



Helium

Description

Formula: He

Gas Data

Molecular Weight: 4.00
 Density: 0.165 kg/m³ @ 21.1°C, 101.325 kPa
 0.0103 lb/ft³ @ 70°F, 14.696 psia
 Specific Volume: 6.06 m³/kg @ 21.1°C, 101.325 kPa
 97.1 ft³/lb @ 70°F, 14.696 psia

Shipping Information

CAS Registry Number: 7440-59-7
 UN Number: UN 1046
 ECCN Number: 1C980
 DOT Proper Shipping Name: Helium, Compressed
 DOT Classification: 2.2 (Nonflammable Gas)
 DOT Label: NON-FLAMMABLE GAS
 TC Shipping Name: Helium, 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	
				lb	kg
1U	677	6,000	41,369	322	146
1H	680	3,500	24,132	198	90
1L	580	2,640	18,202	150	68
1A	580	2,490	17,167	133	60
2	580	2,000	13,790	74	34
3	580	2,000	13,790	39	18
4	580	2,000	13,790	22	10
6	580	1,585	10,928	20	9
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.	
Helium, Research Purity 99.9999%	G2137101	1A	244 ft ³	6.91 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Leak Detector Outlet Plug Wrench	Consult Factory	-	
<i>Guaranteed Specifications</i>	G2137140	2	77 ft ³	2.18 m ³		Consult Factory	-	
Carbon Dioxide < 0.1 ppm	G2137150	3	31 ft ³	0.88 m ³		Series 3570-170	314	
Carbon Monoxide < 0.1 ppm	G2137165	4	10 ft ³	0.28 m ³		8066	406	
Nitrogen < 0.4 ppm	G2137178	6	3.53 ft ³	100 L		TW-4	430	
Oxygen < 0.1 ppm	G2137183	7B	1.77 ft ³	50 L				
THC as Methane < 0.1 ppm	G2137182	7A	0.88 ft ³	25 L				
Water < 0.2 ppm	G2137181	7	0.25 ft ³	7 L				
<i>A Certificate of Analysis is available on request at a nominal charge. Guarantee is for total purity on a neon free basis.</i>								
Helium, Matheson Purity 99.9995%	G1841112	1L	288 ft ³	8.16 m ³		Dual Stage Reg. Single Stage Reg. LB Regulator Leak Detector Outlet Plug Wrench	Series 3810-580	318
<i>Guaranteed Specifications</i>	G1841101	1A	244 ft ³	6.91 m ³	Series 3510-580		312	
Argon < 0.5 ppm	G1841140	2	77 ft ³	2.18 m ³	Series 3570-170		314	
Carbon Dioxide < 0.1 ppm	G1841150	3	31 ft ³	0.88 m ³	8066		406	
Carbon Monoxide < 0.1 ppm	G1841165	4	10 ft ³	0.28 m ³	TW-4*		430	
Nitrogen < 1 ppm	G1841175	LB	2 ft ³	56 L				
Oxygen < 1 ppm								
THC < 0.1 ppm Water < 0.5 ppm								
<i>A Certificate of Analysis is available on request at a nominal charge. *Except LB</i>								
Helium, UHP Enable 99.999%	G2671450	1L	288 ft ³	8.16 m ³	Dual Stage Reg. Single Stage Reg. Leak Detector Outlet Plug Wrench	Series 3810-580	318	
<i>Guaranteed Specifications</i>	G2671089	1A	244 ft ³	6.91 m ³		Series 3510-580	312	
Carbon Dioxide < 0.5 ppm						8066	406	
Carbon Monoxide < 1 ppm						TW-4	430	
430Oxygen < 1 ppm								
Nitrogen < 4 ppm								
THC < 0.5 ppm Water < 1 ppm								
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis.</i>								
Helium, Ultra High Purity 99.999%	G1929112	1L	288 ft ³	8.16 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Leak Detector Outlet Plug Wrench	Series 3810-580	318	
<i>Guaranteed Specifications</i>	G1929101	1A	244 ft ³	6.91 m ³		Series 3510-580	312	
Carbon Dioxide < 1 ppm	G1929140	2	77 ft ³	2.18 m ³		Series 3570-170	314	
Carbon Monoxide < 1 ppm	G1929150	3	31 ft ³	0.88 m ³		8066	406	
Nitrogen < 8 ppm	G1929165	4	10 ft ³	0.28 m ³		TW-4*	430	
Oxygen < 4 ppm	G1929175	LB	2 ft ³	56 L				
THC < 0.5 ppm Water < 5 ppm								
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis. *Except LB</i>								



Helium (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.	Page No.
			US	Metric			
Helium, Zero Gas 99.995% <i>Guaranteed Specifications</i> THC < 0.5 ppm	G2033112	1L	288 ft ³	8.16 m ³	Dual Stage Reg.	Series 3120-580	299
	G2033101	1A	244 ft ³	6.91 m ³	Single Stage Reg.	Series 3530-580	313
	G2033140	2	77 ft ³	2.18 m ³	LB Regulator	Series 3550-170	314
	G2033150	3	31 ft ³	0.88 m ³	Leak Detector	8066	406
	G2033165	4	10 ft ³	0.28 m ³	Cyl. Valve Wrench	TW-4*	430
	G2033175	LB	2 ft ³	56 L			
<i>A lot analysis is available on request. Please inquire for individual cylinder analysis.</i>							
<i>*Except LB</i>							
Helium, High Purity 99.995%	G1141112	1L	288 ft ³	8.16 m ³	Dual Stage Reg.	Series 3120-580	299
	G1141101	1A	244 ft ³	6.91 m ³	Single Stage Reg.	Series 3530-580	313
	G1141140	2	77 ft ³	2.18 m ³	LB Regulator	Series 3550-170	314
	G1141150	3	31 ft ³	0.88 m ³	Leak Detector	8066	406
	G1141165	4	10 ft ³	0.28 m ³	Outlet Plug Wrench	TW-4*	430
	G1141175	LB	2 ft ³	56 L			
<i>A Certificate of Conformance will be provided on request.</i>							
<i>*Except LB</i>							
Helium, 3500 psig 99.995%	G1141208	1H	332 ft ³	9.40 m ³	Single Stage Reg.	Series 3060-680	298
					Leak Detector	8066	406
					Cyl. Valve Wrench	TW-2	430
<i>A Certificate of Conformance will be provided on request.</i>							
Helium, 6000 psig 99.995%	G1141321	1U	515 ft ³	14.58 m ³	Single-Stage Reg.	Series 3060-677	298
					Leak Detector	8066	406
					Outlet Plug Wrench	TW-4	430
<i>A Certificate of Conformance will be provided on request.</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.