Boron nitride is a man-made ceramic material prized for its excellent thermal and chemical stability and lubricating properties. Our boron nitride powder can be used in products ranging from high-temperature lubricants to cosmetics.

**Characteristics**
- High electrical resistivity.
- Good thermal conductivity.
- High-temperature stability.
- Oxidation-resistant:
  - Up to 850 °C in air.
  - Up to 1400 °C under vacuum.
  - Up to 2200 °C under inert atmosphere.
- High chemical inertness.
- Corrosion resistant against many molten metals.
- Excellent lubricant.
- Non-toxic

**Applications**
- Electrical insulator.
- Release agent.
- High-temperature lubricant.
- Hexagonal BN used to manufacture CBN.
- Additive in cosmetics.
- Filler for silicone and resins to improve thermal conductivity.

**Properties**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Typical Chemical Properties</th>
<th>Typical Physical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short name</td>
<td>O%</td>
<td>C%</td>
</tr>
<tr>
<td>M120</td>
<td>&lt;2</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>B150</td>
<td>&lt;2</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>P050</td>
<td>&gt;2</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

**General Properties**

BORON NITRIDE is a man-made ceramic material prized for its excellent thermal and chemical stability and lubricating properties. Our boron nitride powder can be used in products ranging from high-temperature lubricants to cosmetics.

**Applications**

- Electrical insulator.
- Release agent.
- High-temperature lubricant.
- Hexagonal BN used to manufacture CBN.
- Additive in cosmetics.
- Filler for silicone and resins to improve thermal conductivity.

Kennametal manufactures sophisticated materials in the form of castings, powders, coatings, consumables, and machined parts that resist wear, corrosion, and abrasion. Information provided in this document is intended only for general guidance about Kennametal. Selection and purchase of Kennametal products is the sole responsibility of the product user. Individual applications must be fully evaluated by the user, including compliance with applicable laws, regulations, and non-infringement. Kennametal cannot know or anticipate the many variables that affect individual product use and individual performance results may vary. For these reasons, Kennametal does not warrant or guarantee information in this document and assumes no liability regarding the same. Kennametal makes no warranties regarding this information and disclaims all express or implied warranties with respect to this information, including, without limitation, all implied warranties of merchantability and fitness for a particular purpose and warranties of patent non-infringement. Kennametal will not be responsible for special, incidental, exemplary, or consequential damages that may be incurred pursuant to the use of the information provided in this document.

To learn more, please contact your local Kennametal sales office.