

Al₂O₃ Material Properties

(for Thin Film Deposition)

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Property	Unit	Value	Test Per	
Colour		white		
Grain Size Average	μm	< 1.5		
Alumina Content	Wt%	99.6		
Surface Roughness	Side A	CLA μinch	3.0 (.08)	Profile Meter
	Side B	(Ra μm)	5.0 (.125)	
Bulk Density	kg/m ³	3.6×10 ³		
Water Absorption Capacity		0	ASTM C 373-88	
Thermal Conductivity 20 °C	25°C 300°C 500°C	W/m · k	33 30 25	Laser Flash
Coefficient of Linear Thermal Expansion	25 to 300°C 25 to 600°C 25 to 800°C	ppm/K	7.2 7.4 8.2	
Dielectric Constant	1MHz	9.9±0.2		
Dielectric Loss Angle	1MHz	2×10 ⁻⁴		
Volume Resistivity	Ω · cm	> 10 ¹⁴ (25°C)		
Flexural Strength	MPa	550		