

Alumina 96%

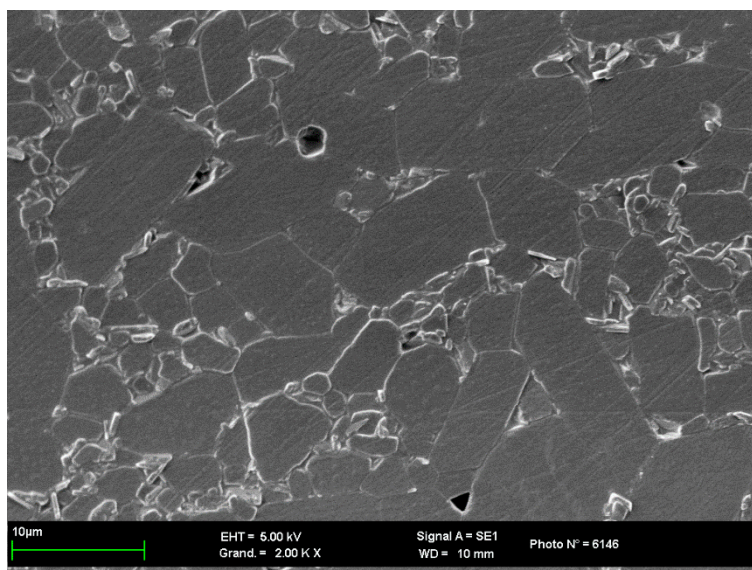
CHEMICAL COMPOSITION	Al_2O_3	96%wt	* by difference
	MgO	0.95%wt	
	Na_2O	<0.1%wt	
	SiO_2	3%wt	
	Fe_2O_3	0.05%wt	

PHYSICAL PROPERTIES	Mean grain size	$4 \pm 1 \mu\text{m}$
	Sintered density	3.75 g/cm^3
	Bending strength at 20° C	300 MPa
	Hardness $H_{v0.5}$	1500 Hv

THERMAL PROPERTIES	Thermal conductivity at 20°C	$20 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$
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ELECTRICAL PROPERTIES	Dielectric constant at 25°C-1MHz	8 (1MHz)
	$\tan \delta$	$5 \cdot 10^{-3}$ (9GHz)
	DC Volume resistivity at 25°C	$1 \cdot 10^{15} \Omega \cdot \text{cm}$
	Dielectric strength at 3mm	17 kV/mm^{-1}

MICROSTRUCTURE



KEY FEATURES	Cost-effective with good electrical, mechanical and wear properties
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TYPICAL APPLICATIONS	Low purity alumina is usually well suited for applications such as rotor valves components pump seals, electrical insulators & inductors, wear nozzles, electrical connector housings, yarn guides in textile industry. For higher demanding performance product, alumina with higher purity will be a better choice.
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