

# Helium He

## Physical Constants of Gas

Molecular Weight ..... 4.003  
 Specific Volume ..... 96.6 CF/lb. (6 m<sup>3</sup>/kg)  
 Boiling Point ..... -452.1°F (-268.94°C) 1 atm  
 Gas Density 70°F 1 atm ..... 0.169 kg/m<sup>3</sup>

## 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 <sup>3</sup>	psig	bar	lbs.	kg			
ALPHAGAZ 2 CO < 0.1 ppm CO <sub>2</sub> < 0.5 ppm H <sub>2</sub> < 0.1 ppm H <sub>2</sub> O < 0.5 ppm O <sub>2</sub> < 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			
ALPHAGAZ 1 H <sub>2</sub> O < 3 ppm O <sub>2</sub> < 2 ppm THC < 0.5 ppm	99.999%	49	291	8	2640	182	146	67	Two-Stage Regulator Q1-318B-580	270	
		49 x 16	4656	132	2640	182	2596	1177			
		44	223	6	2265	156	135	61	Single-Stage Regulator Q1-2900AS-677***	290	
		44 x 6*	1338	38	2265	156	885	401			
44HH	473	134	6000	414	357	162					
ALPHAGAZ 1000 H <sub>2</sub> O < 3 ppm O <sub>2</sub> < 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 <sub>2</sub> < 0.5 ppm H <sub>2</sub> < 0.5 ppm H <sub>2</sub> O < 0.5 ppm N <sub>2</sub> < 0.5 ppm O <sub>2</sub> < 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			
Electronic Grade 1 CO < 0.5 ppm CO <sub>2</sub> < 0.5 ppm H <sub>2</sub> < 1 ppm H <sub>2</sub> O < 1 ppm N <sub>2</sub> < 5 ppm O <sub>2</sub> < 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			

\* 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.