

Lanthanum Aluminate

Formula	LaAlO ₃
Crystal Growth	
Growth Method	Czochralski
Growth Direction	[100]
Max. Diameter (inch)	Ø3"
Crystallographic Properties	
Crystal Structure and Lattice Parameters (nm)	pseudocubic rhombohedral @25 °C $\alpha = 90.096^\circ$ cubic >435 °C $a = 0.37896$
Twin structure	twins parallel (100) in pseudocubic cell
Physical Properties	
Color	colorless to light brown
Density (g/cm ³)	6.51
Melting Point (K)	2453
Thermal Expansion (10 ⁻⁶ K ⁻¹)	9.2
Dielectric Constant	24.5
Loss Tangent (@ 77K, 10GHz)	6 x 10 ⁻⁵
Hardness (Mohs)	5-5.6

