AIR LIQUIDE
SPECIALTY GASES

Ammonia NH_3

Synonym: Anhydrous Ammonia

Physical Constants of Gas
Molecular Weight 17.031
Specific Volume ..... 22.6 CF/lb. (1.4 m^3/kg)
Boiling Point ..... -28.2°F (-33.4°C) 1 atm
Gas Density 70°F 1 atm ..... 0.73 kg/m^3

Cylinder Data
CGA Valve Outlet
CHEMGAZ 3 and 2 ..... 660, 705
CHEMGAZ 1 240
Electronic Grades 720
LB CGA Valve Outlet 110

Shipping Data
Shipping Class 70
DOT/TC Name ..... Ammonia, Anhydrous
DOT Class ..... 2.2 (Nonflammable Gas)
TC Class ..... 2.3 (8) Toxic Gas (Corrosive)
WHMIS Class AB1D1AE
DOT Label ..... Nonflammable Gas
Inhalation Hazard
CAS Registry No. 7664-41-7
UN No./IATA No. UN1005

Safety Information
Toxic gas – Avoid inhalation of vapors.
TLV = 25 ppm.
Skin contact with liquid can cause frostbite upon evaporation.
Ammonia is a flammable gas in air in the 15–25% range, although it is classified as nonflammable in cylinders.
Ammonia is a weak base that can react with acids, strong oxidizers and halogens.

Specifications									Recommended Equipment	
	Purity		Contents		Pressure		Weight		Description	
Grade	(Minimum)	Size	lbs.	kg	psig	bar	lbs.	kg	Model Number	Page
CHEMGAZ 3	99.9995%	44	50	23	114	8	183	83	Single-Stage Regulator	
H_2 < 1 ppm	Liquid Phase	30AL	30	14	114	8	78	35	Q1-217A-(**)	272
N_2 < 1 ppm		16	15	7	114	8	78	35		
O_2 < 1 ppm										
THC < 1 ppm										
CHEMGAZ 2	99.999%	44	50	23	114	8	183	83	Single-Stage Regulator	
H_2 < 5 ppm	Liquid Phase	30AL	30	14	114	8	78	35	Q1-213A-(**)	271
N_2 < 1 ppm		16	15	7	114	8	78	35		
O_2 < 5 ppm										
THC < 1 ppm										
CHEMGAZ 1	99.99%	2000	1740	789	114	8	3140	1423	Single-Stage Regulator	
H_2O < 50 ppm*	Liquid Phase	125	150	68	114	8	318	144	Q1-213A-240	271
		44	50	23	114	8	183	83	LB Regulator	
		16	15	7	114	8	78	35	Q1-220AS-110	295
		LB	6 ozs.	0.1	114	8	78	35		
Electronic Grade 2	99.9995%	44	50	23	114	8	185	84	Single-Stage Regulator	
CO < 0.2 ppm		30AL	35	16	114	8	85	39	Q1-217A-720	272
CO_2 < 0.2 ppm		16	15	7	114	8	90	40		
H_2O < 1 ppm										
N_2 < 1 ppm										
O2 < 1 ppm										
THC < 0.2 ppm										
Electronic Grade 1	99.999%	44	50	23	114	8	185	84	Single-Stage Regulator	
CO < 1 ppm		30AL	35	16	114	8	85	39	Q1-217A-720	272
CO_2 < 1 ppm		16	15	7	114	8	90	40		
H_2O < 5 ppm										
N_2 < 3 ppm										
O_2 < 2 ppm										
THC < 1 ppm										

* In Canada, H_2O < 100 ppm.
** Available with CGA 660 or 705.

We stock SCOTT™ regulators, manifolds, flowmeters, point-of-use panels, cabinets, valves and related equipment.