

Helium He

Physical Constants of Gas

Molecular Weight 4.003
 Specific Volume 96.6 CF/lb. (6 m³/kg)
 Boiling Point -452.1°F (-268.94°C) 1 atm
 Gas Density 70°F 1 atm 0.169 kg/m³

Cylinder Data

CGA Valve Outlet 580, 677, 718

Shipping Data

Shipping Class 70
 DOT/TC Name Helium, Compressed
 DOT Class 2.2 (Nonflammable Gas)
 TC Class 2.2 (Nontoxic, Nonflammable Gas)
 WHMIS Class A
 DOT Label Nonflammable Gas
 CAS Registry No. 7440-59-7
 UN No./ATA No. UN1046

Safety Information

Helium is an inert gas that does not support life.
 Can cause rapid suffocation.

Specifications									Recommended Equipment	
Grade	Purity** (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			CF	m ³	psig	bar	lbs.	kg		
ALPHAGAZ 2 CO < 0.1 ppm CO ₂ < 0.5 ppm H ₂ < 0.1 ppm H ₂ O < 0.5 ppm O ₂ < 0.5 ppm THC < 0.1 ppm	99.9998%	49	291	8	2640	182	146	66	Two-Stage Regulator Q1-318B-580	270
		49 x 16	4656	132	2640	182	2596	1177		
		44	223	6	2265	156	135	61		
		44 x 6*	1338	38	2265	156	885	401		
		44HH	473	134	6000	414	357	162		
ALPHAGAZ 1 H ₂ O < 3 ppm O ₂ < 2 ppm THC < 0.5 ppm	99.999%	49	291	8	2640	182	146	67	Two-Stage Regulator Q1-318B-580 Single-Stage Regulator Q1-2900AS-677***	270 290
		49 x 16	4656	132	2640	182	2596	1177		
		44	223	6	2265	156	135	61		
		44 x 6*	1338	38	2265	156	885	401		
ALPHAGAZ 1000 H ₂ O < 3 ppm O ₂ < 2 ppm THC < 0.5 ppm	99.999%	500*	13315	350	10	0.7	687	312	Application Dependent – Please Inquire	—
		250*	7219	175	10	0.7	432	196		
		100*	2887	70	10	0.7	245	111		
		60*	1732	62	10	0.7	204	93		
Electronic Grade 2 CO < 0.5 ppm CO ₂ < 0.5 ppm H ₂ < 0.5 ppm H ₂ O < 0.5 ppm N ₂ < 0.5 ppm O ₂ < 0.5 ppm THC < 0.2 ppm	99.9995%	49	291	8	2640	182	146	66	Two-Stage Regulator Q1-318B-580	270
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
Electronic Grade 1 CO < 0.5 ppm CO ₂ < 0.5 ppm H ₂ < 1 ppm H ₂ O < 1 ppm N ₂ < 5 ppm O ₂ < 1 ppm THC < 0.2 ppm	99.999%	49	291	8	2640	182	146	66	Two-Stage Regulator Q1-318B-580	270
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		
		44	223	7	2265	156	136	61		

* Not available in Canada.

** Excluding neon.

*** For 44HH cylinder.

Need advice on SCOTT™ equipment to safely deliver gas to your point-of-use? Call our Solutions Center at 800.217.2688.