



## Boron Trichloride

## Description

Synonym: Boron Chloride  
Formula: BCl<sub>3</sub>

## Gas Data

Molecular Weight: 117.17  
Density: 4.8 kg/m<sup>3</sup> @ 21.1°C, 101.325 kPa  
0.30 lb/ft<sup>3</sup> @ 70°F, 14.696 psia  
Specific Volume: 0.21 m<sup>3</sup>/kg @ 21.1°C, 101.325 kPa  
3.3 ft<sup>3</sup>/lb @ 70°F, 14.696 psia

## Shipping Information

CAS Registry Number: 10294-34-5  
UN Number: UN 1741  
ECCN Number: EAR99  
DOT Proper Shipping Name: Boron Trichloride  
DOT Classification: 2.3, Hazard Zone C (gas poisonous by inhalation)

DOT Label: INHALATION HAZARD  
CORROSIVE GAS

TC Shipping Name: Boron Trichloride

TC Classification: 2.3, 8

TC Label: POISON GAS, CORROSIVE GAS



## Cylinder Specifications

Cylinder Size	Valve Outlet CGA No.	Pressure psig @ 70°F	Pressure kPa @ 21.1°C	Approximate Ship Weight	
				lb	kg
1A	660	4.4	30	202	92
2	660	4.4	30	114	52
3	660	4.4	30	49	22
4	660	4.4	30	27	12
LB	180	4.4	30	6	3
QF	660	4.4	30	202	92
UF	660	4.4	30	40	18

Gas Grade Purity Specifications	Product Code	Cylinder Size	Content		Equipment Recommendations	Model No.	Page No.
			US	Metric			
<b>Boron Trichloride, Research Purity 99.999%</b> <i>Guaranteed Specifications</i>	G2102123	QF	100 lb	45.36 kg	Manual Control Valve Cross Purge Personal Monitor Cyl. Valve Wrench	61A-660 4775-660 IQ250 TW-2	417 422 398 430
	G2673833	UF	10 lb	4.54 kg			
Carbon Dioxide <	2 ppm						
Carbon Monoxide <	0.5 ppm						
Methane <	0.5 ppm						
Nitrogen <	4 ppm						
Oxygen <	1 ppm						
<i>A Certificate of Analysis is available upon request at a nominal charge.</i>							
<b>Boron Trichloride, Matheson Purity 99.998%</b> <i>Guaranteed Specifications</i>	G1802123	QF	100 lb	45.36 kg	Manual Control Valve Cross Purge Personal Monitor Cyl. Valve Wrench	61A-660 4775-660 IQ250 TW-2	417 420 398 430
	G2674726	UF	10 lb	4.54 kg			
Carbon Monoxide <	1 ppm						
Methane <	1 ppm						
Nitrogen <	5 ppm						
Oxygen <	2 ppm						
<i>A Certificate of Analysis is available upon request at a nominal charge.</i>							
<b>Boron Trichloride, CP Grade 99.9%</b>	G1502101	1A	100 lb	45.36 kg	Manual Control Valve LB Control Valve Cross Purge Personal Monitor Cyl. Valve Wrench	55A-660 4333-180 4775-660 IQ250 TW-2*	417 416 423 398 430
	G1502145	2	40 lb	18.14 kg			
	G1502156	3	10 lb	4.54 kg			
	G1502165	4	5 lb	2.27 kg			
	G1502175	LB	1 lb	454 gm			

*Liquid phase, weight/weight%*

*A Certificate of Conformance will be provided on request.*

*\*Except LB*

⚠WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).