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.

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

| | Crystal Structure | | Typical Chemical Properties | | | | | | Typical Physical Properties | | | |
|------------|-------------------|--------------------|-----------------------------|-------|-------|-----|-------|----------|-----------------------------|----------|------|-------|
| Short name | Structure | Crystal Size µm | 0% | C% | В% | Ca% | B203 | Moisture | BET | TD | D50 | D90 |
| M120 | Hexagonal | <2 | <2 | <0.1 | >42.5 | 1 | <1.2 | <0.7 | 10~20 | 0.17-0.3 | 4~6 | <14 |
| B150 | Hexagonal | <2 | <1.5 | <0.1 | >42.5 | 1 | 0.5-1 | <0.7 | 8~20 | 0.17~0.3 | 4~6 | 10~14 |
| P050 | Hexagonal | >2 | <1.5 | <0.05 | >42.5 | 1 | <0.4 | 0.3~0.4 | 4~6 | 0.1~0.2 | 5~10 | 10~20 |

NOTE: This data shows typical values and does not represent a specification.

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