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.

Momentive Performance Materials’ PolarTherm thermal management powders are a unique spherical agglomerate of boron nitride crystals, which may result in more isotropic properties versus typical boron nitride particles. This can result in increased thermal conductivity at moderate loading levels in polymer composites, combined with the low dielectric constant typical of boron nitride.

Potential Applications

PolarTherm boron nitride (BN) powder grades used as fillers may offer benefits to a variety of electronics applications. Potential uses include:
- Thermal greases, adhesives, and gels
- Phase change thermal interface materials
- Thermal interface films
- Printed circuit board pre-pregs and laminates
- Electronic molding compounds
- Underfills

Key Features & Typical Benefits
- Thermal Conductor
- Electrical Insulator
- Low Dielectric Constant/Loss
- High Temperature Stability
- Lubricious
- Inert and Chemically Stable
- Non-Wetting

<table>
<thead>
<tr>
<th>Typical Physical Properties¹</th>
<th>PTX25</th>
<th>PTX60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>Spherical Agglomerate</td>
<td>Spherical Agglomerate</td>
</tr>
<tr>
<td>Mean Particle Size µm</td>
<td>25</td>
<td>55-65</td>
</tr>
<tr>
<td>D10/D90</td>
<td>10/45</td>
<td>20/90</td>
</tr>
<tr>
<td>Surface Area m²/g</td>
<td>7.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Tap Density g/cm³</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Oxygen %</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Carbon %</td>
<td>0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>Soluble Borates %</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

¹ Typical data are average and actual results may vary. Typical data shall not be used as product specifications.
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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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Momentive Performance Materials maintains an around-the-clock emergency service for its products.

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