



Boron Nitride Powders

NX Grades

Momentive Performance Materials produces over 70 standard and custom grades of boron nitride (BN) powders to meet a wide range of application requirements and has over 50 years of expertise in the synthesis and refinement of BN powders.

Potential Applications

Momentive's NX grades are excellent candidates to consider for use in a wide range of demanding applications, including:

- Lubricants and release agents for high-temperature metal and glass processing
- Refractory coatings
- Base material for hot pressed solids and metal-matrix or ceramic-metal composites
- Processing and final product enhancement of plastics, including nucleation of solid and foamed products
- Lubricating and reinforcing additives for tribological enhancement of polymer composites

Key Features & Typical Benefits

- Thermal Conductor
- Electrical Insulator
- Low Dielectric Constant/Loss
- High Temperature Stability
- Lubricious
- Inert and Chemically Stable
- Non-Wetting

Typical Physical Properties	NX1	NX5	NX9	NX10
Crystal (Type)	Hexagonal (Graphitic)	Hexagonal (Graphitic)	Hexagonal (Graphitic)	Hexagonal (Graphitic)
Color	White	White	White	White
Mean Particle Size μm	0.9	5.0	9.0	10.0
Crystal Size μm	0.2-0.5	0.2-0.5	0.2-0.5	0.2-0.5
Surface Area m^2/g	20	14	8	12
Tap Density g/cm^3	0.12	0.25	0.50	0.40
Oxygen %	0.9-1.2	1.0-1.5	11.0-13.0	0.9-1.2
Soluble Borates %	0.10	0.10	4.0-7.0	0.10
Carbon %	0.03	0.10	0.10	0.10
Calcium %	< 0.01	< 0.01	3.0-4.0	< 0.01

Boron Nitride Powder Grades NX1, NX5, NX9, NX10

NX1

NX1 is an ultrafine grade with a submicron mean particle size, making it easy to disperse. It also has the highest surface area of the NX grades.

NX5

NX5 has a mean particle size of approximately 5 microns. It contains slightly higher oxygen levels than typical BN grades.

NX9

NX9 has a mean particle size of approximately 9 microns and the lowest

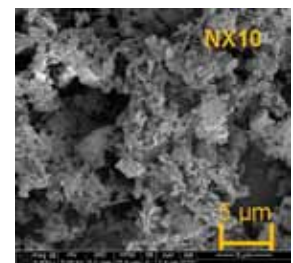
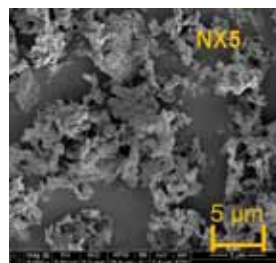
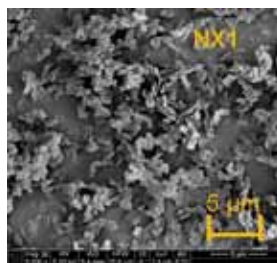
surface area of the NX grades. It has a higher level of residual calcium and soluble borates than most BN grades.

NX10

NX10 has a mean particle size of approximately 10 microns and is a higher purity grade than NX9.

Typical Trace Element Content

Si	< 500 ppm
Cu, Al, Mg, Fe, K	< 100 ppm (per element)
Cl, S	< 50 ppm (per element)
Na	< 20 ppm
Other Metals	< 10 ppm each



Note: Test data. Actual results may vary. Typical properties are average data and are not to be used as or to develop specifications.

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For email inquiries, we will make every attempt to respond in the incoming written language. If that is not possible, we will respond in English.

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Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

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