



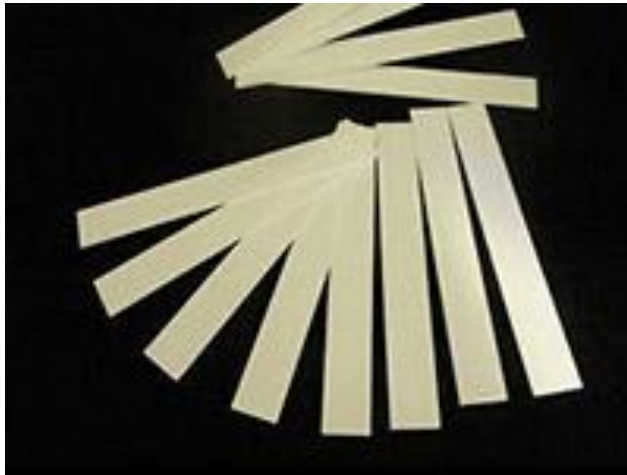
### Pyrolytic Boron Nitride Strip

Compared with normal boron nitride ceramic, pyrolytic boron nitride (PBN) has a much better purity level. pyrolytic boron nitride strips and other pyrolytic boron nitride products are synthesized on the mold by chemical vapor deposition (CVD) process, with BCl<sub>3</sub> and NH<sub>3</sub> at high temperature and low pressure. Nextgen Advanced Materials supplies pyrolytic boron nitride strip with high

quality and fast delivery. Customization is available too.

### Product Description

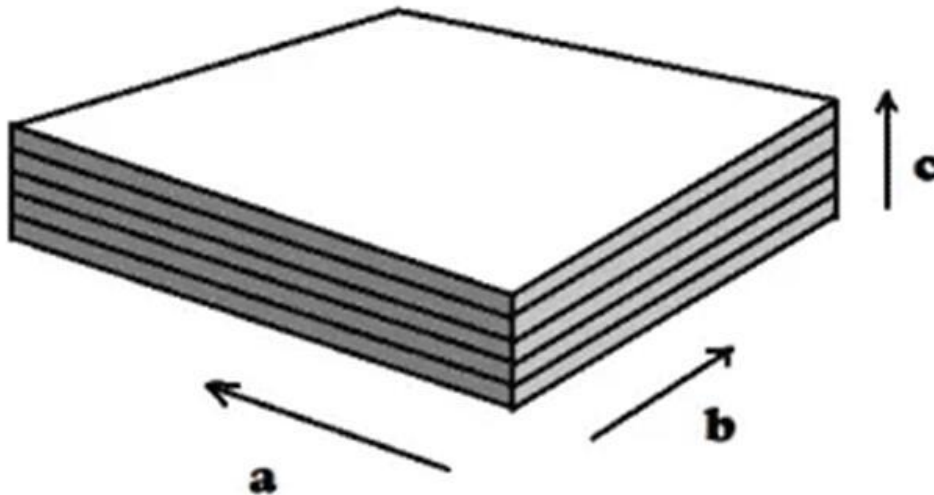
You are welcomed to come to our factory to buy the latest selling, low price, and high-quality Nextgen Pyrolytic Boron Nitride Strip. We firmly believe that perseverance is the key to the success of an enterprise. Compared with normal boron nitride ceramic, pyrolytic boron nitride (PBN) has a much better purity level. PBN strips and other pyrolytic boron nitride products are synthesized on the mold by chemical vapor deposition (CVD) process, with BCl<sub>3</sub> and NH<sub>3</sub> at high temperature and low pressure. The PBN products are extremely pure, as the purity of vapor is easier to be controlled. Most PBN products made from the CVD process have a total impurity of less than 100 ppm, which means the purity is better than 99.99%.



### Pyrolytic Boron Nitride Specification

Item	Unit	Value	
Lattice constant	μ m	a:2.504×10 <sup>-10</sup>	
		c:6.692×10 <sup>-10</sup>	
Density	g/cm <sup>3</sup>	2.0-2.19	

Resistivity		$\Omega \cdot \text{cm}$	$3.11 \times 10^{11}$	
Tensile strength (ab)		N/mm <sup>2</sup>	153.86	
Bend strength	c	N/mm <sup>2</sup>	243.63	
	ab	N/mm <sup>2</sup>	197.76	
Elastic modulus		N/mm <sup>2</sup>	235690	
Thermo conductivity			"a" direction	"c" direction
	(200 °C)	W/m·k	60	2.6
	(900 °C)	W/m·k	43.7	2.8
Dielectric strength (at RT)		KV/mm	56	



PBN Strip Properties	
Item	Parameter
Compound Formula	BN
Molecular Weight	24.82
Appearance	White
Melting Point	2973 °C
Density	2.1 g/cm <sup>3</sup> (h-BN); 3.45 g/cm <sup>3</sup> (c-BN)
Solubility in H <sub>2</sub> O	Insoluble
Refractive Index	1.8 (h-BN); 2.1 (c-BN)
Electrical Resistivity	13 to 15 10 <sup>x</sup> $\Omega \cdot \text{m}$