



Wholesale Cylinder Gas High Purity 99.996% NF3 Gas Nitrogen Trifluoride

Our Product Introduction

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Basic Information

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



Product Specification

- Product Name: Nitrogen Trifluoride
- Boiling Point: -129.0 °C
- Valve: Diss640
- Cylinder Pressure: 15MPa/20MPa
- Appearance: Colorless, Odorless
- Melting Point: -206.79 °C
- Model No.: Nitrogen Trifluoride
- Transport Package: ISO Tank
- Specification: ISO Tank
- Trademark: CMC
- Origin: Suzhou, China
- HS Code: 2812190091
- Supply Ability: 1000t/Year
- CAS No.: 7783-54-2
- Formula: NF3



More Images



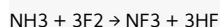
Product Description

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Nitrogen trifluoride (NF₃) is a chemical compound composed of one nitrogen atom bonded to three fluorine atoms. It is a colorless, odorless gas at room temperature and is commonly used in various industrial applications. Here are some key points about nitrogen trifluoride:

Chemical Composition: Nitrogen trifluoride consists of one nitrogen (N) atom bonded to three fluorine (F) atoms. Its chemical formula is NF₃.

Production: Nitrogen trifluoride is typically produced through the reaction of ammonia (NH₃) with fluorine gas (F₂):



This reaction occurs at elevated temperatures in the presence of a catalyst.

Properties: NF₃ is a non-flammable, non-toxic gas with a slightly sweet odor at high concentrations. It is stable and does not react with most common materials at room temperature. It has a boiling point of -129 degrees Celsius (-200 degrees Fahrenheit) and can exist as a gas at room temperature and pressure.

Uses: Nitrogen trifluoride has several industrial applications:

Electronics Manufacturing: NF₃ is commonly used as a cleaning agent in the electronics industry for removing residues from silicon wafers, chambers, and other electronic components during the manufacturing process.

Plasma Etching: It is used as a plasma etchant in the semiconductor industry to selectively remove materials from the surface of silicon wafers and other substrates.

Solar Panels: NF₃ is used in the production of thin-film photovoltaic cells, which are used in solar panels.

Fluorinating Agent: It can be employed as a fluorinating agent in various chemical reactions for introducing fluorine atoms into organic molecules.

Environmental Impact: Nitrogen trifluoride is a potent greenhouse gas with a high global warming potential. It has a long atmospheric lifetime, contributing to its potential impact on climate change. Due to its increasing use in various industries, efforts are being made to monitor and reduce emissions of NF₃.

When handling nitrogen trifluoride, appropriate safety measures should be followed, including working in well-ventilated areas and wearing proper protective equipment. Care should also be taken to prevent exposure to high concentrations, as NF₃ can displace oxygen and cause asphyxiation in confined spaces.

It's important to handle and use nitrogen trifluoride responsibly, taking into account its potential environmental impact and safety considerations.

Basic Info.

| | | | |
|-------------------|--------------------|---------------------|----------------|
| Molecular Weight | 147.05 | Density | 2.96Kg/m³ |
| Melting Point | -206.79°C | Boiling Point | -129.0°C |
| 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 |

Production:

It is used as fluorine source for high energy chemical laser of hydrogen fluoride and fluoride gas. It is an excellent plasma etching gas in the microelectronics industry. It is the class 2.2 toxic gas, and its maximum allowable content in the air is 29mg/m3.

Specification:

| | |
|----------------------|--|
| Product Name | Nitrogen Trifluoride |
| Type | NF3 |
| Purity | n4.6 |
| ISO Tank Spec | 8800L |
| Fill contents (20°C) | 4000kg |
| Valve type | DISS 640 |
| Applications | Semiconductor: Plasma etching gas, used in plasma dry etching process. |

Detailed Photos



Company
Profile

About us



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 | | | | | | Ar+O ₂ |
| TMAI | DMZn | DEZn | | | | | | Xe+NO |
| | | | AsH ₃ | C ₂ H ₄ | C ₂ H ₂ | HBr | COS | |
| | | | GeH ₄ | C ₂ H ₆ | B ₂ H ₆ | H ₂ Se | GeCl ₄ | |



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