

## **Shield Gas Coolant Helium Scientific And Industrial Applications**

#### **Basic Information**

. Place of Origin: China . Brand Name: CMC COA · Certification: Model Number: He • Minimum Order Quantity: 1 Piece • Price: US \$300/PC Cylinder/Tank · Packaging Details: • Delivery Time: 15 days Payment Terms: L/C, T/T 3000 Pcs/Month . Supply Ability:



### **Product Specification**

Product Name: Helium GasPurity: 99.9%-99.999%

• Formular: He

Appearance: Colorless Gas
Filling Pressure: 150 Bar-200 Bar
Transport Package: He Cylinder
Specification: 40L, 47L, 50L
Trademark: CMC

Trademark.
 Origin:
 China
 HS Code:
 CAS No.:
 7440-59-7
 Formula:
 EINECS:
 231-168-5

Constituent: Industrial Pure AirGrade Standard: Industrial Grade



# **Helium Gas**

## More Images





#### **Product Description**

## Scientific and industrial applications shield gas coolant Helium

Helium gas, symbolized as He, is an element found in the periodic table with atomic number 2. It is the second lightest and the second most abundant element in the universe after hydrogen. 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. It is lighter than air 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, but it is relatively rare on Earth. It is primarily obtained from natural gas deposits, where it is produced as a byproduct of the decay of radioactive elements, such as uranium and thorium.

Applications: Helium gas has various applications in different fields. Its most well-known application is in filling balloons and airships due to its low density, which allows them to float. Helium is also used as a coolant in various scientific and industrial applications, particularly in cryogenics. It is used to cool superconducting magnets in magnetic resonance imaging (MRI) machines, particle accelerators, and other scientific equipment. Helium is also used in welding, as a shield gas in certain processes, and in leak detection due to its low reactivity and high thermal conductivity. Liquid Helium: Helium can exist in a liquid state at extremely low temperatures. Liquid helium has unique properties, such as superfluidity, which is the ability to flow with zero viscosity. The superfluid form of helium-4, known as helium II, exhibits these remarkable properties at temperatures below 2.17 Kelvin (-270.98 degrees Celsius or -455.76 degrees Fahrenheit).

Safety Considerations: Helium gas is generally considered to be non-toxic and is not known to have any adverse health effects. However, as with any compressed gas, proper handling, storage, and ventilation are important to ensure safety. It is also important to note that inhaling helium directly from a pressurized source can be dangerous as it can displace oxygen and lead to asphyxiation.

Helium Shortage: Helium is a finite resource, and its availability can be limited. In recent years, there have been concerns about a global helium shortage due to increasing demand and limited production capacity. Efforts are being made to promote helium recycling and conservation. Helium in the Universe: Helium played a significant role in the early development of the universe. It was formed shortly after the Big Bang and is a crucial component of stellar nuclear fusion processes, where hydrogen fuses into helium in stars.

#### Basic Info.

DOT Class 2.2 Un Number 1963

 Cylinder Standard
 DOT/ISO/GB
 Cylinder Pressure
 15MPa/20MPa

 Valve
 Qf-2/Cga580
 Melting Point
 -272.2 °C

 Appearance
 Colorless, Odorless Boiling Point
 -272.2 °C

 Density
 0.1786 Kg/M3
 Molecular Weight
 4.0026

Transport Package 40L, 47L, 50L Specification 99.999%, 99.9999% Trademark CMC Origin Suzhou, China HS Code 28042900 Production Capacity 20, 000 Tons/Yea





#### Specification:

Specification Company Standard

≥ 99.999% N2 ≤ 2.0 ppm O2+AR ≤ 1.0 ppm H2 ≤ 1.0 ppm CO ≤ 0.5 ppm CO<sub>2</sub> ≤ 0.5 ppm Ne ≤ 1.0 ppm CH4 ≤ 0.5 ppm ≤ 0.5 ppm Moisture

#### **Company Profile**



Shanghai Kemike 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: H2, O2, N2, Ar, CO2, propane, acetylene, helium, laser mixed gas, SiH4, Sih2cl2, SiHCL3, SiCL4, NH3, CF4, NF3, SF6, HCL, N2O, doping mixed gas (TMB, PH3, B2H6) and other electronic gases.

CH3F F6+CI2 NH3 WF6 SiCI4 NH3 SiH4 Kr H<sub>2</sub>S

C2 HCI+Ne C3F8 C3F8 **TEOS** CH4 PH<sub>3</sub> SF6 4MS

C4F8 SiH2 CF4

TMB+H2

SiF4 **C3H8** CI2 He +As

DCE C3H6 BBr3

Ge+Se

POCI3 **SO2** N2

D+B

BCI3 D2 CO<sub>2</sub>

DMZn

DEZn

CO+NO

AsH3 **C2H4**  HBr

COS Ar+O2

SiHCI3 CH2F2 HF

**TMAI** 

GeH4

C2H6 **B2H6** 

C2H2

H2Se GeCl4 Xe+NO





