



# 6 Ammonia

Pure Gases

### Description

Formula: NH<sub>3</sub>

### Gas Data

Molecular Weight: 17.03  
 Density: 0.709 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
 0.0442 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
 Specific Volume: 1.41 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
 22.6 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

### Safety Information

LFL in Air: 16%  
 UFL in Air: 25%  
 Permissible Exposure Limit (TLV): 25 ppm

### Shipping Information

CAS Registry Number: 7664-41-7  
 UN Number: UN 1005  
 ECCN Number: 1C980  
 DOT Proper Shipping Name: Ammonia, Anhydrous  
 DOT Classification: 2.2 (Nonflammable Gas)  
 DOT Label: NON-FLAMMABLE GAS  
 TC Shipping Name: Ammonia, Anhydrous, Liquefied  
 TC Classification: 2.4, 9.2  
 TC Label: CORROSIVE GAS

### Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight	
				lb	kg
1K	705	114	786	308	140
1M	705	114	786	224	102
1A	705	114	786	172	78
1R	660	114	786	93	42
2	705	114	786	89	40
2R	660	114	786	57	26
3	705	114	786	44	20
4	705	114	786	24	11
LB	180	114	786	12	5
QF	660/720	114	786	182	83
QH	660/720	114	786	93	42
UH	660/720	114	786	31	14

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.			
<b>Ammonia, Research Purity 99.9992%</b>	G2100823	QF	50 lb	22.68 kg	Single Stage Reg. Cross Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3610A-660 4774-660 IQ250 8081A 8014-105SD TW-2	316 422 398 404 391 430			
<i>Guaranteed Specifications</i>	G2100832	QH	34 lb	15.45 kg						
Carbon Dioxide < 1 ppm	G2100860	UH	5 lb	2.27 kg						
Carbon Monoxide < 0.1 ppm										
Methane < 0.1 ppm										
Nitrogen < 2 ppm										
Oxygen < 1 ppm										
Water < 2 ppm										
<i>A Certificate of Analysis is available on request at a nominal charge.</i>										
<b>Ammonia, Matheson Purity 99.999%</b>	G1800823	QF	50 lb	22.68 kg	Single Stage Reg. Tee Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3610A-660 4754-660 IQ250 8081A 8014-105SD TW-2	316 423 398 404 391 430			
<i>Guaranteed Specifications</i>	G1800832	QH	34 lb	15.45 kg						
Carbon Monoxide < 2 ppm	G1800860	UH	5 lb	2.27 kg						
Methane < 3 ppm										
Nitrogen < 6 ppm										
Oxygen < 4 ppm										
Water < 2 ppm										
<i>A Certificate of Analysis is available on request at a nominal charge.</i>										
<b>Ammonia, SFC Purity 99.995%</b>	G2400318	1R	34 lb	15.43 kg	Single Stage Reg. Tee Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3610A-660 4754-660 IQ250 8081A 8014-105SD TW-2	316 423 398 404 391 430			
<i>Guaranteed Specifications</i>	G2400347	2R	15 lb	6.80 kg						
Carbon Dioxide < 10 ppm										
Oxygen < 10 ppm										
THC < 10 ppm										
<i>A lot analysis will be provided with each order. Please inquire for individual cylinder analysis. Supplied with full length eductor tube. Pressurized to 1500 psig with helium on request.</i>										
<b>Ammonia, Anhydrous 99.99%</b>	G1501211	1K	140 lb	63.64 kg				Single Stage Reg. LB Regulator Tee Purge Personal Monitor Leak Detector Detector Tube Cyl. Valve Wrench	Series 3610A-705 Series 3330-180 4754-705 IQ250 8081A 8014-105SD TW-2*	316 302 423 398 404 391 430
	G1501213	1M	90 lb	40.82 kg						
	G1501201	1A	40 lb	18.14 kg						
	G1501240	2	15 lb	6.80 kg						
	G1501250	3	5 lb	2.27 kg						
	G1501265	4	2 lb	0.91 kg						
	G1501275	LB	0.375 lb	170 gm						
<i>Liquid phase, weight/weight% A Certificate of Conformance will be provided on request. By request, all except LB can be furnished with full length eductor tubes for liquid withdrawal. *Except LB</i>										

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).