



Nitrogen

Description

Formula: N₂

Gas Data

Molecular Weight: 28.01
 Density: 1.153 kg/m³ @ 21.1°C, 101.325 kPa
 0.07199 lb/ft³ @ 70°F, 14.696 psia
 Specific Volume: 0.8673 m³/kg @ 21.1°C, 101.325 kPa
 13.89 ft³/lb @ 70°F, 14.696 psia

Shipping Information

CAS Registry Number: 7727-37-9
 UN Number: UN 1066
 ECCN Number: EAR99
 DOT Proper Shipping Name: Nitrogen, Compressed
 DOT Classification: 2.2 (Nonflammable Gas)
 DOT Label: NON-FLAMMABLE GAS
 TC Shipping Name: Nitrogen, Compressed
 TC Classification: 2.2
 TC Label: NON-FLAMMABLE GAS,
 NON-POISONOUS GAS

Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight kg	
1U	677	6,000	41,369	359	163
1H	680	3,500	24,132	233	106
1L	580	2,640	18,202	170	77
1A	580	2,490	17,167	151	68
1R	580	2,000	13,790	69	31
2	580	2,000	13,790	80	36
2R	580	2,000	13,790	48	22
3	580	2,000	13,790	41	19
3R	580	2,000	13,790	28	13
4	580	2,000	13,790	23	10
6	580	1,585	10,928	20	9
6A	180	1,775	12,238	2	1
7B	580	1,650	11,376	6	3
7A	580	825	5,688	6	3
7	580	225	1,551	6	3
LB	170	1,775	12,238	6	3

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.
Nitrogen, Research Purity 99.9999%	G2173112	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. Outlet Plug Wrench	Consult Factory Consult Factory TW-4	– – 430
<i>Guaranteed Specifications</i>	G2173101	1A	255 ft ³	7.22 m ³			
Carbon Dioxide < 0.1 ppm	G2659809	1R	144 ft ³	4.08 m ³			
Carbon Monoxide < 0.1 ppm	G2173140	2	81 ft ³	2.29 m ³			
THC < 0.1 ppm	G2173150	3	32 ft ³	0.91 m ³			
Oxygen < 0.5 ppm	G2173165	4	11 ft ³	0.31 m ³			
Water < 0.2 ppm	G2173178	6	3.53 ft ³	100 L			
	G2173183	7B	1.77 ft ³	50 L			
	G2173182	7A	0.88 ft ³	25 L			
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
Nitrogen, Matheson Purity 99.9995%	G1881112	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 3810-580 Series 3510-580 Series 3570-170 TW-4*	318 312 314 430
<i>Guaranteed Specifications</i>	G1881101	1A	255 ft ³	7.22 m ³			
Carbon Dioxide < 0.5 ppm	G1881140	2	81 ft ³	2.29 m ³			
Carbon Monoxide < 0.5 ppm	G1881150	3	32 ft ³	0.91 m ³			
Oxygen < 1 ppm	G1881165	4	11 ft ³	0.31 m ³			
THC < 0.2 ppm	G1881172	6A	3.64 ft ³	103 L			
Water < 1 ppm	G1881175	LB	2 ft ³	56 L			
<i>A Certificate of Analysis is available on request at a nominal charge.</i>							
<i>*Except LB</i>							
Nitrogen, UHP Enable, 99.999%	G2671452	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. Outlet Plug Wrench	Series 3810-580 Series 3510-580	318 312
<i>Guaranteed Specifications</i>	G2671091	1A	255 ft ³	7.22 m ³			
Carbon Dioxide < 1 ppm					Outlet Plug Wrench	TW-4	430
Carbon Monoxide < 1 ppm							
Oxygen < 1 ppm							
THC < 0.5 ppm							
Water < 1 ppm							
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis.</i>							
Nitrogen, Ultra High Purity 99.999%	G1959112	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 3120-580 Series 3530-580 Series 3570-170 TW-4*	299 313 314 430
<i>Guaranteed Specifications</i>	G1959101	1A	255 ft ³	7.22 m ³			
Carbon Dioxide < 1 ppm	G1959140	2	81 ft ³	2.29 m ³			
Carbon Monoxide < 1 ppm	G1959150	3	32 ft ³	0.91 m ³			
Oxygen < 2 ppm	G1959165	4	11 ft ³	0.31 m ³			
THC < 0.5 ppm	G1959175	LB	2 ft ³	56 L			
Water < 3 ppm							
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis.</i>							
<i>*Except LB</i>							



Nitrogen (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.	
Nitrogen, Prepurified 99.998%	G1168312	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 3120-580 Series 3530-580 Series 3570-170 TW-4*	299 313 314 430	
	G1168301	1A	255 ft ³	7.22 m ³				
	G1168340	2	81 ft ³	2.29 m ³				
	G1168350	3	32 ft ³	0.91 m ³				
	G1168365	4	11 ft ³	0.31 m ³				
	G1168375	LB	2 ft ³	56 L				
<i>A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge. *Except LB</i>								
Nitrogen, VOC Free 99.9995% <i>Guaranteed Specification</i>	G1168918	1R	144 ft ³	4.08 m ³	Dual Stage Reg. Single Stage Reg. Outlet Plug Wrench	Series 3120-580 Series 3530-580 TW-4	299 313 430	
	G1168947	2R	76 ft ³	2.15 m ³				
	Carbon Dioxide < 0.3 ppm	G1168959	3R	29 ft ³				0.82 m ³
	Carbon Monoxide < 0.05 ppm	G1168972	6A	3.64 ft ³				103 L
	Oxygen < 2 ppm							
	THC < 0.1 ppm							
	Total VOC < 0.01 ppm Water < 2 ppm							
<i>A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge.</i>								
Nitrogen, Acid Rain, CEM Grade 99.9995% <i>Guaranteed Specifications</i>	G1169018	1R	144 ft ³	4.08 m ³	Dual Stage Reg. Single Stage Reg. Outlet Plug Wrench	Series 3120-580 Series 3530-580 TW-4	299 313 430	
	G1169047	2R	76 ft ³	2.15 m ³				
	G1169059	3R	29 ft ³	0.82 m ³				
	Carbon Dioxide < 1 ppm							
	Carbon Monoxide < 0.5 ppm							
	Oxygen < 0.5 ppm							
	NOx < 0.1 ppm Sulfur Dioxide < 0.1 ppm THC < 0.1 ppm Water < 1 ppm							
<i>A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge.</i>								
Nitrogen, Vehicle Emission Zero 99.9995% <i>Guaranteed Specification</i>	G2659806	1L	300 ft ³	8.5 m ³	Dual Stage Reg. Single Stage Reg. Outlet Plug Wrench	Series 3120-580 Series 3530-580 TW-4	299 313 430	
	G2659807	1A	255 ft ³	7.22 m ³				
	G2659808	1R	144 ft ³	4.08 m ³				
	Carbon Dioxide < 1 ppm Carbon Monoxide < 0.5 ppm NOx < 0.1 ppm Oxygen < 0.5 ppm THC < 0.1 ppm Water < 1 ppm							
<i>A Certificate of Conformance will be provided on request. A lot analysis is available at a nominal charge.</i>								
Nitrogen, Zero Gas 99.998%	G2056112	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 3120-580 Series 3530-580 Series 3550-170 TW-4*	299 313 314 430	
	Certified Total	G2056101	1A	255 ft ³				7.22 m ³
	Hydrocarbons as CH ₄ < 0.5 ppm	G2056140	2	81 ft ³				2.29 m ³
		G2056150	3	32 ft ³				0.91 m ³
		G2056165	4	11 ft ³				0.31 m ³
		G2056175	LB	2 ft ³				56 L
	<i>A lot analysis is available on request. Please inquire for individual cylinder analysis. *Except LB</i>							
Nitrogen, High Purity 99.99%	G1168212	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 1250-580 Series 3530-580 Series 3550-170 TW-4*	299 313 314 430	
	G1168201	1A	255 ft ³	7.22 m ³				
	G1168240	2	81 ft ³	2.29 m ³				
	G1168250	3	32 ft ³	0.91 m ³				
	G1168265	4	11 ft ³	0.31 m ³				
	G1168275	LB	2 ft ³	56 L				
	<i>A Certificate of Conformance will be provided on request. *Except LB</i>							



Nitrogen (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.
Nitrogen, Extra Dry 99.9%	G1168412	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 81-580	293
	G1168401	1A	255 ft ³	7.22 m ³		Series 18-580	292
	G1168440	2	81 ft ³	2.29 m ³		Series 3320-170	302
	G1168450	3	32 ft ³	0.91 m ³		TW-4*	430
	G1168465	4	11 ft ³	0.31 m ³			
	G1168475	LB	2 ft ³	56 L			
<i>A Certificate of Conformance will be provided on request.</i>							
<i>*Except LB</i>							
Nitrogen, Oxygen Free Oxygen < 0.5 ppm	G1168112	1L	300 ft ³	8.50 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Outlet Plug Wrench	Series 3120-580	299
	G1168101	1A	255 ft ³	7.22 m ³		Series 3530-580	313
	G1168140	2	81 ft ³	2.29 m ³		Series 3550-170	314
	G1168150	3	32 ft ³	0.91 m ³		TW-4*	430
	G1168165	4	11 ft ³	0.31 m ³			
	G1168175	LB	2 ft ³	56 L			
<i>A Certificate of Conformance will be provided on request.</i>							
<i>*Except LB</i>							
Nitrogen, 3500 PSIG 99.998%	G1168608	1H	341 ft ³	9.66 m ³	Single Stage Reg.	Series 3060-680	298
<i>A Certificate of Conformance will be provided on request.</i>							
Nitrogen, 6000 PSIG 99.998%	G1168721	1U	485 ft ³	13.73 m ³	Single Stage Reg.	Series 3060-677	298
<i>A Certificate of Conformance will be provided on request.</i>							