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## 99.8% ALUMINA

TYPE C799 TO IEC 60672

### Composition

Alumina	Al <sub>2</sub> O <sub>3</sub>	99.82%
Silica	SiO <sub>2</sub>	0.06%
Calcia	CaO	0.04%
Magnesia	MgO	0.035%
Iron Oxide	Fe <sub>2</sub> O <sub>3</sub>	0.025%
Sodium Oxide	Na <sub>2</sub> O	0.008%
Titania	TiO <sub>2</sub>	0.004%
Chromic Oxide	Cr <sub>2</sub> O <sub>3</sub>	0.003%
Potassium Oxide	K <sub>2</sub> O	0.001%
Boron Oxide	B <sub>2</sub> O <sub>3</sub>	0.001%

### Physical Properties

Bulk Density	Open Porosity	Flexural Strength		Compressive Strength
		20°C	1000°C	20°C
3.91 g/cm <sup>3</sup>	0%	380 Mpa	165 Mpa	2650 Mpa
244 lbs/ft <sup>3</sup>	0%	55 ksi	24 ksi	384 ksi

### Thermal Properties

These values represent typical properties of standard materials.  
 Values should be used only for comparison and should not be used as a warranty.

Conductivity		Expansion Coefficient	Max Use Temperature (no load)
20°C	800°C		
30 W/m°K	8.2 W/m°K	$8.4 \times 10^{-6}/C^{\circ}$	1750°C
208 BTU.in/ft <sup>2</sup> .hr°F	57 BTU.in/ft <sup>2</sup> .hr°F	$4.7 \times 10^{-6}/F^{\circ}$	3182°F

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