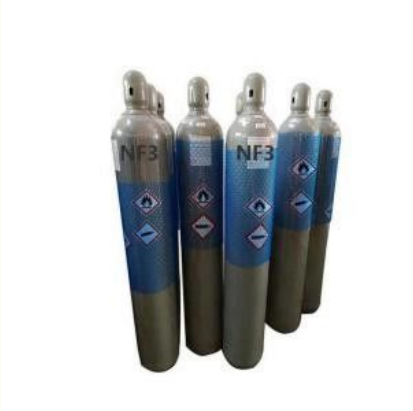
China factory wholesale High Purity Cylinder Gas NF3 Nitrogen Trifluoride

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: NF3
- Minimum Order Quantity: 1kg
- Price: US $50/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 5000kg/month



Product Specification

- Product Name: Nitrogen Trifluoride Gas
- Melting Point: -206.79 ºC
- Appearance: Colorless, Odorless
- Boiling Point: -129.0 ºC
- Cylinder Pressure: 15MPa/20MPa
- Valve: Diss640
- Cylinder Standard: DOT/ISO/GB
- Transport Package: Sea Transportation
- Specification: 47L, 440L
- Trademark: CMC
- Origin: China
- HS Code: 28129011
- Supply Ability: 5000tons/Year
- CAS No.: 7783-54-2
- Formula: NF3

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Product Description

Electronic Specialty Gas Cylinder Liquid Nitrogen Trifluoride NF3 Gas

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:
1. Production: Nitrogen trifluoride is primarily produced through the reaction of ammonia (NH3) with fluorine gas (F2) under controlled conditions. The reaction is exothermic and usually occurs in the presence of a catalyst.
2. Physical properties: NF3 is a non-flammable gas that is stable at room temperature and pressure. It has a boiling point of -129.1°C (-204.4°F) and a melting point of -206.8°C (-340.2°F). The gas is denser than air and has a slightly sweet odor at high concentrations.
3. Applications: Nitrogen trifluoride has several industrial applications, including:
- Semiconductor manufacturing: NF3 is widely used in the electronics industry as a cleaning agent for removing impurities from the surfaces of silicon wafers during the fabrication of integrated circuits and thin-film transistors.
- Plasma etching: It is used as a plasma etchant in the production of microelectronic devices. NF3 reacts with silicon dioxide (SiO2), a common material in semiconductor manufacturing, to form volatile products that can be easily removed.
- Flat-panel display production: NF3 is employed in the manufacturing of liquid crystal displays (LCDs) and plasma displays to clean and etch glass surfaces.
- Solar panel manufacturing: It is used in the production of thin-film solar panels, where it helps remove impurities and residues from the panel surfaces.
4. Environmental impact: Nitrogen trifluoride is a potent greenhouse gas with a high global warming potential (GWP). It has a long atmospheric lifetime (around 550 years) and is estimated to have a GWP significantly higher than that of carbon dioxide (CO2). The release of NF3 into the atmosphere can contribute to climate change.
5. Safety considerations: NF3 is generally considered non-toxic but can be an asphyxiation hazard in high concentrations, displacing oxygen. It is also a powerful oxidizer and can support combustion. Proper handling, storage, and ventilation measures should be followed when working with nitrogen trifluoride.

Basic Info

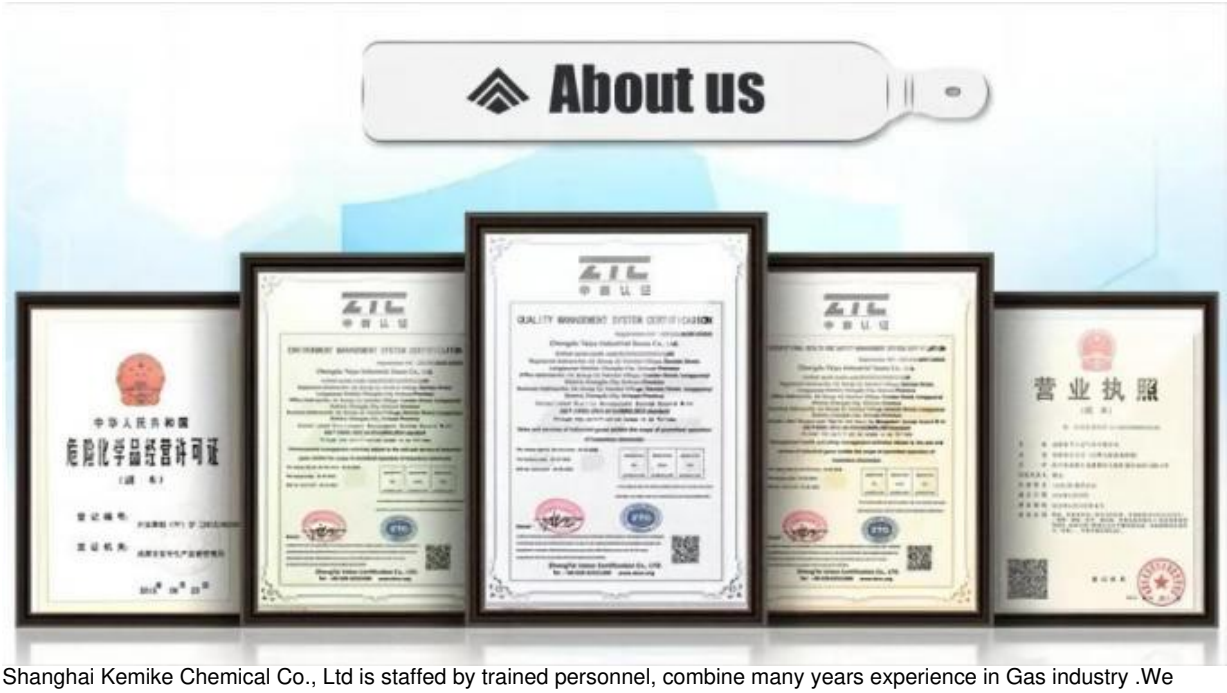
Transport Package:	47L, 440L	Melting Point	-206.79ºC
Trademark:	CMC	Boiling Point	-129.0ºC
Specification	99.99%, 99.996%	Production Capacity	5000 M3/Year
Cylinder Pressure	15MPa/20MPa	Valve	Diss640
Appearance	Colorless, Odorless	Density	2.96 Kg/M3

Specifications:

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.

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