High-Purity Silicon Semiconductors Solar Cells Production Sihcl3 Trichlorosilane

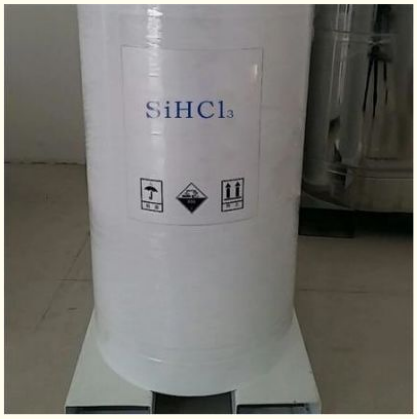
Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: Sihcl3
- Minimum Order Quantity: 1kg
- Price: US $500/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 200 Tons/Year

Product Specification

- Product Name: Trichlorosilane
- Purity: 99.99%
- Transport: By Sea
- Orign: China
- Transport Package: Tanker
- Specification: Y-Cylinder
- Trademark: CMC
- Origin: China
- HS Code: 2812190091
- Supply Ability: 500ton/Month
- CAS No.: 10025-78-2
- Formula: Sihcl3
- EINECS: 7783-82-6
- Constituent: Industrial Pure Air
- Grade Standard: Industrial Grade



More Images



Product Description

Trichlorosilane is a chemical compound composed of one silicon atom bonded to three chlorine atoms and one hydrogen atom. It is a colorless liquid at room temperature and is commonly encountered as a gas. Here are some key points about trichlorosilane:

Chemical Composition: Trichlorosilane consists of one silicon (Si) atom bonded to three chlorine (Cl) atoms and one hydrogen (H) atom. Its chemical formula is HSiCl3.

Properties: Trichlorosilane is a highly volatile liquid that readily converts to a gas at room temperature. It has a boiling point of -31.8 degrees Celsius (-25.2 degrees Fahrenheit) and a melting point of -80.8 degrees Celsius (-113.4 degrees Fahrenheit). Trichlorosilane has a pungent odor and is highly reactive.

Production: Trichlorosilane is primarily produced through the reaction of metallurgical-grade silicon (typically obtained from the reduction of silicon dioxide with carbon) with hydrogen chloride gas:

Si + 3HCl → HSiCl3 + H2

This reaction typically occurs at high temperatures in the presence of a catalyst, such as copper.

Uses: Trichlorosilane has various industrial applications, particularly in the production of silicon-based materials:

Silicon Production: Trichlorosilane is a key precursor in the production of high-purity polysilicon, which is used in the manufacture of solar cells, semiconductor devices, and other electronic components. It is used as a feedstock in the chemical vapor deposition (CVD) process for depositing silicon layers.

Silicones: Trichlorosilane is a starting material for the synthesis of various silicone polymers and resins. It undergoes hydrolysis to produce silanols, which can further condense to form silicone materials with different properties.

Chemical Synthesis: Trichlorosilane is used as a reagent in various chemical reactions, including the synthesis of organosilicon compounds and as a reducing agent.

Safety Considerations: Trichlorosilane is a flammable and reactive substance. It can react violently with water, releasing hydrogen chloride gas. Trichlorosilane is also toxic andI apologize for the incorrect information in my previous response. Trichlorosilane (HSiCl3) is a chemical compound composed of one silicon atom bonded to three chlorine atoms and one hydrogen atom. It is a colorless liquid at room temperature and is commonly encountered as a gas. Here are some key points about trichlorosilane:

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Safety Considerations: Trichlorosilane is a flammable and reactive substance. It can react violently with water, releasing hydrogen chloride gas. Trichlorosilane is also toxic and can cause severe burns upon contact with the skin or eyes. Proper safety precautions, such as the use of appropriate protective equipment and handling procedures, should be followed when working with trichlorosilane.

Basic Info.

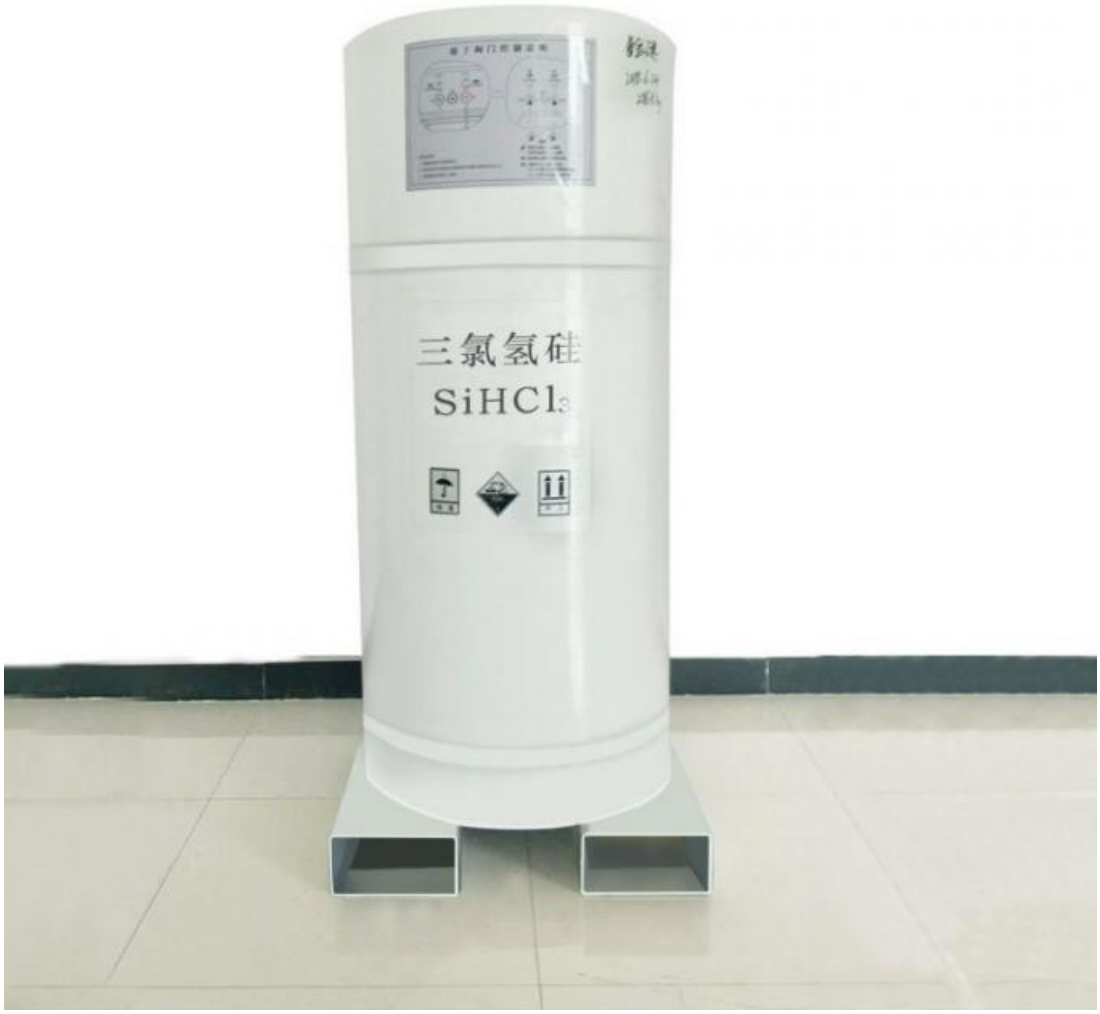
Model No:	SiHCl3	Quality	Electron Grade
Transport Package	Y-Cylinder, T-Drum, Tt, Tanker	Specification	20L, 40L, 280L and customizable
Trademark	CMC	Origin	Suzhou, China
HS Code	2812190091	Production Capacity	500ton/Month

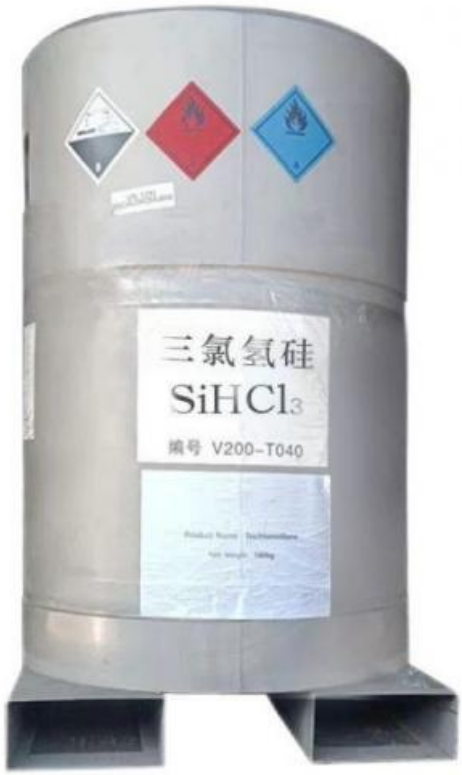
Specification:

Trichlorosilane is a silicon precursor for epitaxial silicon-containing thin films, especially for the preparation of starting wafers.

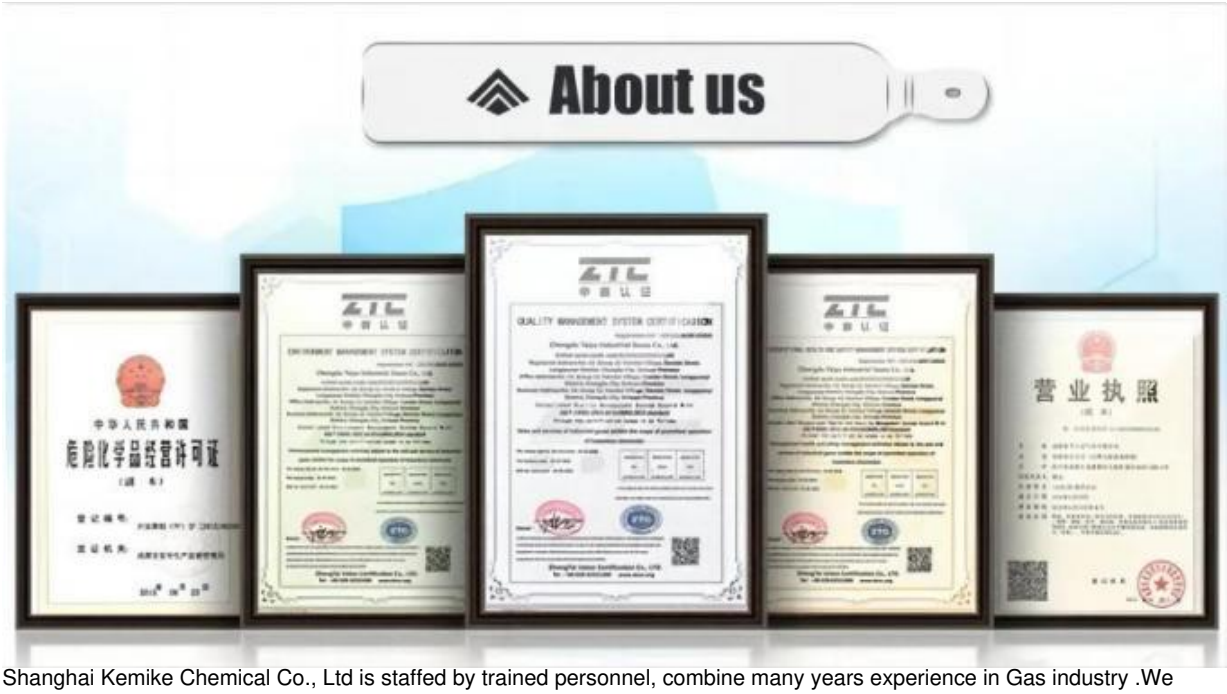
Purity %:	≥99.85
Resistivity:	≥ 300 ohm-cm
Boron:	≤ 0.1 ppba silicon
Total Carbon:	≤ 5 ppma
Iron:	≤ 5 ppba
Other Chlorosilane :	≤ 500 ppm
Cylinder State @ 21.1°C :	Liquid
Flammable Limits In Air :	7-83%
Auto Ignition Temperature (°C):	182
Molecular Weight (g/mol):	135.45
Specific gravity (air =1):	4.67
Critical Temperature (°C):	242.5

Detailed Photos





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.

SiCl4	NH3	NH3	CH3F	SiH4	Kr	H2S	WF6	F6+Cl2
4MS	C3F8	C3F8	TEOS	CH4	PH3	SF6	C2	HCl+Ne
CF4	C4F8	SiH2						TMB+H2
SiF4	C3H8	Cl2						He +As
BBr3	C3H6	DCE						Ge+Se
POCl3	N2	SO2						D+B
BCl3	D2	CO2						CO+NO
SiHCl3	CH2F2	HF	AsH3	C2H4	C2H2	HBr	COS	Ar+O2
TMAl	DMZn	DEZn	GeH4	C2H6	B2H6	H2Se	GeCl4	Xe+NO

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