



## Factory Price Research And Industrial Applications Cylinder Gas Helium High Purity He

Our Product Introduction

for more products please visit us on [gascylindertank.com](http://gascylindertank.com)

### Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: He
- Minimum Order Quantity: 1 Piece
- Price: US \$300/PC
- Packaging Details: Cylinder/Tank
- Delivery Time: 30 days
- Payment Terms: L/C, T/T
- Supply Ability: 3000 Pcs/Month



### Product Specification

- Product Name: Helium Gas
- Class (Imdg): 2.2
- Appearance: Colorless
- Relative Gas Density: 0.14
- Gas Group: Compressed Gas
- Specification: 40L, 50L
- Trademark: CMC
- Origin: China
- HS Code: 2804290000
- Supply Ability: 10000 Bottles Per Month
- CAS No.: 7440-57-9
- Formula: He
- EINECS: 7440-57-9
- Constituent: Industrial Pure Air
- Grade Standard: Industrial Grade



### More Images



## Product Description

### Product Description

Helium gas, symbolized as He, is an element found in the periodic table with atomic number 2. It is the second lightest and second most abundant element in the universe. Helium is a noble gas belonging to Group 18. Here are some key points about helium gas:

Chemical Symbol: He

Atomic Number: 2

Atomic Weight: 4.0026 g/mol

Physical Properties: Helium is a colorless, odorless, and tasteless gas at standard conditions. It is the second lightest gas, after hydrogen, and has a density of approximately 0.1785 grams per liter at 0 degrees Celsius and 1 atmosphere of pressure. Helium has a boiling point of -268.93 degrees Celsius (-452.07 degrees Fahrenheit) and a melting point of -272.2 degrees Celsius (-457.96 degrees Fahrenheit).

Abundance and Occurrence: Helium is the second most abundant element in the universe, primarily formed through nuclear fusion in stars.

However, it is relatively rare on Earth. It is obtained as a byproduct during the extraction of natural gas, where certain gas fields have higher concentrations of helium.

Applications: Helium gas has various applications in different fields. Its most well-known use is in filling balloons and airships due to its low density, making them float. Helium is also used in cryogenics, as it can reach extremely low temperatures when liquefied, making it suitable for cooling superconducting magnets in MRI machines, particle accelerators, and other scientific equipment. Additionally, helium is used as a shielding gas in welding processes, in breathing mixtures for deep-sea diving, in certain types of lasers, and in various research and industrial applications.

Liquid Helium: Helium can be liquefied at extremely low temperatures, below its boiling point. Liquid helium has unique properties, such as superfluidity and superconductivity, which make it valuable for scientific research and applications in low-temperature physics.

Safety Considerations: Helium gas is generally considered to be safe and non-toxic. It is not flammable and does not support combustion.

However, as with any compressed gas, proper handling, storage, and ventilation should be ensured to prevent accidents.

Helium Shortage: There have been concerns about the global helium supply in recent years due to its limited availability and increasing demand.

Helium is a non-renewable resource, and its extraction and conservation are important to ensure its sustainable use in various applications.

#### Basic Info.

|                   |                 |                     |                         |
|-------------------|-----------------|---------------------|-------------------------|
| Filling Pressure  | 150 Bar-200 Bar | Un-No.(DOT)         | Un 1046                 |
| Formular          | He              | Appearance          | Colorless Gas           |
| Case No.          | 7440-59-7       | Purity              | 99.9%-99.999%           |
| Transport Package | Gas Cylinders   | Specification       | 40L-50L                 |
| Trademark         | CMC             | Origin              | Suzhou, China           |
| HS Code           | 2804290000      | Production Capacity | 10000 Bottles Per Month |



**Proper Shipping Name: Helium, Compressed**

**UN NO.: UN 1046**

**Hazard labels: 2.2-Non-flammable gas**

Helium gas

PRODUCT DETAILS

Helium is a highly specialized product. It's chemically inert and non-flammable, with high thermal conductivity, low molecular weight and size, and the lowest boiling point known.

PRODUCT NAME PURITY

Helium gas ≥ 99.9%

Helium gas ≥99.999%

Normal Package cylinders

|                  |            |             |             |
|------------------|------------|-------------|-------------|
| Size             | 40L-150BAR | 50L-150 BAR | 50L-200 BAR |
| Volume           | 6M3        | 7.5M3       | 10M3        |
| Outside Diameter | 219MM      | 232MM       | 232MM       |
| Height           | 1333MM     | 1420MM      | 1420MM      |
| Weight           | 47.8KG     | 52KG        | 52KG        |
| Working pressure | 150BAR     | 150BAR      | 200BAR      |
| Test pressure    | 250BAR     | 250BAR      | 300BAR      |
| Material         | 37Mn       | 37Mn        | 34CrMo4     |
| Wall thickness   | 5.7MM      | 5.7MM       | 5.7MM       |
| Standard         | ISO9809-3  | ISO9809-3   | ISO9809-1   |

Smaller size cylinders:

|                   |                |                |
|-------------------|----------------|----------------|
| Item              | EC-13 ( 30 LB) | EC-22 ( 50 LB) |
| Water Capacity    | 13.4L          | 22.3L          |
| Working Pressure  | 1.8Mpa         | 1.8Mpa         |
| Weight            | 3.2Kg          | 5.1Kg          |
| Balloon quantity  | 30 Pcs (9")    | 50 Pcs (9")    |
| Ribbon            | 40 Meters      | 60 Meters      |
| Packing Size      | 245*245*425    | 305*305*452    |
| Qty/20' Container | 1100pcs        | 650pcs         |

Applications:

Aerospace & Aircraft

From manufacturing to flight, helium is widely utilized throughout the aerospace and aircraft industry. In space flight operations, helium is used to purge hydrogen systems and works as a pressurizing agent for ground and flight fluid systems. It is also a source of lift in weather and other surveillance balloons.

Automotive & Transportation Equipment

Helium is used to test critical automotive parts such as radiator heat exchangers, air conditioning components, fuel tanks and torque converters to ensure they meet quality specifications. It is also used in combination with argon as a source of inflation in a growing number of airbags.

Diving

In combination with oxygen, helium is used in diving to help eliminate nitrogen narcosis, reduce breathing resistance at depth, and shorten decompression stops. Known as heliox, the mixture allows divers to reach greater depths for longer periods of time. The deeper the dive, the higher the concentration of helium, allowing divers to explore more and weld longer.

Detailed

Photos



#### Company Profile

ShangHai CMC chemical Co.,Ltd. is staffed by trained personnel, combine many years experience in Gas industry .We supply cylinder gas, electronic gas, etc ., and the gas holder, panel, valves and fittings and other equipment, parts and engineering services to our customers in China and worldwide; The products are involved in various industrial fields, such as semiconductor chip, solar cell, LED, TFT-LCD, optical fiber, glass, laser, medicine , etc., Our mission is to partner with our global customers to provide support, solutions and quality products that are innovative, reliable, and safe. Our products mainly include: H<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, Ar, CO<sub>2</sub>, propane, acetylene, helium, laser mixed gas, SiH<sub>4</sub>, SiH<sub>2</sub>Cl<sub>2</sub>, SiHCl<sub>3</sub>, SiCl<sub>4</sub>, NH<sub>3</sub>, CF<sub>4</sub>, NF<sub>3</sub>, SF<sub>6</sub>, HCL, N<sub>2</sub>O, doping mixed gas (TMB, PH<sub>3</sub>, B<sub>2</sub>H<sub>6</sub>) and other electronic gases.

|                    |                                |                               |                                                                                    |                   |                   |                  |                 |                                 |
|--------------------|--------------------------------|-------------------------------|------------------------------------------------------------------------------------|-------------------|-------------------|------------------|-----------------|---------------------------------|
| SiCl <sub>4</sub>  | NH <sub>3</sub>                | NH <sub>3</sub>               | CH <sub>3</sub> F                                                                  | SiH <sub>4</sub>  | Kr                | H <sub>2</sub> S | WF <sub>6</sub> | F <sub>6</sub> +Cl <sub>2</sub> |
| 4MS                | C <sub>3</sub> F <sub>8</sub>  | C <sub>3</sub> F <sub>8</sub> | TEOS                                                                               | CH <sub>4</sub>   | PH <sub>3</sub>   | SF <sub>6</sub>  | C <sub>2</sub>  | HCl+Ne                          |
| CF <sub>4</sub>    | C <sub>4</sub> F <sub>8</sub>  | SiH <sub>2</sub>              |  |                   |                   |                  |                 | TMB+H <sub>2</sub>              |
| SiF <sub>4</sub>   | C <sub>3</sub> H <sub>8</sub>  | Cl <sub>2</sub>               |                                                                                    |                   |                   |                  |                 | He +As                          |
| BBr <sub>3</sub>   | C <sub>3</sub> H <sub>6</sub>  | DCE                           |                                                                                    |                   |                   |                  |                 | Ge+Se                           |
| POCl <sub>3</sub>  | N <sub>2</sub>                 | SO <sub>2</sub>               |                                                                                    |                   |                   |                  |                 | D+B                             |
| BCl <sub>3</sub>   | D <sub>2</sub>                 | CO <sub>2</sub>               |                                                                                    |                   |                   |                  |                 | CO+NO                           |
| SiHCl <sub>3</sub> | CH <sub>2</sub> F <sub>2</sub> | HF                            |                                                                                    |                   |                   |                  |                 | Ar+O <sub>2</sub>               |
| TMAI               | DMZn                           | DEZn                          |                                                                                    |                   |                   |                  |                 | Xe+NO                           |
| AsH <sub>3</sub>   | C <sub>2</sub> H <sub>4</sub>  | C <sub>2</sub> H <sub>2</sub> | HBr                                                                                | COS               | Ar+O <sub>2</sub> |                  |                 |                                 |
| GeH <sub>4</sub>   | C <sub>2</sub> H <sub>6</sub>  | B <sub>2</sub> H <sub>6</sub> | H <sub>2</sub> Se                                                                  | GeCl <sub>4</sub> | Xe+NO             |                  |                 |                                 |

#### Certifications



**Workshop Display:**



**Monitor**



**Laboratory**



**Equipment**

**Zone of rectification**



**Gas filling**



**Equipment**



## Shipping Methods





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