



# Boron Nitride Powders

Grades HCV and AC6003

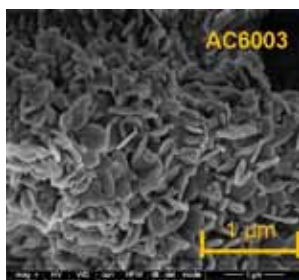
Momentive Performance Materials produces over 70 standard and custom grades of BN powders to meet a wide range of application requirements, and has over 50 years of expertise in the synthesis and refinement of boron nitride powders.

## Potential Applications

Boron nitride (BN) grades HCV and AC6003 may be considered for use in paints, refractory coatings and mold/die release agents for their release properties and inertness to molten metals and salts. They are also hot-pressable materials which can be considered for use in manufacturing shapes and composites where good thermal conductivity, high electrical resistivity and machinability are desired.

## 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 <sup>1</sup>	HCV	AC6003
Crystal (Type)	Hexagonal (Turbostratic)	Hexagonal (Turbostratic)
Color	White	White
Mean Particle Size µm	7-11	7-11
Crystal Size µm	0.1-0.2	0.5
Surface Area m <sup>2</sup> /g	40	29
Tap Density g/cm <sup>3</sup>	0.5	0.35
Oxygen %	2.7	2
Soluble Borates %	0.5	0.2
Carbon %	0.05	0.03

Momentive Performance Materials boron nitride (BN) powders of grades HCV and AC6003 are agglomerates composed of submicron hexagonal turbostratic crystals. The mean particle size for these fine powders is 7 – 11 µm, and over 95% of the particles pass through a -325 mesh.

As initial synthesis powders, these grades provide an economical alternative to higher-purity grades such as HCP and possess a smaller hexagonal platelet structure which may provide good nucleation and lubrication qualities.

## Boron Nitride Powder Grades HCV and AC6003

### HCV

Grade HCV is Momentive Performance Materials “basic” grade of BN, and

serves as a starting-block for the production of many advanced materials. It may provide excellent nucleation in plastics applications for foaming and solidification.

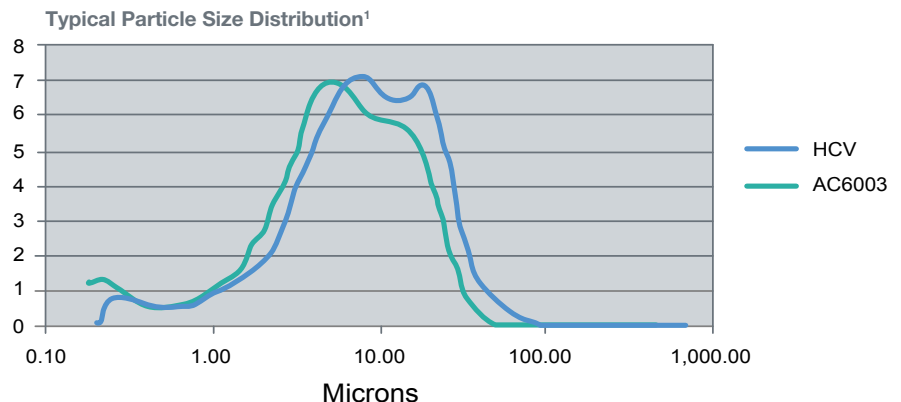
### AC6003

Grade AC6003 is a more processed form of HCV, resulting in a lower surface area and oxygen content and slightly larger particle size distribution.

## Typical Trace Element Content<sup>1</sup>

(ppm, per element)

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



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

## Customer Service Centers

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**LIMITATIONS:** Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.=

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LOCATION	EMERGENCY SERVICE PROVIDER	EMERGENCY CONTACT NUMBER
Mainland U.S., Puerto Rico	CHEMTREC	1.800.424.9300
Alaska, Hawaii	CHEMTREC	1.800.424.9300
Canada,	CHEMTREC	1.800.424.9300
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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
All other locations world wide	NCEC	+44(0) 1235239670
At sea	Radio U.S. Coast Guard in US waters NCEC in International waters	+44(0) 1235239670

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