

BP200

General Properties

BP200 is a silicon nitride based material that exhibits excellent high-temperature strength, wear resistance, and thermal shock resistance. BP200 is light weight compared to other wear materials and is resistant to corrosion and molten metal.

Applications

- Abrasive flow control
- High-temperature wear parts
- Bearings
- Pins
- Spacers
- Spray nozzles

Physical Properties

Property	Units	BP200
Bulk Density	g/cm ³	3.25
Flexural Strength (20 °C)	MPa	800
Vickers Hardness (18,5 kg load)	GPa	16.7
Hot Hardness (1000 °C)	GPa	12.2
Rockwell A	—	93.5
Young's Modulus	GPa	304
Bulk Modulus	GPa	223
Shear Modulus	GPa	119
Poisson's Ratio	—	.27
Fracture Toughness	MPa • m ^{1/2}	6.0
Erosion Resistance (ASTM G76*) 90° *w/SiC abrasive	x 10 ⁻⁶ cm ³ /g	193
Thermal Expansion, RT-400 °C	x 10 ⁻⁶ °C ⁻¹	2.5
Thermal Conductivity at RT	W/m ² K	12
Thermal Shock Resistance	ΔT °C	249
Maximum Use Temperature oxidizing environment	°C	1000

WORLD AND CORPORATE HEADQUARTERS
Kennametal Inc.
 800 446 7738 (United States and Canada)
 ftmill.service@kennametal.com

EUROPEAN HEADQUARTERS
Kennametal Europe GmbH
 +41 52 6750 100
 neuhausen.info@kennametal.com

ASIA-PACIFIC HEADQUARTERS
Kennametal Singapore Pte. Ltd.
 +65 6265 9222
 k-sg.sales@kennametal.com

INDIA HEADQUARTERS
Kennametal India Limited
 +91 080 22198444 or +91 080 43281444
 bangalore.information@kennametal.com

