



High Temperature Cordierite Ceramic

TECHNICAL DATA SHEET OF HT CORDIERITE CERAMIC

| | PROPERTIES | VALUE |
|------------|---|-----------------------------------|
| CHEMICAL | SiO ₂ | 50 - 55 % |
| | Al ₂ O ₃ | 34 - 38 % |
| | MgO | 6 - 8 % |
| | Others | 2 - 8 % |
| PHYSICAL | Colour | Light Grey |
| | Surface Finish | Smooth |
| | Density | 2.37 ± 0.05 g/cm ³ |
| | Bulk Density | - |
| | Porosity | 5 % |
| | Water Absorption | 2 % |
| | Hardness on Moh's Scale | 7 % |
| | Hardness on Vicker's Scale | 300 Hv ₁₀ |
| | Flexural Strength 3 P.B. (@ Room Temperature) | 105 MPa |
| | Compressive Strength (@ Room Temperature) | 350 MPa |
| | Young's Modulus | 90 GPa |
| | Crushing Strength | - |
| | Bead Sphericity 90% | - |
| | % Cumulative Weight Loss / Hr | |
| | After 24 Hrs. | - |
| | After 96 Hrs. | - |
| THERMAL | Coefficient of Linear Thermal Expansion (Room Temperature to 1000 °C) | 2.5 - 3.5 x 10 ⁻⁶ / °C |
| | Thermal Conductivity (@ Room Temperature) | 3 W/mK |
| | Max Temperature of Use (No Load Condition) | 1100 °C (2012 °F) |
| ELECTRICAL | Dielectric Strength (@ Room Temperature) | 15 kV/mm |
| | Dielectric Constant (@ Room Temperature @ 1 MHz) | 5 |
| | Dissipation Factor (@ Room Temperature @ 1 MHz) | 0.004 |
| | Volume Resistivity (@ Room Temperature) | 10 ¹¹ Ω.cm |
| | Te - Value | 600 °C (1112 °F) |

Kindly note that all values mentioned are based on test pieces and may vary according to component design and manufacturing process. The values are not guaranteed by Jyoti Ceramic Ind. in anyway whatsoever and should be treated as indicative only. All values refer to a testing temperature of 20 °C, unless otherwise specified.



Contact us :

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