



Boron Nitride Powders

Grades HCP and HCPL

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

Potential Applications

Boron nitride (BN) grades HCP and HCPL powders may be considered for use in a broad range of demanding applications, including release agents for high temperature metal and glass processing. Additionally, these grades are often employed as additives in solid lubrication applications, and as base materials for hot-pressed solids, composites, and refractory coatings.

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 ¹	HCP	HCPL
Crystal (Type)	Hexagonal (Graphitic)	Hexagonal (Graphitic)
Color	White	White
Mean Particle Size μm	7-10	9-12
Crystal Size μm	4	8
Surface Area m^2/g	13	7
Tap Density g/cm^3	0.3	0.4
Oxygen %	0.40	0.40
Soluble Borates %	0.20	0.20
Carbon %	0.03	0.03

Momentive Performance Materials' boron nitride (BN) powders of grades HCP and HCPL are generally single-crystal hexagonal platelets with very high purity. The mean particle sizes for these ultra-fine powders are in the range of 6 to 13 μm , and they are >99.9% -325 mesh.

HCPL

Grade HCPL is refined to achieve a lower surface area than HCP, making it more lubricious and stable at even higher temperatures. It also exhibits improved blending in many formulations.

Boron Nitride Powder Grades HCP and HCPL

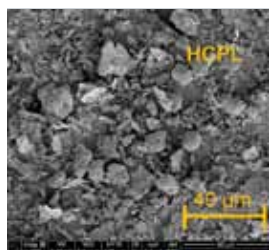
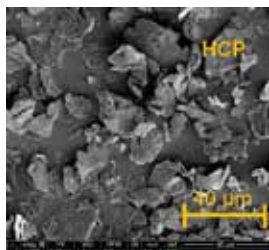
HCP

Grade HCP is Momentive's basic high-purity grade and is flexible enough to fulfill a wide range of advanced material applications. Its mean particle size is 7-10 μm .

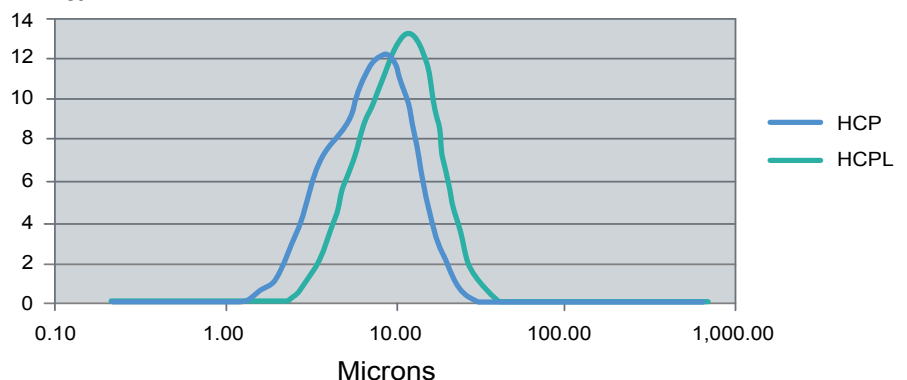
Typical Trace Element Content¹

(ppm, per element)

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



Typical Particle Size Distribution¹



¹ Typical data are average and actual results may vary. Typical data shall not be used as product specifications.

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Middle East	NCEC	+44(0) 1235239671
Asia/Pacific (except China)	NCEC	+44(0) 1235239670
China	NCEC	+86.10.5100.3039
Latin America (except Brazil)	NCEC	+44(0) 1235239670
Brazil	SOS Cotec	08000111767 or 08007071767
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At sea	Radio U.S. Coast Guard in US waters NCEC in International waters	+44(0) 1235239670

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