

## BORON NITRIDE POWDER SPECIFICATION

### GRADE MBN

#### Powder Characteristics

- \* Not Wetted by most Molten Metals
- \* Excellent Thermal Shock Resistance
- \* Low Thermal Expansion
- \* Hexagonal Crystal Structure
- \* Chemically Inert
- \* Good Oxidation Resistance
- \* High Temperature Lubricity

#### CHEMICAL COMPOSITION

##### Grade MBN

B+N	94% min
B <sub>2</sub> O <sub>3</sub>	5.0% max
Total O <sub>2</sub>	5.5% max
C	0.1% max
Moisture	0.15% min
Trace Elements	0.2% max

#### PHYSICAL PROPERTIES

##### Grade MBN

Theoretical Density	2.27g/cm <sup>3</sup>
d50(Malvern)	4-6 micron
Specific Surface (BET)	8-20m <sup>2</sup> /g
Tap Density	0.2-0.4g/cc
Sublimation Temp	2800°C
Coefficient of Thermal expansion K <sup>-1</sup>	0.7 x 10 <sup>-6</sup> (prep)
	8 x 10 <sup>-6</sup> (parallel)

Individual grades can be custom made to match specific customer requirements.

ISO 9002 - 1987 APPROVED