

## <sup>11</sup>Boron Trifluoride High Purity Grade

### SPECIFICATIONS

#### ISOTOPIC ENRICHMENT

Boron-11/Boron-10 ratio is determined by ICP-MS, Inductively Coupled Plasma Mass Spectrometry

B-11 (Atomic %) .....> 99.8%

#### CHEMICAL PURITY

Determined by GC-DID and FTIR

BF<sub>3</sub>.....> 99.99%  
 N<sub>2</sub>.....< 15 ppmv  
 O<sub>2</sub>/Ar.....< 15 ppmv  
 CO<sub>2</sub>.....< 15 ppmv  
 SO<sub>2</sub>.....< 15 ppmv  
 HF.....< 15 ppmv  
 SiF<sub>4</sub>.....< 15 ppmv

### PACKAGING

**ALL CYLINDERS** are fully D.O.T. certified containers manufactured from carbon steel. Customer cylinders may be filled upon request.

**VALVES** are CGA330 or DISS642.

**MINIMUM ORDER** is 50g

### STANDARD CYLINDERS

| CYLINDER    | O.D.         | Length      | Gross Wt.   | Wall         | Volume              | Service Pressure | Test Pressure | Fitting | Max. Fill ( <sup>11</sup> BF <sub>3</sub> ) |
|-------------|--------------|-------------|-------------|--------------|---------------------|------------------|---------------|---------|---|
| Description | Inches (mm)  | Inches (mm) | Pounds (kg) | Inches (mm)  | cu. inches (liters) | Psi.             | Psi.          | NGT     | Grams                                       |
| 0.44L       | 1.94 (49.28) | 11.88 (302) | 2.3 (1.04)  | 0.095 (2.41) | 25.5 (0.418)        | 1800             | 3000          | 3/4     | 100   |
| 8.4 L       | 7.00 (178)   | 17.40 (442) | 25.0 (11.3) | 0.160 (4.06) | 525 (8.60)          | 2015             | 3360          | 3/4     | 1600  |
| 49L         | 9.25 (235)   | 55 (1397)   | 139 (63)    | 0.224 (5.7)  | 2990 (49)           | 2400             | 4000          | 3/4     | 20,000                                      |

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