Cooling Applications Thermal Conductivity Cylinder Gas High Purity Helium

Our Product Introduction

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: 15 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 (He) is a colorless, odorless, and inert noble gas. It is the second-lightest element in the periodic table, with an atomic number of 2. Here are some key points about helium gas:

Chemical Composition: Helium is composed of single helium atoms (He).

Properties: Helium possesses several important properties:

Inertness: Helium is chemically inert, meaning it does not readily react with other elements or compounds. It is non-toxic and does not support combustion.

Low Density: Helium is lighter than air and has a very low density. This property allows helium-filled balloons to float in the air.

Low Boiling and Melting Points: 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), which are the lowest among all elements.

Excellent Thermal Conductivity: Helium has a very high thermal conductivity, making it useful in various cooling applications, such as cooling superconducting magnets in medical magnetic resonance imaging (MRI) machines.

Low Solubility: Helium is sparingly soluble in water and other common solvents.

Occurrence and Production: Helium is relatively rare on Earth and is primarily obtained from natural gas deposits. It is a byproduct of the natural decay of radioactive elements, such as uranium and thorium, within the Earth's crust. The extraction of helium involves the purification of natural gas through cryogenic processes.

Uses: Helium gas has several important applications:

Balloons and Airships: Helium's low density makes it ideal for filling balloons and airships to provide buoyancy.

Cryogenics: Helium is used as a cryogenic coolant in various applications, including scientific research, superconducting magnets, and cooling of certain metals during manufacturing processes.

Welding and Leak Detection: Helium is utilized as a shielding gas in welding processes to protect the weld area from atmospheric contamination. It is also commonly used in leak detection due to its low molecular size and inertness.

Breathing Mixtures: Helium-oxygen mixtures, known as heliox, are used in certain medical treatments and deep-sea diving to reduce the effects of high pressure on the body.

Scientific Research: Helium is essential for various scientific research applications, such as in cryogenics, nuclear magnetic resonance (NMR) spectroscopy, and particle accelerators.

Aerospace: Helium is used in certain aerospace applications, including pressurizing fuel tanks and purging systems.

Conservation and Supply: Helium is a non-renewable resource, and its supply is limited. It is important to conserve and manage helium usage responsibly, especially for critical applications such as medical and scientific research.

It's worth noting that helium is a finite resource, and its scarcity and importance have led to efforts to promote responsible helium usage and conservation.

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
CAS No.: 7440-59-7

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


FULL
CYLINDER
II
He
NON-FLAMMABLE
GAS
2

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: 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.

Certifications

Workshop Display:

Monitor

Laboratory

Equipment

Zone of rectification

Gas filling

Equipment

Shipping Methods

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