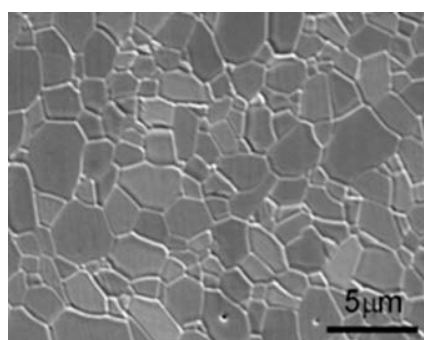




KA999

Alumina (Al₂O₃) 99,96%



Typical microstructure

Main properties

- Excellent abrasion resistance
- Excellent dielectric properties
- Improved corrosion resistance
- High thermal conductivity
- Improved thermal shock resistance

Applications

- Labware
- Mineral grinding wear
- Machinery parts
- Chemical industry
- High voltage dielectric components

Ultra high purity alumina

Physical properties		
Parameters	Units	Value
Density	g/cm ³	3.9
Flexural Strength	MPa	400
Hardness	GPa	18
Fracture toughness	MPa·√m	3.5
Young Modulus	GPa	370
Thermal conductivity	W/m·k	35
Thermal Expansion Coefficient (20-1000°C)	10 ⁻⁶ K ⁻¹	8.2
Maximum working temperature	°C	1600
Electrical resistivity	Ω·cm	>10 ¹⁴
Dielectric strength**	KV/mm	16

* All properties measured at 20°C unless otherwise stated

** Measured in a wall thickness of 2 mm

Chemical analysis	%
Al ₂ O ₃	>99.95
Zn	<0.003
Ti	<0.005
Si	<0.01
Fe	<0.01

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