



## Trichlorosilane Good Price High Purity Semiconductor Industry Application Usage $\text{SiHCl}_3$

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number:  $\text{SiHCl}_3$
- Minimum Order Quantity: 1kg
- Price: US \$500/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 30 days
- Payment Terms: L/C, T/T
- Supply Ability: 200 Tons/Year



### Product Specification

- Product Name: Trichlorosilane
- Purity: 99.99%
- Grade: Electron Grade
- Transport: By Sea
- Model No.:  $\text{SiHCl}_3$
- Transport Package: Tanker
- Specification: Y-Cylinder
- Trademark: CMC
- Origin: China
- HS Code: 2812190091
- Supply Ability: 500ton/Month
- CAS No.: 10025-78-2
- Formula:  $\text{SiHCl}_3$
- EINECS: 7783-82-6
- Constituent: Industrial Pure Air



### More Images



## Product Description

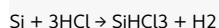
### Product Description

Trichlorosilane (SiHCl<sub>3</sub>) is a chemical compound composed of one silicon atom bonded to three chlorine atoms and one hydrogen atom. It is a colorless, volatile liquid that has a pungent odor. 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 SiHCl<sub>3</sub>.

**Properties:** Trichlorosilane is a volatile liquid with a boiling point of -30.8 degrees Celsius (-23.4 degrees Fahrenheit) and a melting point of -120.1 degrees Celsius (-184.2 degrees Fahrenheit). It has a characteristic odor similar to that of hydrochloric acid.

**Production:** Trichlorosilane is primarily produced through the reaction of metallurgical-grade silicon (usually derived from quartz or silicon dioxide) with hydrogen chloride (HCl) gas:



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

**Uses:** Trichlorosilane has various industrial applications:

**Silicon Production:** It is a key precursor in the production of polycrystalline silicon, which is widely used in the manufacturing of solar cells, semiconductors, and electronics.

**Chemical Synthesis:** Trichlorosilane is utilized as a starting material or intermediate in the synthesis of various silicon-based compounds, including silanes, silicones, and high-purity silicon.

**Semiconductor Industry:** It is used as a source material for the chemical vapor deposition (CVD) process, where trichlorosilane is decomposed to deposit thin layers of silicon on semiconductor wafers.

**Optical Fiber Manufacturing:** Trichlorosilane is used in the production of high-purity silica glass, which is essential for optical fibers and other optical components.

**Safety Considerations:** Trichlorosilane is flammable and may react violently with water or moisture, releasing hydrogen chloride gas. It is corrosive to metals and can cause skin and eye irritation. Proper safety precautions, such as using appropriate protective equipment and handling procedures, should be followed when working with trichlorosilane.

It's important to handle trichlorosilane with care and adhere to safety measures to mitigate potential risks associated with its reactivity and corrosiveness.

#### Basic Info.

Model No:	SiHCl <sub>3</sub>	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: H<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, Ar, CO<sub>2</sub>, propane, acetylene, helium, laser mixed gas, SiH<sub>4</sub>, SiH<sub>2</sub>Cl<sub>2</sub>, SiHCl<sub>3</sub>, SiCl<sub>4</sub>, NH<sub>3</sub>, CF<sub>4</sub>, NF<sub>3</sub>, SF<sub>6</sub>, HCL, N<sub>2</sub>O, doping mixed gas (TMB, PH<sub>3</sub>, B<sub>2</sub>H<sub>6</sub>) and other electronic gases.

SiCl <sub>4</sub>	NH <sub>3</sub>	NH <sub>3</sub>	CH <sub>3</sub> F	SiH <sub>4</sub>	Kr	H <sub>2</sub> S	WF <sub>6</sub>	F <sub>6</sub> +Cl <sub>2</sub>
4MS	C <sub>3</sub> F <sub>8</sub>	C <sub>3</sub> F <sub>8</sub>	TEOS	CH <sub>4</sub>	PH <sub>3</sub>	SF <sub>6</sub>	C <sub>2</sub>	HCl+Ne
CF <sub>4</sub>	C <sub>4</sub> F <sub>8</sub>	SiH <sub>2</sub>						TMB+H <sub>2</sub>
SiF <sub>4</sub>	C <sub>3</sub> H <sub>8</sub>	Cl <sub>2</sub>						He +As
BBr <sub>3</sub>	C <sub>3</sub> H <sub>6</sub>	DCE						Ge+Se
POCl <sub>3</sub>	N <sub>2</sub>	SO <sub>2</sub>						D+B
BCl <sub>3</sub>	D <sub>2</sub>	CO <sub>2</sub>						CO+NO
SiHCl <sub>3</sub>	CH <sub>2</sub> F <sub>2</sub>	HF						Ar+O <sub>2</sub>
TMAI	DMZn	DEZn						Xe+NO
AsH <sub>3</sub>	C <sub>2</sub> H <sub>4</sub>	C <sub>2</sub> H <sub>2</sub>	HBr	COS	Ar+O <sub>2</sub>			
GeH <sub>4</sub>	C <sub>2</sub> H <sub>6</sub>	B <sub>2</sub> H <sub>6</sub>	H <sub>2</sub> Se	GeCl <sub>4</sub>	Xe+NO			



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