



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% <i>Guaranteed Specifications</i> Carbon Dioxide < 0.1 ppm Carbon Monoxide < 0.1 ppm Nitrogen < 0.4 ppm Oxygen < 0.1 ppm THC as Methane < 0.1 ppm Water < 0.2 ppm	G2137101	1A	244 ft ³	6.91 m ³	Dual Stage Reg. Single Stage Reg. LB Regulator Leak Detector Outlet Plug Wrench	Consult Factory Consult Factory Series 3570-170 8066 TW-4	– – 314 406 430				
	G2137140	2	77 ft ³	2.18 m ³							
	G2137150	3	31 ft ³	0.88 m ³							
	G2137165	4	10 ft ³	0.28 m ³							
	G2137178	6	3.53 ft ³	100 L							
	G2137183	7B	1.77 ft ³	50 L							
	G2137182	7A	0.88 ft ³	25 L							
	G2137181	7	0.25 ft ³	7 L							
	Helium, Matheson Purity 99.9995% <i>Guaranteed Specifications</i> Argon < 0.5 ppm Carbon Dioxide < 0.1 ppm Carbon Monoxide < 0.1 ppm Nitrogen < 1 ppm Oxygen < 1 ppm THC < 0.1 ppm Water < 0.5 ppm	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 Series 3510-580 Series 3570-170 8066 TW-4*	318 312 314 406 430
		G1841101	1A	244 ft ³				6.91 m ³			
G1841140		2	77 ft ³	2.18 m ³							
G1841150		3	31 ft ³	0.88 m ³							
G1841165		4	10 ft ³	0.28 m ³							
G1841175		LB	2 ft ³	56 L							
Helium, UHP Enable 99.999% <i>Guaranteed Specifications</i> Carbon Dioxide < 0.5 ppm Carbon Monoxide < 1 ppm 430Oxygen < 1 ppm Nitrogen < 4 ppm THC < 0.5 ppm Water < 1 ppm		G2671450	1L	288 ft ³	8.16 m ³	Dual Stage Reg. Single Stage Reg. Leak Detector Outlet Plug Wrench	Series 3810-580 Series 3510-580 8066 TW-4	318 312 406 430			
	G2671089	1A	244 ft ³	6.91 m ³							
	Helium, Ultra High Purity 99.999% <i>Guaranteed Specifications</i> Carbon Dioxide < 1 ppm Carbon Monoxide < 1 ppm Nitrogen < 8 ppm Oxygen < 4 ppm THC < 0.5 ppm Water < 5 ppm	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 Series 3510-580 Series 3570-170 8066 TW-4*	318 312 314 406 430
		G1929101	1A	244 ft ³	6.91 m ³						
		G1929140	2	77 ft ³	2.18 m ³						
G1929150		3	31 ft ³	0.88 m ³							
G1929165		4	10 ft ³	0.28 m ³							
G1929175		LB	2 ft ³	56 L							

A Certificate of Analysis is available on request at a nominal charge.
 Guarantee is for total purity on a neon free basis.

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 *Except LB

A lot analysis is available on request. Please inquire for individual cylinder analysis.

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 *Except LB



Helium (continued)

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content US	Content Metric	Equipment Recommendations	Model No.	Page No.
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>							