China

CMC

COA

NF3

Cylinder/Tank

Wholesale Cylinder Gas High Purity 99.996% NF3 Gas Nitrogen Trifluoride

Basic Information

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



Product Specification

- Product Name:
- Boiling Point:
- Valve:
- Cylinder Pressure:
- Appearance:
- Melting Point:
- Model No.:
- Transport Package:
- Specification:
- Trademark:
- Origin:
- HS Code:
- Supply Ability:
- CAS No.:
- Formula:



-129.0 °C Diss640

Nitrogen Trifluoride

- Nitrogen Trifluoride
- ISO Tank ISO Tank
- CMC
- ONIO
- Suzhou, China
- 2812190091
- 1000t/Year
- 7783-54-2 NF3



More Images









Our Product Introduction

Product Description

Product Description

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): NH3 + 3F2 \Rightarrow NF3 + 3HF

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/m ³
	Melting Point	-206.79ºC	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%
Ì	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
Туре	NF3
Purity	n4.6
ISO Tank Spec	8800L
Fill contens (20?C)	4000kg
Valve type	DISS 640
Applications	Semiconductor: Plasma etching gas, used in plasma dry etching process.

Detailed Photos





