

**Transportation Information**
**UN Number:** 1046


United States of America



Canada



Mexico

Shipping Name	Helium, Compressed	Helium, Compressed	Helium, Compressed
Hazard Class	2.2	2.2	2.2
Label	Nonflammable Gas	Nonflammable Gas	Nonflammable Gas

**Formula**

He

**MSDS Reference**

P-4602

**CAS Number**

7440 - 59 - 7

**General Description**

Colorless, odorless, nonflammable inert gas.

**Product and Package Information**

Part Number	Product Grade	Quality Assay/ Specification	Cylinder Style	Content ft <sup>3</sup> /m <sup>3</sup>	Regulator Recommendations See Section F, Page 1
HE 6.0RS	6.0	99.9999%*	T	291/8.07	7000 Series: Semiconductor
	Research/ Chromatographic	O <sub>2</sub> < 0.1 ppm H <sub>2</sub> O < 0.2 ppm CO <sub>2</sub> < 0.1 ppm CO < 0.1 ppm THC < 0.1 ppm N <sub>2</sub> < 0.4 ppm Ar < 0.5 ppm H <sub>2</sub> < 0.5 ppm	K	218/6.05	4000 Series: Non-corrosive
HE 5.5EC	5.5	99.9995%*	T	291/8.07	4000 Series: Non-corrosive
	Electron	O <sub>2</sub> < 1 ppm	K	218/6.05	
	Capture	CO <sub>2</sub> + CO < 1 ppm	AT	239/6.63	
	Detector	THC < 0.1 ppm N <sub>2</sub> < 2 ppm Ar < 1 ppm Halocarbons < 500 ppt H <sub>2</sub> O < 2 ppm	AS	135/3.74	

 The sum of O<sub>2</sub>, CO<sub>2</sub>, THC as CH<sub>4</sub>, N<sub>2</sub> and H<sub>2</sub>O < 5 ppm.

A chromatogram of the Halogen and Hydrocarbon analysis is available with each cylinder.

HE 5.5TG	5.5	99.9995%*	T	291/8.07	4000 Series: Non-corrosive
	Trace Analytical	O <sub>2</sub> < 1ppm CO <sub>2</sub> + CO < 1 ppm THC < 0.1 ppm N <sub>2</sub> < 2 ppm Ar < 1 ppm Halocarbons < 500 ppt H <sub>2</sub> O < 2 ppm	K	218/6.05	

 The sum of O<sub>2</sub>, CO<sub>2</sub>, THC as CH<sub>4</sub>, N<sub>2</sub> and H<sub>2</sub>O < 5 ppm.

\* Neon free basis.

## Product and Package Information

Part Number	Product Grade	Quality Assay/ Specification	Cylinder Style	Content ft <sup>3</sup> /m <sup>3</sup>	Regulator Recommendations See Section F, Page 1
HE 5.5LS	5.5 LaserStar	99.9995%* O <sub>2</sub> < 1ppm Halocarbons < 50 ppt THC < 0.1 ppm H <sub>2</sub> O < 1 ppm	AT	239/6.63	4000 Series: Non-corrosive
HE 5.0LS	5.0 LaserStar	99.9995%* O <sub>2</sub> < 1ppm THC < 0.5 ppm H <sub>2</sub> O < 2 ppm	T K	291/8.07 218/6.05	4000 Series: Non-corrosive
HE 5.0MF	5.0 Methanizer FID	99.999 %* O <sub>2</sub> < 1 ppm H <sub>2</sub> O < 2 ppm CO <sub>2</sub> < 1 ppb CO < 1 ppb THC < 0.5 ppm N <sub>2</sub> < 5 ppm H <sub>2</sub> < 1 ppm	T K	291/8.07 218/6.05	3000 Series: Non-corrosive
HE 5.0UH	5.0 Ultra High Purity	99.999 %* O <sub>2</sub> < 1 ppm H <sub>2</sub> O < 2 ppm THC < 0.5 ppm N <sub>2</sub> < 5 ppm	T K	291/8.07 218/6.05	3000 Series: Non-corrosive
HE 4.7LS	4.7 Laser	99.997 %* O <sub>2</sub> < 3 ppm H <sub>2</sub> O < 3 ppm THC < 1 ppm	T K	291/8.07 218/6.05	3000 Series: Non-corrosive 2000 Series: Non-corrosive
HE 4.6Z	4.6 Zero	99.996 %* THC < 0.5 ppm	T K	291/8.07 218/6.05	3000 Series: Non-corrosive 2000 Series: Non-corrosive
HE 4.6OF	4.6 O <sub>2</sub> Free	99.996 %* O <sub>2</sub> < 0.5 ppm	T K	291/8.07 218/6.05	3000 Series: Non-corrosive 2000 Series: Non-corrosive 100 Series: Non-corrosive
HE 4.5	4.5	99.995 %* O <sub>2</sub> < 5 ppm H <sub>2</sub> O < 5 ppm	6K 4K 3K T K AS	519/14.39 432/11.98 333/9.23 291/8.07 218/6.05 135/3.74	4092 Series: Special Purpose 4092 Series: Special Purpose 4092 Series: Special Purpose 3000 Series: Non-corrosive 2000 Series: Non-corrosive 100 Series: Non-corrosive

\* Neon free basis.

## Product and Package Information

Part Number	Product Grade	Quality Assay/ Specification	Cylinder Style	Content ft <sup>3</sup> /m <sup>3</sup>	Regulator Recommendations See Section F, Page 1
HE 6.0SP	6.0	99.9999 %*	AT	239/6.63	Valve Panel
	Semiconductor Process Gas	O <sub>2</sub> < 0.2 ppm H <sub>2</sub> O < 0.2 ppm CO <sub>2</sub> < 0.1 ppm CO < 0.1 ppm THC < 0.1 ppm N <sub>2</sub> < 0.5 ppm H <sub>2</sub> < 0.1 ppm	AS	135/3.74	7000 Series: Semiconductor 4000 Series: Non-corrosive
HE 5.5SP	5.5	99.9995 %*	T	291/8.07	Valve Panel
	Semiconductor Process Gas	O <sub>2</sub> < 0.5 ppm H <sub>2</sub> O < 0.5 ppm CO <sub>2</sub> < 0.5 ppm CO < 0.5 ppm THC < 0.5 ppm N <sub>2</sub> < 2 ppm	K	218/6.05	7000 Series: Semiconductor
HE 5.0SP	5.0	99.999 %*	T	291/8.07	Valve Panel
	Semiconductor Process Gas	O <sub>2</sub> < 2 ppm H <sub>2</sub> O < 3 ppm CO <sub>2</sub> < 1 ppm CO < 1 ppm THC < 1 ppm N <sub>2</sub> < 6 ppm	K	218/6.05	7000 Series: Semiconductor 4000 Series: Non-corrosive

\* Neon free basis.

When ordering, please add the desired cylinder style to the end of the above part number.

 Add "D" for DISS connection (HE 6.0SP-**ATD**)

## Cylinder Information

Cylinder Style	Connection CGA/DISS	Pressure psig/bar	Gross Weight lb/kg
6K	677	6000/460	308/140
4K	680	4500/310	151/69
3K	680	3500/268	192/87
T	580/ <b>718</b>	2640/183	146/66
K	580/ <b>718</b>	2200/154	135/61
AT	580/ <b>718</b>	2200/154	97/44
AS	580/ <b>718</b>	2000/139	49/22

Praxair is a world leader in helium production and purification.

Products are also available in larger quantities, such as 6-, 12- and 16- pack cylinder clusters as well as dewars and tube trailers.

See page C66 for liquid helium.

See Section E – Medical Gases for Helium – U.S.P. Grade (page E37)