



Pyrolytic Boron Nitride Crucible

Pyrolytic boron nitride crucibles are traditionally used to vaporize a variety of materials including Gallium (Ga) and Aluminium (Al) for epitaxial growth compound semiconductors due to their high purity, anisotropic thermal properties, chemical inertness, thermal stability, and thermal shock resistance. Nextgen Advanced Materials supplies Pyrolytic boron nitride crucible with high

quality and fast delivery. Customization is available too.

Product Description

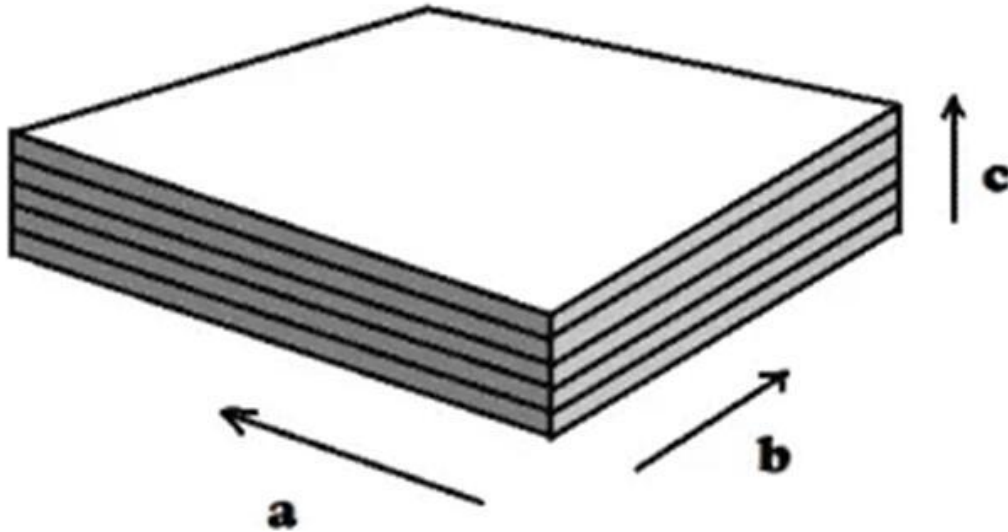
As the professional manufacture, we would like to provide you Nextgen Pyrolytic Boron Nitride Crucible. And we will offer you the best after-sale service and timely delivery. Pyrolytic boron nitride crucible (PBN crucible), as its name suggests, is a vessel or a melting tank made of pyrolytic boron nitride, a type of refractory material. PBN crucible is a deep-bottomed bowl container that can withstand higher temperatures than glassware and other common crucibles to heat solids (especially high melting point materials). When PBN crucible is used, the lid is usually placed diagonally on the crucible to prevent the heated material from jumping out and allowing air to enter and exit freely for possible oxidation reactions.



Pyrolytic Boron Nitride Specification

Item	Unit	Value	
Lattice constant	$\mu\text{ m}$	a: 2.504×10^{-10}	
		c: 6.692×10^{-10}	
Density	g/cm^3	2.0-2.19	
Resistivity	$\Omega \cdot \text{cm}$	3.11×10^{11}	
Tensile strength (ab)	N/mm^2	153.86	
Bend strength	c	N/mm^2	243.63
	ab	N/mm^2	197.76
Elastic modulus	N/mm^2	235690	

			"a" direction	"c" direction
Thermo conductivity	(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 crucible Specification	
Size	5ml~5L
Material	PBN, Pyrolytic Boron Nitride
Standard	LEC, MBE, VGF
Purity	99.99%

Product	Available size
Liquid Encapsulated Czochralski, PBN LEC crucibles	50ml~5L
Molecular Beam Epitaxy, PBN MBE crucibles	5ml~300ml
Vertical Gradient Freeze, PBN VGF crucibles	0.2L~5L