

# Good Quality Industrial Grade 98%/99.5%/99.9% CF4 Gas Carbon Tetrafluoride

### **Basic Information**

. Place of Origin: China . Brand Name: CMC COA · Certification: CF4 Model Number: • Minimum Order Quantity: 1kg • Price: US \$15/kg Cylinder/Tank Packaging Details: • Delivery Time: 15 days Payment Terms: L/C, T/T



**Carbon Tetrafluoride** 

### **Product Specification**

• Cylinder Pressure:

. Supply Ability:

Product Name: Carbon Tetrafluoride Gas

20000 Tons/Year

15MPa/20MPa

CF4

Valve: Cga580
Boiling Point: -128.1°C
Melting Point: -184 °C
DOT Class: 2.2

CF4 Gas Model No.: • Transport Package: 40L/47L/50L · Specification: 40L/47L/50L • Trademark: CMC China • Origin: 28261990 . HS Code: . Supply Ability: 2000tons/Year 75-73-0 CAS No.:



## More Images

Formula:







### **Product Description**

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Carbon tetrafluoride gas, also known as tetrafluoromethane or CF4, is a colorless and odorless gas composed of one carbon atom bonded to four fluorine atoms (CF4). It is a member of the haloalkane family and is notable for its high stability and low reactivity. Here are some key points about carbon tetrafluoride gas:

Properties: Carbon tetrafluoride gas possesses several important properties:

Stability: CF4 is highly stable and non-reactive under normal conditions. It is resistant to many common chemical reactions, such as combustion, and does not readily react with most substances.

Insolubility: CF4 is insoluble in water and does not dissolve easily in other common solvents.

Density: Carbon tetrafluoride gas is denser than air, so it tends to sink and accumulate in low-lying areas.

Production: Carbon tetrafluoride gas can be produced through various processes, including the reaction of carbon or carbon monoxide with fluorine gas.

Uses: CF4 has several industrial applications:

Electronics: Carbon tetrafluoride is widely used in the electronics industry as a plasma etching and cleaning gas. It is used to remove layers of material from semiconductor surfaces during the manufacturing of microelectronic devices.

Plasma Processing: CF4 is used in plasma-based processes, such as plasma-enhanced chemical vapor deposition (PECVD) and plasma etching, to modify or pattern surfaces in various industries, including semiconductor manufacturing, flat-panel displays, and optical coatings.

Refrigeration: CF4 has been used as a refrigerant in certain specialized applications, although its use as a refrigerant has decreased due to environmental concerns.

Fire Suppression: In some specialized fire suppression systems, carbon tetrafluoride has been used as an inert gas to displace oxygen and suppress fires in enclosed environments.

Safety Considerations: Carbon tetrafluoride gas is generally considered to be safe when handled properly. However, as with any compressed gas, there are some safety considerations:

Pressure and Storage: CF4 is typically stored in high-pressure cylinders designed for the safe containment of compressed gases. Proper storage, handling, and transportation practices should be followed.

Inhalation and Ventilation: CF4 is not toxic, but it can displace oxygen in enclosed spaces, leading to an oxygen-deficient atmosphere. Adequate ventilation should be provided when working with carbon tetrafluoride gas to maintain safe oxygen levels.

Fire and Explosion Hazards: While CF4 is not flammable, it can support combustion in the presence of other flammable substances. Precautions should be taken to avoid mixing CF4 with flammable materials and to prevent ignition sources in its vicinity.

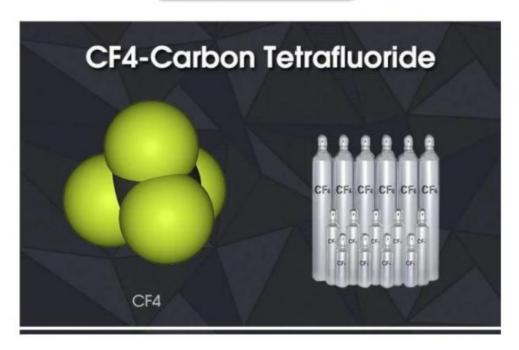
Environmental Impact: Carbon tetrafluoride is a potent greenhouse gas, contributing to global warming. Its release into the atmosphere should be minimized, and appropriate recycling or disposal methods should be followed.

It is important to follow proper safety guidelines, regulations, and manufacturer instructions when handling carbon tetrafluoride gas to ensure the safe and responsible use of the substance.

#### Basic Info.

DOT Class	2.2	Un No	1982
Cylinde	DOT/ISO/GB	Cylinder Pressure	15MPa/20MPa
Valve	Cga580	Melting Point	-184 ºC
Appearance	Colorless, Odorless	Boiling Point	-128.1ºC
Density	3.72 Kg/M3;	Molecular Weight	88
Transport Package	40L, 47L, 50L	Specification	100.00%
Trademark	CMC	Origin	China
HS Code	28261990	Production Capacity	2, 000 Tons/Year





#### Specification:

Specifications	Company Standard	
CF4	≥ 99.999%	
O2+AR	≤ 1 ppm	
N2	≤ 2 ppm	
H2 CO	≤ 0.3 ppm	
co	≤ 0.3 ppm	
C02	≤ 0.3 ppm	
SF6	≤ 0.3 ppm	
THC	≤ 0.3 ppm	
OFC	≤1 ppm	
Moisture	s 1 ppm	

#### **Detailed Photos**





Packaging & Shipping



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.

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