

# Materials

## CERAMICS

|                         |                                          | <b>AL</b><br>ALUMINA CERAMIC |
|-------------------------|------------------------------------------|------------------------------|
| <b>POWDER</b>           | PURITY (%)                               | 99.99                        |
| <b>SLURRY</b>           | SLURRY APPEARANCE                        | White                        |
|                         | SLURRY DENSITY (g/mL)                    | 2.58                         |
|                         | SOLIDS CONTENT (vol%)                    | 51.4                         |
|                         | DYNAMIC VISCOSITY 1 [Pa·s]               | 8400                         |
|                         |                                          |                              |
| <b>SINTERED CERAMIC</b> | THEORETICAL DENSITY (g/cm <sup>3</sup> ) | 3.99                         |
|                         | RELATIVE DENSITY (%)                     | 99.5                         |
|                         | THREE-POINT FLEXURAL STRENGTH (MPa)      | 500                          |
|                         | YOUNG'S MODULUS (GPa)                    | 300                          |
|                         | COEFFICIENT OF THERMAL EXPANSION (ppm/K) | 7-8                          |
|                         | THERMAL CONDUCTIVITY (W/(m·K))           | 32                           |
|                         | RESISTIVITY (Ω·cm)                       | ≈10 <sup>14</sup>            |
|                         | COMPATIBLE BMF SYSTEMS                   | S230, S240                   |