase)	044 016 008 LB	100 lbs 40 lbs 10 lbs 1 lb	Stainless-steel high purity single-stage regulator, refer to page 144 Stainless-steel lecture bottle regulator, refer to page 149

TECHNICAL INFORMATION					
Molecular Weight       117.17         Specific Volume       3.3CF/lb         Fire Potential       Nonflammable         TLV-TWA       None established         CGA Valve       660         LB       180	Dot Name         Boron Trichloride           UN No.         UN1741           Dot Class         2.3           Dot Label         Poison Gas, Corrosive           Cas Registry         10294-35-1           Cylinder Pressure @ 70°F         4.4 psig				

### **BORON TRIFLUORIDE BF**<sub>3</sub>

**General Characteristics:** A colorless, nonflammable, and compressed gas which is broken down by water to hydrogen fluoride and boric acid. Penetrating odor. Forms white smoke in humid air.

**Health Hazards:** Toxic. Attacks eyes and the mucous membrances. Can cause lung damage and a high concentration will cause burns on the skin similar to those that are caused by hydrogen fluoride.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ELECTRONIC GRADE Min. Purity 99.99%	- See Electronic Gases Section -		
C.P. GRADE Min. Purity 99.5%	044 008 LB	60 lbs 5.5 lbs 0.375 lbs	Stainless-steel high purity double-stage regulator, refer to page 146 Stainless-steel lecture bottle regulator, refer to page 149

TECHNICAL INFORMATION						
Molecular Weight       67.82         Specific Volume       5.6CF/lb         Fire Potential       Nonflammable         TLV-TWA       1 ppm (ACGIH 1991-1992)         CGA Valve       330         LB       180	Dot Name         Boron Trifluoride           UN No.         UN1008           Dot Class         2.3           Dot Label         Poison Gas           Cas Registry         7637-07-2           Cylinder Pressure @ 70°F         1600 psig					