C4f8 Cylinder Gas Octafluorocyclobutane Semiconductor Electrical Applications Usage

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: C4f8
- Minimum Order Quantity: 1kg
- Price: US $0-500/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 5000kg/month

Product Specification

- Product Name: Octafluorocyclobutane Gas
- Melting Point: -41.4 ºC
- Boiling Point: -6 ºC
- Appearance: Colorless, Odorless
- Density: 6.9 Kg/M³
- Cylinder Pressure: 12.5MPa/15MPa/20MPa
- Valve: Cga580
- Cylinder Standard: GB/ISO/DOT
- Transport Package: 40L, 47L, 50L
- Specification: 40L, 47L, 50L
- Trademark: CMC
- Origin: China
- HS Code: 29038900
- Supply Ability: 1000000ton/Year
- CAS No.: 115-25-3

More Images

Product Description

Product Description

Octafluorocyclobutane gas, also known as C4F8 or perfluorocyclobutane, is a chemical compound composed of carbon and fluorine. It is a colorless, odorless gas with the molecular formula C4F8. Here are some key points about octafluorocyclobutane gas:

Formation: Octafluorocyclobutane can be synthesized by the reaction of tetrafluoroethylene (CF2=CF2) with fluorine gas (F2). The reaction proceeds as follows:

CF2=CF2 + 4F2 → C4F8

Physical properties: C4F8 is a non-flammable and non-toxic gas at room temperature and pressure. It has a boiling point of -16.3 °C (-1.3 °F) and a melting point of -97.9 °C (-144.2 °F). It is relatively stable and has low reactivity under normal conditions.

Chemical properties: Octafluorocyclobutane is chemically inert and does not readily react with other substances. It is non-corrosive and electrically insulating, making it suitable for certain applications requiring electrical insulation.

Uses: C4F8 gas finds various applications, particularly in the electronics industry. It is commonly used as a dielectric gas in plasma etching processes for semiconductor manufacturing. It is highly effective in etching materials such as silicon dioxide (SiO_2) and silicon nitride (Si_3N_4). Octafluorocyclobutane is also utilized in the production of photovoltaic cells, flat-panel displays, and other electronic devices.

Environmental impact: Similar to other fluorinated gases, octafluorocyclobutane has a high global warming potential (GWP). It has a significantly higher GWP than carbon dioxide (CO_2) over a 100-year time frame. Hence, efforts are being made to monitor and reduce the emissions of C4F8 and other fluorinated gases to mitigate their impact on climate change.

When working with or handling octafluorocyclobutane gas, it is important to follow proper safety protocols, including using appropriate protective equipment and adhering to handling guidelines provided by experts and manufacturers.

Basic Info.

DOT Class	2.2	Un No	1976
Cylinde	DOT/ISO/GB	Cylinder Pressure	15MPa/20MPa
Valve	Cga580	Melting Point	-41.4 ºC
Appearance	Colorless, Odorless	Boiling Point	-6 ºC
Density	6.9 Kg/M	Molecular Weight	200.03
Transport Package	40L, 47L, 50L	Specification	100.00%
Trademark	CMC	Origin	China
HS Code	29038900	Production Capacity	100, 000 Tons/Year

Specification:
CAS No.: 115-25-3
EINECS No.: 204-075-2
UN No.: UN1976

Purity: 99.999%
Dot Class: 2.2
Appearance: Colorless, Odorless
Grade Standard: Electronic Grade

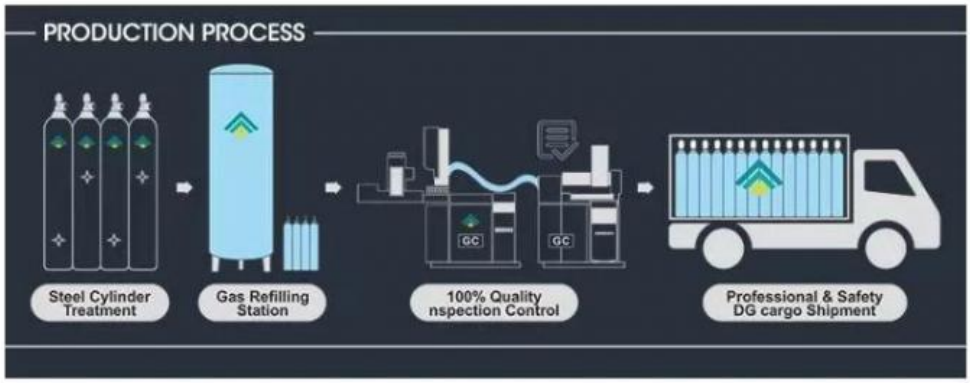
Specification	99.999%
Oxygen + Argon	≤ 1 ppm
Nitrogen	≤ 2 ppm
Hydrogen	≤ 0.5 ppm
Carbon Monoxide	≤ 0.5 ppm
Carbon Dioxide	≤ 0.5 ppm
Methane	≤ 0.5 ppm
OHC	≤ 2 ppm
Moisture	≤ 3 ppm
Acidity as HF	≤ 0.1 ppm

Packaging & Shipping

Cylinder Specifications		Contents
Cylinder Capacity	Valve	Weight
47L	DISS716	50 kgs

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.



Factory display

Detection equipment

Strict quality assurance proccedures,
stands for highest stand

Quality control

Cylinder Treatment

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