Product Data Sheet

Hexagonal Boron Nitride Powder (HBN)

Hexagonal Boron Nitride powder has a structure and properties similar to graphite. It has become one of the most popular dry lubricants due to its lubricating properties and inertness to molten metals and salts. It is used in many different applications, especially as a mold release agent. Hexagonal Structure Boron Nitride improves the strength and holdability of the present powder composites.

Product Availability

Hexagonal Boron Nitride powder is available in 3 grades: PG (Premium), SG(Standard) and CG (Custom). Custom grades are fine-tuned to the customer applications and are available on request. Grade CG-F is shown as an example in the chart below.

Availability of Particle Sizes

Boron Nitride powder typically comes in size of - 10umm. Also available on request sizes -44 um and -60 um.

Technical Data

Grade		PG	SG	CG-F
Typical Applications		Cosmetic Industry, high purity ceramics	Paints and coatings Mold and die release agents Ceramics Ceramic Coating Dry Lubricants	Misc. applications including ceramics
Appearance (dry state):	Color	Pure White	White	White
Chemical composition:		Typical	Specifications	Specifications
	Chemical formula:	BN	BN	BN
	Total B+N	99.6%	99% min	77% min
	Calcium	0.014%	n/a	n/a
	Free Carbon	0.001%	0.02% max	0.02% max.
	Iron	78 ppm	n/a	n/a
	Oxygen	0.03%	0.45% max	12% max
	Soluble Boron	0.2%	0.25% max.	2% max
	Chloride	38 ppm	n/a	n/a
	Aluminum	78 ppm	n/a	n/a
	Silicon	0.001%	n/a	n/a
	Lead	<0.1 mg/kg	n/a	n/a
	Arsenic	<0.1 mg/kg	n/a	n/a
	Mercury	<0.1 mg/kg	n/a	n/a
	Magnetic Metals	0.07% max.	0.07% max	0.07% max
	Moisture:	0.1%	0.1% max	0.1% max
Physical data:	Particle Shape:	Similar to Graphite	Similar to Graphite	Similar to Graphite
	Particle size D50	5.46 um	5.46 um	5.46 um
	Surface Area	7.4 m2/g	7.4 m2/g	7.4 m2/g
	Bulk Density	0.4 g/cc3	0.4 g/cc3	0.4 g/cc3
	Tap Density	0.45	0.45	0.45
	Structure	Hexagonal	Hexagonal	Hexagonal