



## Industrial Applications Semiconductor Industry Cylinder Gas Bcl3 Gas Boron Trichloride

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: Bcl3
- Minimum Order Quantity: 1kg
- Price: US \$18
- Packaging Details: Cylinder
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 300,000tons/year



### Product Specification

- Product Name: Boron Trichloride
- Melting Point: -107.3°C
- Cylinder Pressure: 15MPa/20MPa
- Cylinder Standard: GB/ISO/DOT
- Boiling Point: 12.5°C
- Appearance: Colorless Fuming Liquid Or Gas With A Pungent
- Valve: Cga660
- Model No.: Boron Trichloride
- Transport Package: Sea Transportation
- Specification: 40L/47L/50L
- Trademark: CMC
- Origin: Suzhou, China
- HS Code: 2812191090
- CAS No.: 10294-34-5



### More Images



Product Description

Product Description

Boron trichloride, or BCl<sub>3</sub>, is a chemical compound composed of one boron atom and three chlorine atoms. It belongs to the group of covalent compounds and is known for its strong Lewis acidity. Here are a few key points about BCl<sub>3</sub>:

**Molecular Structure:** BCl<sub>3</sub> has a trigonal planar molecular geometry. The boron atom is located at the center, and the three chlorine atoms are symmetrically arranged around it.

**Physical Properties:** BCl<sub>3</sub> is a colorless gas with a pungent and irritating odor. Its boiling point is relatively low at around -107 degrees Celsius (-161 degrees Fahrenheit), and it readily evaporates at room temperature.

**Lewis Acidity:** Boron trichloride is a powerful Lewis acid, meaning it can accept a pair of electrons from a Lewis base. It readily reacts with compounds containing lone pair electrons, such as ammonia (NH<sub>3</sub>) or water (H<sub>2</sub>O).

**Chemical Reactivity:** BCl<sub>3</sub> is highly reactive due to the presence of the electron-deficient boron atom. It reacts vigorously with water to produce hydrochloric acid (HCl) and boric acid (H<sub>3</sub>BO<sub>3</sub>). It also reacts with alcohols and amines to form alkyl or aryl chlorides.

**Industrial Applications:** BCl<sub>3</sub> has several industrial uses. It is commonly employed as a catalyst in organic synthesis, particularly in the production of polymers and plastics. It is also used in the semiconductor industry for plasma etching and as a dopant in certain processes.

**Safety Considerations:** Boron trichloride is toxic and corrosive, and it can cause severe burns upon contact with the skin or eyes. It should be handled with caution in a well-ventilated area, and appropriate protective equipment, such as gloves and goggles, should be worn.

Molecular Weight	117.19	Density	1.35Kg/m³
Melting Point	-107.3°C	Boiling Point	12.5°C
Appearance	Colorless Fuming Liquid or Gas with a Pungent	Un No.	1741
DOT Class	2.3&8	Valve	CGA660
Cylinder Standard	GB/ISO/DOT	Cylinder Pressure	12.5Mpa/15Mpa/20Mpa
Transport Package	40L,47L,50L	Specification	99.9%
Trademark	CMC	Origin	China
HS Code	2812191090	Production Capacity	300000tons/Year

Detailed Photos



**Specification:**

Dot Class: 2.3

State: Liquid

Purity: 99.9%

UN NO: UN1741

CAS NO: 10294-34-5

Grade Standard: Industrial Grade

<b>Specification</b>	<b>99.9%</b>
Chlorine	≤ 10 ppm
Silicon Tetrachloride	≤ 300 ppm

**Packaging & Shipping**

Cylinder Specifications		Contents
Cylinder Capacity	Valve	Weight
47L	CGA 660	50 kgs



Company

Profile

ShangHai CMC 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	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>
TMAI	DMZn	DEZn	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

The image shows a modern industrial building with a glass facade and a white fence in the foreground. The building has multiple floors and a flat roof. The fence is made of metal and has a gate. The building is surrounded by a green lawn.

**Workshop Display:**



**Monitor**



**Laboratory**



**Equipment**



**Zone of rectification**



**Gas filling**



**Equipment**

## Shipping Methods



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