99.999% High Purity Electron Grade Cylinder Gas Sf6 Sulfur Hexafluoride

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: SF6
- Minimum Order Quantity: 1kg
- Price: US $ 1/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 5000 Tons/Year

Product Specification

- Product Name: Sulfur Hexafluoride
- Melting Point: -50.8 ºC
- Appearance: Colorless, Odorless
- Boiling Point: -63.8 ºC
- Cylinder Pressure: 15MPa/20MPa
- Valve: Qf-2, Cga590
- Cylinder Standard: DOT/ISO/GB
- Specification: 40L, 47L, 50L, 500L
- Trademark: CMC
- Origin: China
- HS Code: 28129019
- Supply Ability: 5000tons/Year
- CAS No.: 2551-62-4
- Formula: Sf6
- EINECS: 219-854-2

More Images

Product Description

SF6 refers to sulfur hexafluoride, which is a chemical compound composed of one sulfur atom bonded to six fluorine atoms. Here are some key points about SF6:

Chemical Formula: SF6

Molecular Weight: 146.06 g/mol

Structure: SF6 is a covalent compound with a central sulfur atom surrounded by six fluorine atoms, giving it an octahedral molecular geometry.

Physical Properties: SF6 is a colorless, odorless, and non-flammable gas at standard temperature and pressure. It has a high density and is significantly heavier than air. SF6 is not soluble in water but is soluble in nonpolar organic solvents.

Stability and Inertness: SF6 is chemically stable and inert under normal conditions. It is non-reactive with most substances, including acids, bases, and oxidizers. This inertness makes SF6 useful in various applications.

Electrical Insulation: One of the most significant applications of SF6 is as a dielectric medium in high-voltage electrical equipment, such as circuit breakers, gas-insulated switchgear (GIS), and transformers. SF6's high dielectric strength and excellent electrical insulation properties allow for compact and efficient electrical equipment designs.

Greenhouse Gas: SF6 is considered a potent greenhouse gas due to its high global warming potential (GWP). It has a GWP significantly higher than carbon dioxide, making it a focus of environmental concerns. Efforts are being made to reduce SF6 emissions and find alternative solutions in various industries.

Industrial Applications: SF6 is used in several industrial applications apart from electrical equipment. It is employed as a gaseous dielectric in the electronics industry, as an etching agent in semiconductor manufacturing, and as a tracer gas for leak detection in various systems.

Safety Considerations: SF6 is non-toxic and does not pose immediate health hazards. However, as a dense gas, it can displace oxygen in confined spaces and pose asphyxiation risks. When handling SF6, appropriate safety measures and equipment should be employed to ensure proper ventilation and prevent accidental release.

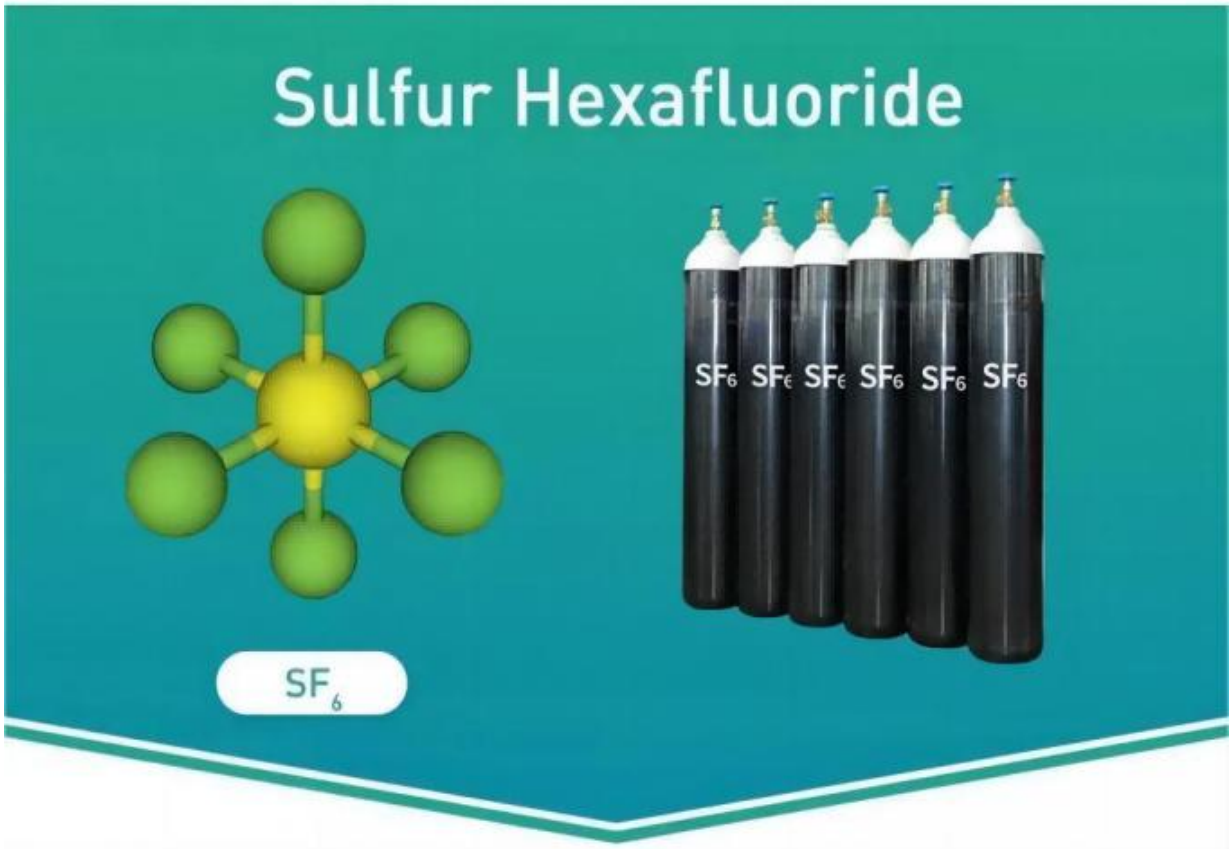
Regulations: Due to SF6's high GWP and environmental impact, its use is regulated in many countries. Measures include the monitoring and reporting of SF6 emissions, the use of alternative gases, and the proper handling and recycling of SF6-filled equipment.

Basic Info.

DOT Class	2.2	Un Number	Un 1080
Cylinder Standard	DOT/ISO/GB	Cylinder Pressure	15MPa/20MPa
Valve	Qf-2, Cga590	Melting Point	-50.8 ºC
Appearance	Colorless, Odorless	Boiling Point	-63.8 ºC
Density	6.0886 Kg/M³	Molecular Weight	146.05
Transport Package	40L, 47L, 50L, 500L	Specification	99.995%, 99.999%
Trademark	CMC	Origin	China
HS Code	28129019	Production Capacity	5000tons/Year

Specifications:

PRODUCT



Specifications	Company Standard
SF6	≥ 99.995%
Air	≤ 10 ppm
CF4	≤ 2 ppm
C2F6	≤ 20 ppm
C3F8	≤ 5 ppm
Low Sulfide	Not Detected
H2O	≤ 1 ppm
Acidity as HF	≤ 0.1 ppm
Hydrolysable Fluor ides as HF	≤ 0.3 ppm
Mineral Oil	≤ 1 ppm

APPLICATION

① Dielectric medium:

SF6 is used in the electrical industry as a gaseous dielectric medium for high-voltage circuit breakers, switchgear, and other electrical equipment, often replacing oil filled circuit breakers (OCBs) that can contain harmful PCBs.

② Tracer compound:

Sulfur hexafluoride was the tracer gas used in the first roadway air dispersion model calibration,It has been used successfully as a tracer in oceanography to study diapycnal mixing and air-sea gas exchange.

Detailed Photos

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