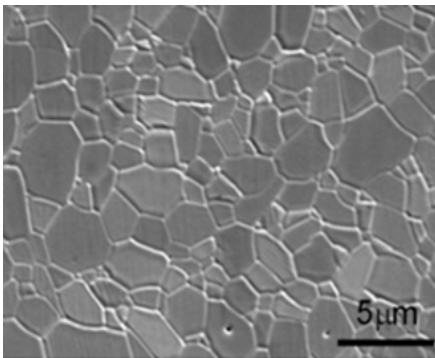


KA999

Aluminum Oxide 99,96%



Key Benefits

- High purity and density
- Excellent dielectric properties
- High corrosion resistance
- High thermal conductivity
- High corrosion resistance

Typical Applications

- High temperature labware
- Furnace construction
- Abrasives industry
- Pump & compressor industry
- Chemical & pharma industry

Main Properties

Parameters	Unit	KA999
Density	g/cm ³	3.94
Open porosity	%	0
Flexural strength @ 20°C	MPa	420
Hardness @ 20°C	GPa	19.5
Fracture Toughness @ 20°C	MPa x m ^{1/2}	3.8
Young's Modulus @ 20°C	GPa	380
Thermal conductivity @ 20°C	W/mK	29
Thermal expansion (20°C-1000°C)	x10 ⁻⁶ /K	8.5
Maximum working temp (No Load)	°C	1750
Electrical resistivity @ 20°C	Ω.cm	>10 ¹³

Chemical Composition

Analysis	Approximate figures %
Al ₂ O ₃	99.96
CaO	0.001
MgO	0.003
Fe ₂ O ₃	0.011
TiO ₂	0.003
SiO ₂	0.010
Zn	0.005
Cr	0.001