

Semiconductor industry application Cylinder Gas Wf6 Tungsten Hexafluoride

Basic Information

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



Product Specification

Product Name: Tungsten Hexafluoride

Transport: By SeaDOT Class: 2.3Purity: 99.999%

Model No.: Tungsten HexafluorideTransport Package: Sea Transportation

Specification: 10L/15kgTrademark: CMC

Origin: Suzhou, China
CAS No.: 7783-82-6
Formula: Wf6
EINECS: 232-029-1

Constituent: Industrial Pure AirGrade Standard: Industrial Grade

Chemical Property: Combustion-Supporting Gas



More Images







Product Description

China Factory Best Price Cylinder Gas Wf6 Tungsten Hexafluoride

Tungsten hexafluoride gas, also known as WF6, is a chemical compound consisting of one tungsten atom and six fluorine atoms. It is a colorless, nonflammable gas with a pungent odor. Tungsten hexafluoride is primarily used in the semiconductor industry for the deposition of tungsten thin films during the manufacturing of integrated circuits and other electronic devices.

Here are some key points about tungsten hexafluoride gas:

Deposition of Tungsten Films: Tungsten hexafluoride is widely employed as a precursor gas in chemical vapor deposition (CVD) processes to deposit tungsten thin films. These films serve as conductive layers in the fabrication of microelectronic devices, such as transistors, interconnects, and gate electrodes.

High Purity and Stability: WF6 gas is typically available in high-purity grades to ensure the quality and integrity of the deposited tungsten films. It exhibits good thermal stability, allowing for controlled and uniform film growth under specific process conditions.

CVD Process: During the CVD process, tungsten hexafluoride gas is introduced into a deposition chamber along with a reducing agent, such as hydrogen gas. The WF6 molecules decompose at elevated temperatures, depositing tungsten atoms onto the substrate surface in a controlled manner.

Safety Considerations: Tungsten hexafluoride is a highly toxic and corrosive gas, requiring careful handling and storage. It reacts violently with water and can release toxic hydrogen fluoride gas. Proper safety measures, including the use of specialized equipment and protective gear, are essential when working with WF6.

Environmental Impact: Like other fluorinated compounds, tungsten hexafluoride has the potential to contribute to environmental concerns. Careful management and disposal practices are necessary to prevent its release into the environment.

It is important to note that tungsten hexafluoride gas is primarily used in industrial and specialized applications, and its handling requires expertise and adherence to safety protocols.

Basic Info.

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
В	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		≤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
Мо	ppb	≤10	<0.001
Total impurities of other metal	ppb	≤500	<0.0010

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

Detailed Photos





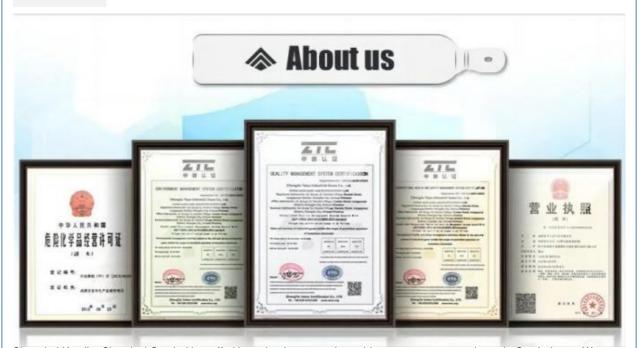






Company

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.

CH3F WF6 F6+CI2 SiCI4 NH3 SiH4 H₂S NH₃ Kr SF₆ C2 HCI+Ne C3F8 **TEOS** PH₃ 4MS C3F8 CH4 TMB+H2 SiH₂ CF4 C4F8 SiF4 **C3H8** CI2 He +As BBr3 **C3H6** DCE Ge+Se POCI3 N2 **SO2** D+B CO+NO BCI3 D2 CO₂ SiHCI3 CH2F2 HF AsH3 **C2H4** C2H2 HBr COS Ar+O2 Xe+NO H2Se GeCI4 **TMAI** DMZn DEZn GeH4 **C2H6 B2H6**



