

PURE GASES

AMMONIA NH₃

General Characteristics: A colorless, nonflammable and liquefied gas with a strong smell.

Health Hazards: Toxic. Highly irritating to the mucous membranes and eyes. Contact with the skin causes severe burns.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
ELECTRONIC GRADE Min. Purity 99.999%		- See Electronic Gases Section -	
ANHYDROUS GRADE Min. Purity 99.99% (Liquid phase)	049	150 lbs	Stainless-steel high purity single-stage regulator, refer to page 144
	016	15 lbs	
	008	2 lbs	Stainless-steel lecture bottle regulator, refer to page 149
	LB	0.375 lbs	

TECHNICAL INFORMATION

Molecular Weight	17.031	Dot Name	Ammonia, Anhydrous, Liquefied
Specific Volume	22.6CF/lb	UN No.	UN1005
Fire Potential	15 - 28% in Air	Dot Class	2.2
TLV-TWA	25 ppm (ACGIH 1991-1992)	Dot Label	Nonflammable Gas, Inhalation Hazard
CGA Valve	705	Cas Registry	7664-41-7
LB	110	Cylinder Pressure @ 70°F	114 psig

ARGON Ar

General Characteristics: A colorless, nonflammable and odorless gas.

Health Hazards: A simple asphyxiant.

GAS GRADE/PURITY SPEC.	CYLINDER SIZE	CONTENTS	EQUIPMENT RECOMMENDATIONS
RESEARCH GRADE Min. Purity 99.99999% Total Impurities < 100 ppb, Certificate of Analysis provided for each cylinder	80AL	79 CF	Stainless-steel high purity double-stage regulator, refer to page 146
SCIENTIFIC GRADE Min. Purity 99.99999% Sum of N ₂ , O ₂ , CO, CO ₂ , THC and H ₂ O < 1 ppm	049	336 CF	Stainless-steel lecture bottle regulator, refer to page 149
	044	248 CF	
	016	88 CF	
	LB	2 CF	
VLSI GRADE Min. Purity 99.9995%		- See Electronic Gases Section -	
ULTRA HIGH PURITY Min. Purity 99.999%, O ₂ < 1 ppm, N ₂ < 5 ppm, H ₂ < 1 ppm, H ₂ O < 1 ppm, THC < 1 ppm	049	336 CF	Double-stage high purity regulator, refer to page 137
	044	278 CF	
	016	88 CF	
ZERO GRADE Min. Purity 99.998%, THC < 0.5 ppm	049	336 CF	High purity lecture bottle regulator, refer to page 148
	044	278 CF	
	016	88 CF	
HIGH PURITY Min. Purity 99.995%	049	336 CF	
	044	278 CF	
	016	88 CF	
	LB	2 CF	
HIGH PRESSURE Min. Purity 99.998%	¹ 3HP (6000 psig)	575 CF	Piston regulator, refer to page 147
	² 2HP (3500 psig)	395 CF	

TECHNICAL INFORMATION

Molecular Weight	39.95	Dot Name	Argon, Compressed
Specific Volume	9.7CF/lb	UN No.	UN1006
Fire Potential	Nonflammable	Dot Class	2.2
TLV-TWA	None established	Dot Label	Nonflammable Gas
CGA Valve	580, 3HP-677, 2HP-680	Cas Registry	7440-37-1
LB	180		

¹Size 3HP = 10" (o.d.) x 51" (h)

²Size 2HP = 9" (o.d.) x 50" (h)