

Lithium Niobate

Formula	LiNbO ₃
Crystal Growth	
Growth Method	Czochralski
Max. Diameter (inch)	Ø3"
Crystallographic Properties	
Crystal Structure	hexagonal
Lattice Constant (nm)	a = 0.5148 b = 0.5148 c = 1.3863
	without twins
Physical Properties	
Color	colorless
Density (g/cm ³)	4.64
Melting Point (K)	1527
Thermal Expansion (10 ⁻⁶ K ⁻¹)	a ₁₁ = 15.4, a ₃₃ = 7.5
Dielectric Constant	ε ₁₁ = 85, ε ₃₃ = 28.7 (unclamped)
Bandgap (eV)	4
Hardness (Mohs)	5

