

¹⁰Boron Trifluoride Detector Grade.



Boron Trifluoride (¹⁰BF₃) proportional counters are largely sensitive to thermal neutrons. Typical applications include: Thermal Neutron Diffraction, Spectroscopy, Density Gauges, and Neutron Monitoring. Compared to ³He, ¹⁰B has a lower cross section for thermal neutrons, making ¹⁰BF₃ detectors less sensitive. The one advantage is that the Q-value of the neutron reactions is much larger than for ³He, making it easier to discriminate against gamma pulses with a ¹⁰BF₃ detector.

Linde's proprietary purification technologies provide ¹⁰BF₃ at the highest purity available making it the preferred source for neutron detection systems.

Specification	Analytical Value	Test Method
¹⁰ B Enrichment	>96.5 atom%	MS
Boron Trifluoride	>99.99%	GC
Hydrogen	< 5 ppm	GC
Oxygen	< 5 ppm	GC
Carbon Dioxide	< 5 ppm	GC
Carbon Monoxide	< 5 ppm	GC
Methane	< 5 ppm	GC

A large variety of cylinder sizes and valve options are available. Please inquire about specific packaging needs.

Linde Electronics and Specialty Gases

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