

Pyrolytic Boron Nitride (PBN)

Exceeds or Meets Standard Industrial Specifications
Economical and Competitive Alternative for Saint-Gobain

Benefits

- Low Thermal Expansion Coefficient
- Relatively Low Density
- High Thermal Conductivity
- Extreme Hardness

Applications

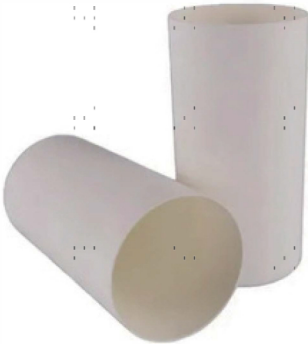
- Crystal growth - VGF, VB/HB, LEC crucibles
- MBE – crucibles and components
- Photovoltaic (CIGS) – boat and components
- MOCVD (HB-LED) – heater components
- OLED – crucibles
- Electrical – high temperature isolation

PBN Products

- PBN Crucibles
- PBN Boats
- PBN Plates
- PBN-PG Heaters

Material	PBN
Bulk Density	2.0-2.19g/cm3
Max. Working Temperature	2400 °C
Volume Resistivity ($\Omega \cdot \text{cm}$)	3.11*10 ¹¹
Thermal Conductivity (W/M·k)	43-60
Tensile Strength (N/mm2)	153.86 (parallel)
Bending Strength (N/mm2)	243.63 (parallel)
Dielectric Strength (RT) (KV/mm)	56

Pyrolytic Boron Nitride Crucibles

Products	Image	Applications
VGF Crucibles		Synthesis of GaAs, InP single crystal
MBE Crucibles		Synthesis of semiconductor crystal and III-V compounds
LEC Crucibles		Synthesis of GaAs, InP, GaP single crystal, semiconductor crystal and III-V compounds



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