

### Factory high purity chemical synthesis flame retardant semiconductors Cylinder Gas Boron Trichloride

#### **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

• Valve: Cga660

• Cylinder Pressure: 15MPa/20MPa

Appearance: Colorless Fuming Liquid Or Gas With A

Pungent

Model No.: Boron Trichloride
 Specification: 40L, 47L, 50L
 Trademark: CMC

Origin: China
 HS Code: 28121910

Supply Ability: 300, 000tons/Year
 CAS No.: 10294-34-5
 Formula: Bcl3
 EINECS: 233-658-4

Constituent: Industrial Pure Air



#### More Images



## Factory high purity chemical synthesis flame retardant semiconductors Cylinder Gas Boron Trichloride

Boron trichloride (BCl3) is a chemical compound composed of one boron atom and three chlorine atoms. It is a colorless, toxic gas that has a pungent odor. Boron trichloride is known for its chemical reactivity and is widely used in various industrial applications. Here are some key points about boron trichloride:

- 1. Structure: Boron trichloride has a trigonal planar molecular geometry, where the boron atom is at the center and the three chlorine atoms are arranged around it.
- 2. Preparation: Boron trichloride can be prepared by the reaction of boron oxide (B2O3) with carbon and chlorine gas. The reaction typically occurs at high temperatures:

 $B2O3 + 3CI2 + C \rightarrow 2BCI3 + CO2$ 

- 3. Physical properties: Boron trichloride is a gas at room temperature and has a boiling point of around -18 °C (-0.4 °F). It is highly soluble in organic solvents such as benzene and carbon tetrachloride but is immiscible with water.
- 4. Chemical reactivity: BCl3 is a Lewis acid, which means it can accept an electron pair from a Lewis base. It reacts readily with compounds containing lone pairs of electrons. It can react with water to form boric acid and hydrochloric acid:
  BCl3 + 3H2O → B(OH)3 + 3HCl

The reaction of boron trichloride with alcohols or amines can lead to the formation of alkyl or aryl borates or boron-containing compounds.

- 5. Uses: Boron trichloride finds several applications in various industries. Some common uses include:
- Catalyst: It is used as a catalyst in organic synthesis, especially in the production of polymers and plastics.
- Chemical synthesis: BCl3 is used in the synthesis of boron compounds, such as boron nitride and boron carbide.
- Etching: It is employed in the semiconductor industry for etching silicon wafers during the production of integrated circuits.
- Flame retardant: Boron trichloride is sometimes used as a flame retardant additive in plastics and textiles.
- Laboratory reagent: It serves as a reagent in various chemical reactions carried out in laboratories.

It is important to note that boron trichloride is a highly reactive and toxic gas. Proper safety precautions, including the use of appropriate ventilation and personal protective equipment, should be followed when handling or working with this compound.

#### Basic Info.

Model NO.	Bcl3 Gas	DOT Class	2.3 & 8
Un No	1741	Cylinder Standard	GB/ISO/DOT
Cylinder Pressure	15MPa/20MPa	Valve	Cga660
Melting Point	-107.3 ºC	Appearance	Colorless Fuming Liquid or Gas with a Pungent
Boiling Point	12.5 ºC	Density	1.35 Kg/M <sup>3</sup>
Molecular Weight	117.19	Transport Package	40L, 47L, 50L
Specification	99.9%, 99.999%	Trademark	CMC
Origin	China	HS Code	28121910
Production Capacity	/300, 000tons/Year		

#### Product Description



# Boron Trichloride BCL<sub>3</sub>





#### Specification:

Dot Class: 2.3 State: Liquid Purity: 99.9% UN NO:UN1741 CAS NO: 10294-34-5

Grade Standard: Industrial Grade

Specification99.9%Chlorine≤ 10 ppmSilicon Tetrachloride≤ 300 ppm

Packaging & Shipping

**Cylinder Specifications Contents**Cylinder Capacity Valve Weight

47L CGA 660 50 kgs

**Detailed Photos** 



#### Our

#### Advantages

- 1. Our factory produces propane from high quality raw material, besides the price is cheap.
- 2. The propane is produced after many times procedures of purification and rectification in our factory. The online control system insure the gas purity every stage. The finished product must meet the standard.
- 3. During the filling, the cylinder should firstly be dried for a longtime(at least 16hrs), then we vacuumize the cylinder, finally we displace it with the original gas. All these methods make sure that the gas is pure in the cylinder.



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.

CH3F H<sub>2</sub>S WF6 F6+Cl2 SiCI4 NH3 NH3 SiH4 Kr

SF<sub>6</sub> C2 HCI+Ne C3F8 **TEOS** CH4 PH<sub>3</sub> 4MS C3F8

CF4

TMB+H2 SiH2 C4F8

SiF4 **C3H8** CI2 He +As

DCE BBr3 **C3H6** Ge+Se

POCI3 N<sub>2</sub> **SO2** D+B

CO+NO BC<sub>13</sub> D2 CO2

SiHCI3 CH2F2 HF AsH3 **C2H4** C2H2 HBr COS Ar+O2

Xe+NO GeH4 H2Se GeCI4 TMAI DMZn DEZn **C2H6 B2H6** 







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