

# China 99.996% Electronic Grade Cylinder Gas NF3 Gas Nitrogen Trifluoride

#### **Basic Information**

. Place of Origin: China . Brand Name: CMC COA · Certification: NF3 Model Number: • Minimum Order Quantity: 1kg • Price: US \$60/kg Cylinder/Tank · Packaging Details: • Delivery Time: 15 days Payment Terms: L/C, T/T . Supply Ability: 20000 Tons/Year



## **Product Specification**

Product Name: Nitrogen Trifluoride

• Melting Point: -206.79 °C

• Appearance: Colorless, Odorless

Boiling Point: -129.0 °C
 Cylinder Pressure: 15MPa/20MPa
 Valve: Diss640
 Cylinder Standard: DOT/ISO/GB
 Transport Package: Sea Transportation

Specification: 47L/440LTrademark: CMC

Origin: Suzhou, China
CAS No.: 7783-54-2
Formula: NF3
EINECS: 232-007-1
Constituent: Industrial Pure Air



## More Images



#### **Product Description**

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Nitrogen trifluoride (NF3) is a chemical compound composed of one nitrogen atom and three fluorine atoms. It is a colorless, odorless gas with a molecular formula of NF3. Here are some key points about nitrogen trifluoride:

Production: NF3 can be produced by the reaction of ammonia (NH3) with fluorine gas (F2). The reaction typically takes place in the presence of a catalyst, such as alumina or silica, at elevated temperatures.

Properties: NF3 is a stable gas at room temperature and pressure. It has a boiling point of -129 °C (-204 °F) and a melting point of -206 °C (-339 °F). The gas is nonflammable, but it can support combustion. NF3 is soluble in water and some organic solvents.

Uses: The primary use of nitrogen trifluoride is as a cleaning agent for the removal of thin film deposition in the semiconductor industry. It is commonly used to clean equipment such as chemical vapor deposition (CVD) chambers, plasma etching systems, and sputtering equipment. NF3 is preferred for this application due to its high etch selectivity and low reactivity with silicon.

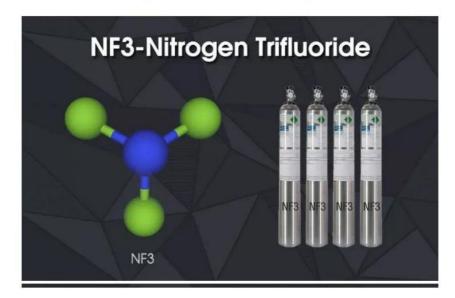
Environmental Impact: NF3 is a potent greenhouse gas with a high global warming potential (GWP). It has a GWP of approximately 17,200 times that of carbon dioxide (CO2) over a 100-year period. Although its atmospheric concentration is relatively low compared to other greenhouse gases, its long atmospheric lifetime contributes to its significant impact on global warming.

Safety Considerations: Nitrogen trifluoride can be hazardous when mishandled or released in large quantities. It is an oxidizer and can react violently with reducing agents or combustible materials. NF3 gas is also an irritant to the respiratory system and can cause eye and skin irritation. Proper safety precautions, including adequate ventilation and personal protective equipment, should be observed when working with NF3.

#### Basic Info.

Molecular Weight	147.05	Density	2.96Kg/m <sup>3</sup>
Melting Point	-206.79°C	Boiling Point	-129.0ºC
Appearance	Colorless,Odorless	Un No.	2451
DOT Class	2.2&5.1	Valve	Diss640
Cylinder Standard	GB/ISO/DOT	Cylinder Pressure	15Mpa/20Mpa
Transport Package	47L/440L	Specification	99.99%,99.996%
Trademark	CMC	Origin	China
HS Code	28129011	Production Capacity	5000tons/Year

#### Specification:



Specifications	Company Standard	
NF3	≥ 99.996%	
CF4	≤ 20 ppm	
N2	≤ 5 ppm	
O2+AR	≤ 3 ppm	
CO	≤ 1 ppm	
CO2	≤ 0.5 ppm	
N2O	≤ 1 ppm	
SF6	≤ 2 ppm	
Moisture	≤ 1 ppm	
Express as HF	≤ 1 ppm	

#### **Detailed Photo**



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 F6+CI2 WF6 SiCI4 NH3 NH3 SiH4 Kr H<sub>2</sub>S

C2 C3F8 C3F8 **TEOS** CH4 PH<sub>3</sub> SF6 HCI+Ne 4MS

SiH2 CF4 C4F8

SiF4 **C3H8** CI2

DCE BBr3 **C3H6** 

POCI3 SO2 N2

BCI3 D2 CO<sub>2</sub>

SiHCI3 CH2F2 HF

**TMAI** DMZn DEZn AsH3

GeH4

C2H4

C2H6

**B2H6** 

C2H2

H2Se

HBr

GeCl4

COS

Xe+NO

TMB+H2

He +As

Ge+Se

D+B

CO+NO

Ar+O2





