



Chemical vapor deposition (CVD) precursor Semiconductor Industry application Wf6 Cylinder Gas Tungsten Hexafluoride

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: Wf6
- Minimum Order Quantity: 1 Piece
- Price: US \$ 15/PC
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 200 Tons/Year



Product Specification

- Product Name: Tungsten Hexafluoride
- Purity: 99.999%
- Appearance: Colorless
- DOT Class: 2.3
- Transport Package: Sea Transportation
- Specification: 10L 40L 50L
- Trademark: CMC
- Origin: China
- HS Code: 2812190091
- Supply Ability: 200t/Year
- CAS No.: 7783-82-6
- Formula: Wf6
- EINECS: 232-029-1
- Constituent: Industrial Pure Air
- Grade Standard: Electronic Grade



More Images



Product Description

WF6 refers to tungsten hexafluoride, which is a chemical compound composed of one tungsten atom bonded to six fluorine atoms. Here are some key points about WF6:

Chemical Formula: WF₆

Molecular Weight: 297.84 g/mol

Structure: WF₆ has an octahedral molecular geometry, with the tungsten atom at the center and six fluorine atoms arranged around it.

Physical Properties: Tungsten hexafluoride is a yellowish-green gas at room temperature. It has a high vapor pressure and is highly reactive.

Uses: WF₆ is primarily used in the semiconductor industry for the deposition of thin films of tungsten. It is a precursor for the chemical vapor deposition (CVD) of tungsten, which is an important process in the manufacturing of microelectronic devices such as integrated circuits and memory chips.

Chemical Reactivity: Tungsten hexafluoride is highly reactive and readily reacts with water and moisture in the air to form toxic hydrofluoric acid (HF) and tungstic acid. Therefore, it must be handled with care, and appropriate safety measures should be taken to avoid exposure to WF₆ and its reaction products.

Safety Considerations: Tungsten hexafluoride is corrosive and toxic. It can cause severe burns to the skin, eyes, and respiratory system. Proper handling, storage, and disposal procedures should be followed to ensure safety. Personal protective equipment, such as gloves, goggles, and respiratory protection, should be worn when working with WF₆.

Stability: Tungsten hexafluoride is thermally stable and can be stored as a gas in suitable containers. However, it should be kept away from heat sources, flames, and incompatible materials.

Environmental Impact: As with any chemical compound, the environmental impact of WF₆ depends on its release and exposure. Proper handling, containment, and disposal practices should be followed to minimize environmental contamination and health risks.

Regulations: The handling, storage, and transport of tungsten hexafluoride may be subject to regulations and restrictions, depending on the jurisdiction. Compliance with applicable laws and regulations is necessary to ensure safe use and minimize environmental impact.

Product Spec:

Tungsten 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	Units	Quality requirements	Test results
CF4	ppm	<0.5	<0.01
O2	ppm	<0.5	<0.01
N2	ppm	<1	0.03
CO	ppm	<0.5	<0.02
CO2	ppm	<0.5	<0.01
SiF4	ppm	<0.5	<0.1
SF6	ppm	<0.5	<0.1
HF	ppm	<5	0.19
Al	ppb	≤10	<0.020
As	ppb	≤10	<0.001
B	ppb	≤10	<0.005
Ca	ppb	≤5	<0.200
Cd	ppb	≤2	<0.001
Cr	ppb	≤10	<0.020
Fe	ppb	≤10	<0.007
K	ppb	≤5	<0.100
Mn	ppb	≤10	<0.001
Na	ppb	≤5	<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	≤10	<0.005
Si	ppb	≤10	<0.100
Pb	ppb	≤10	<0.001
P	ppb	≤2	<0.300
Mg	ppb	≤10	<0.020
Ni	ppb	≤20	<0.030
Cu	ppb	≤5	<0.005
Mo	ppb	≤10	<0.001
Total impurities of other metal	ppb	≤500	<0.0010

Detailed Photos



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.

SiCl ₄	NH ₃	NH ₃	CH ₃ F	SiH ₄	Kr	H ₂ S	WF ₆	F ₆ +Cl ₂
4MS	C ₃ F ₈	C ₃ F ₈	TEOS	CH ₄	PH ₃	SF ₆	C ₂	HCl+Ne
CF ₄	C ₄ F ₈	SiH ₂						TMB+H ₂
SiF ₄	C ₃ H ₈	Cl ₂						He +As
BBr ₃	C ₃ H ₆	DCE						Ge+Se
POCl ₃	N ₂	SO ₂						D+B
BCl ₃	D ₂	CO ₂						CO+NO
SiHCl ₃	CH ₂ F ₂	HF	AsH ₃	C ₂ H ₄	C ₂ H ₂	HBr	COS	Ar+O ₂
TMAI	DMZn	DEZn	GeH ₄	C ₂ H ₆	B ₂ H ₆	H ₂ Se	GeCl ₄	Xe+NO



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