



# 99 ALUMINA

## Composition

Alumina	Al <sub>2</sub> O <sub>3</sub>	99%
Silica	SiO <sub>2</sub>	0.7%
Magnesia	MgO	0.07%
Iron Oxide	Fe <sub>2</sub> O <sub>3</sub>	0.07%
Sodium Oxide	Na <sub>2</sub> O	0.05%
Calcium Oxide	CaO	0.03%

## Physical Properties

Bulk Density	Open Porosity	Flexural Strength		Compressive Strength 20°C
		20°C	1000°C	
3.83 g/cm <sup>3</sup>	0%	345 Mpa	205 Mpa	2550 Mpa
239 #/ft <sup>3</sup>	0%	50 ksi	30 ksi	370 ksi

## Thermal Properties

Conductivity		Expansion Coefficient 20-1000°C	Max Use Temperature (no load)
20°C	800°C		
29 W/m K	7.2 W/m K	8.4x10 <sup>-6</sup> /°C	1800°C
201 BTU.in/ft <sup>2</sup> .hr.°F	50 BTU.in/ft <sup>2</sup> .hr.°F	4.7x10 <sup>-6</sup> /°F	3272°F

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