Boron Trichloride

**Description**

Synonym: Boron Chloride  
Formula: BCl₃

**Gas Data**

Molecular Weight: 117.17  
Density: 4.8 kg/m³ @ 21.1°C, 101.325 kPa  
Specific Volume: 0.30 lb/ft³ @ 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

**Cylinder Specifications**

<table>
<thead>
<tr>
<th>Cylinder</th>
<th>Valve Outlet Pressure</th>
<th>Valves Pressure Ship Weight</th>
<th>CGA No.</th>
<th>psig @ 70°F</th>
<th>kPa @ 21.1°C</th>
<th>lb</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>114</td>
<td>27</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>114</td>
<td>27</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>114</td>
<td>27</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>114</td>
<td>27</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>LB</td>
<td>180</td>
<td>4.4</td>
<td>2</td>
<td>63</td>
<td>18</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>QF</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>202</td>
<td>92</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>UF</td>
<td>660</td>
<td>4.4</td>
<td>2</td>
<td>202</td>
<td>92</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Gas Grade Purity Specifications**

Boron Trichloride, Research Purity 99.999%

Guaranteed Specifications

- Carbon Dioxide < 2 ppm
- Carbon Monoxide < 0.5 ppm
- Methane < 0.5 ppm
- Nitrogen < 4 ppm
- Oxygen < 1 ppm

A Certificate of Analysis is available upon request at a nominal charge.

Boron Trichloride, Matheson Purity 99.98%

Guaranteed Specifications

- Carbon Monoxide < 1 ppm
- Methane < 1 ppm
- Nitrogen < 5 ppm
- Oxygen < 2 ppm

A Certificate of Analysis is available upon request at a nominal charge.

Boron Trichloride, CP Grade 99.9%

- Manual Control Valve  
- Cross Purge  
- Personal Monitor  
- Cyl. Valve Wrench

Liquid phase, weight/weight%

A Certificate of Conformance will be provided on request.

*Except LB