

ZTA zirconia toughened alumina

ROHS & REACH COMPLIANT

Physical properties

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| DENSITY | 4.13 g/cm ³ |
| COMPOSITION | ZrO ₂ 10% + AL ₂ O ₃ 90% |
| COLOUR | white pearl |

Thermal properties

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| SPECIFIC HEAT | 900 j/kg .K (at 100°C) |
| CONDUCTIVITY | 20 W/m ⁻¹ .K ⁻¹ (at 20°C) |
| EXPANSION | 8 10 ⁻⁶ /K ⁻¹ |
| MAX WORKING TEMPERATURE | 1000°C |

Mechanical properties

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| HARDNESS | 1800 Vickers |
| POISSON'S RATIO | 0.25 |
| YOUNG'S MODULUS | 380 GPa |
| COMPRESSIVE STRENGTH | 4000 MPa |
| BENDING STRENGTH | 600 MPa |

Chemical properties

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| ACID & ALKALI | good resistance |
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Electrical properties

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| RESISTIVITY | 1.10 ₁₄ Ohm .cm (at 20°C) |
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