

# Helium (He) USP

Cylinder Color: Brown

A colorless, odorless, nonflammable gas that is only one-seventh as heavy as air. Helium is inert chemically and pharmacologically and will act as a simple asphyxiant by displacing air.

## Medical Applications

As a component of breathing mixtures to reduce the density and viscosity of the mixture, and thus facilitate breathing under certain physical and physiological conditions.

Before use, you should read and fully understand the Material Safety Data Sheet (MSDS) for this product.

## SPECIFICATIONS

Major Hazards ..... High Pressure and Suffocation  
 Exposure Limit ..... Simple Asphyxiant (ACGIH 1995-2001)  
 Fire Potential ..... Nonflammable  
 Odor ..... None  
 Mol. Wt. .... 4.003  
 Sp. Gr. (Air = 1) 70° F (21° C) ..... 0.138  
 Critical Temperature ..... -450.3° F (-268° C)  
 Critical Pressure ..... 33.22 psia (2.3 kg/cm<sup>2</sup>abs)  
 Specific Volume ..... 96.7 ft<sup>3</sup>/lb at 70° F (5.90 m<sup>3</sup>/kg at 15° C)  
 CAS Registry No. .... 7440-59-7  
 DOT Description ..... Helium, Compressed, 2.2, UN1046

## PURITY SPECIFICATIONS

USP ..... 99.0% He, min.  
 CO ..... <10 ppm  
 Odor ..... None detected

VALVE CONNECTION	CYLINDER SIZE	CONTENTS	PRESSURE psig @ 70° F	NOMINAL GROSS WT.	PART NUMBER	RECOMMENDED Regulator or Valve	MODEL/PAGE
CGA 580 (Threaded)	300	291 ft <sup>3</sup> 8.2 m <sup>3</sup>	2640 psig 185.65 kg/cm <sup>2</sup>	158 lb 72 kg	HE USP300+	Regulator	40/55
CGA 580 (Threaded)	200	218 ft <sup>3</sup> 6.17 m <sup>3</sup>	2200 psig 154.7 kg/cm <sup>2</sup>	146 lb 66.4 kg	HE USP200+	Regulator	40/55
CGA 930 (Pin-Indexed)	ME	22.0 ft <sup>3</sup> 0.62 m <sup>3</sup>	2015 psig 141.7 kg/cm <sup>2</sup>	14.8 lb 6.71 kg	HE USPME	Regulator	40/55
CGA 930 (Pin-Indexed)	ED	18.3 ft <sup>3</sup> 0.52 m <sup>3</sup>	2200 psig 154.7 kg/cm <sup>2</sup>	12.6 lb 5.72 kg	HE USPED	Regulator	40/55
CGA 930 (Pin-Indexed)	MD	13.5 ft <sup>3</sup> 0.38 m <sup>3</sup>	2015 psig 141.7 kg/cm <sup>2</sup>	9.7 lb 4.4 kg	HE USPMD	Regulator	40/55