

China

CMC

COA

Wf6

Cylinder/Tank

Depositing tungsten metal films Semiconductor application Gas Tungsten Hexafluoride

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: 1 Piece
- Price: US \$ 15/PC
- Packaging Details:
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 200 Tons/Year



Product Specification

• Product Name: Tungsten Hexafluoride • Appearance: Colorless • Transport: By Sea • Purity: 99.999% Model No.: Tungsten Hexafluoride • Transport Package: 10L 40L 50L • Specification: 10L 40L 50L CMC Trademark: • Origin: China • HS Code: 2812190091 • Supply Ability: 200t/Year • CAS No.: 7783-82-6 Formula: Wf6 • EINECS: 232-029-1 Constituent: Industrial Pure Air



More Images



Product Description

Tungsten hexafluoride gas, often abbreviated as WF6, is a chemical compound composed of tungsten (W) and fluorine (F). It is a colorless, corrosive, and highly reactive gas. Here are some key points about tungsten hexafluoride gas:

Chemical Formula and Structure: Tungsten hexafluoride has the chemical formula WF6. It consists of one tungsten atom bonded to six fluorine atoms, forming an octahedral molecular geometry.

Physical Properties: Tungsten hexafluoride is a dense gas with a molecular weight of 297.84 g/mol. It has a boiling point of approximately 17.1°C (62.8°F) and is typically stored and handled in its liquid form under controlled conditions.

Reactivity: WF6 is highly reactive and readily reacts with a variety of substances. It reacts vigorously with water, moisture, and oxygen, releasing toxic hydrogen fluoride (HF) gas. Due to its reactivity, WF6 is commonly used as a fluorine source in various chemical processes. Applications: Tungsten hexafluoride gas has several industrial applications, including:

Semiconductor Industry: WF6 is used as a precursor in the production of tungsten films or layers in semiconductor manufacturing processes, such as chemical vapor deposition (CVD) and atomic layer deposition (ALD). It serves as a source of tungsten for depositing thin films on integrated circuits and other electronic devices.

Metal-Organic Chemical Vapor Deposition (MOCVD): WF6 is utilized in MOCVD processes to deposit tungsten films in the production of highbrightness light-emitting diodes (LEDs) and other optoelectronic devices.

Surface Treatment: WF6 is employed in surface treatment applications, such as etching and cleaning of metals, ceramics, and glass surfaces. Research and Development: Tungsten hexafluoride gas is sometimes used in research laboratories as a source of tungsten or as a fluorinecontaining reagent in various chemical reactions.

Safety Considerations: Tungsten hexafluoride is a toxic and corrosive gas. It reacts with moisture in the air to produce hydrogen fluoride, which is highly corrosive and can cause severe burns. Proper handling, storage, and disposal procedures, along with the use of appropriate personal protective equipment, are essential to ensure worker safety.

It is important to note that the specific applications, handling procedures, and safety considerations for tungsten hexafluoride gas may vary depending on the industry and intended use. It is recommended to consult relevant safety guidelines, regulations, and the material safety data sheet (MSDS) provided by the manufacturer for comprehensive information on the safe handling and usage of WF6.



Overview

Basic Info.

Model NO. Specification Origin WF6 Transport 10L/15kg Trademar Suzhou, China HS Code

Transport Package Cylinder Trademark CMC HS Code 2812190091 Production Capacity 200t/Year

Product Spec:

ungsten Hexafluoride WF6 GAS CAS No.: 7783-82-6 EINECS No.: 232-029-1 UN No.: UN2196 Purity: 99.999% Dot Class: 2.3 Appearance: Colorless Grade Standard: Electron Grade,Industrial Grade

The COA of Product:

| Test items CF4 O2 N2 CO CO2 SiF4 SF6 HF AI AS B Ca | ppm ppm ppm ppm ppm ppm ppm ppb ppb ppb | <0.5 <0.5 <0.5 <0.5 <5 ≤10 ≤10 ≤10 ≤5 | <0.01 <0.01 0.03 <0.02 <0.01 <0.1 <0.1 0.19 <0.020 <0.001 <0.005 <0.200 |
|--|--|---|--|
| Cd | ppb | ≤2 | <0.001 |
| Cr | | ≤10 | <0.020 |
| Fe K | ppb ppb ppb | ≤10 | <0.020 <0.007 <0.100 |
| Mn Na | ppb ppb ppb | ≤10 ≤5 | <0.001 <0.040 |
| Th | ppb | ≤0.1 | <0.001 |
| Ti | ppb | ≤10 | <0.002 |
| Li | ppb | ≤10 | <0.002 |
| U | ppb | ≤0.05 | <0.001 |
| Zn | ppb | | <0.005 |
| Si | ppb | | <0.100 |
| Pb | ppb | | <0.001 |
| P Mg | ppb ppb ppb | ≤2 ≤10 | <0.300 <0.020 |
| Ni | ppb | ≤20 | <0.030 |
| Cu | ppb | ≤5 | <0.005 |
| Mo Total impurities of other meta | ppb | | <0.001 |

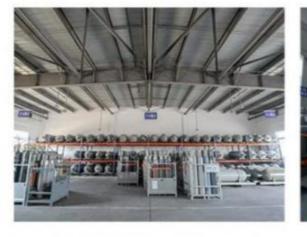


Shanghai Kemike Chemical Co., Ltd is staffed by trained personnel, combine many years experience in Gas industry .We supply cylinder gas, electronic gas, etc., and the gas holder, panel, valves and fittings and other equipment, parts and engineering services to our customers in China and worldwide; The 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.

| SiCl4 NH3 | NH3 CH3F SiH4 | Kr H2S WF6 | F6+Cl2 |
|--------------|----------------|----------------|---------|
| 4MS C3F8 C | C3F8 TEOS CH4 | PH3 SF6 C2 | HCI+Ne |
| CF4 C4F8 S | iH2 | | TMB+H2 |
| SiF4 C3H8 | CI2 | | He +As |
| BBr3 C3H6 | DCE | rrnni a | Ge+Se |
| POCI3 N2 | SO2 | | D+B |
| BCI3 D2 | CO2 | | CO+NO |
| SiHCI3 CH2F2 | HF AsH3 C2H4 | C2H2 HBr COS | Ar+O2 |
| TMAI DMZn [| DEZn GeH4 C2H6 | B2H6 H2Se GeCl | 4 Xe+NO |







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