

Strontium Titanate

Formula	SrTiO ₃
Crystal Growth	
Growth Method	Verneuil
Growth Direction	Near [100]
Max. Diameter (inch)	ø1"
Crystallographic Properties	
Crystal Structure	cubic
Lattice Constant (nm)	a = 0.39045
	without twins
	wide rocking curves possible due to dislocation
Physical Properties	
Color	colorless to pale yellow
Density (g/cm ³)	5.12
Melting Point (K)	2353
Thermal Expansion (10 ⁻⁶ K ⁻¹)	9
Dielectric Constant	300
Loss Tangent (@ 77K, 10GHz)	2x10 ⁻²
Hardness (Mohs)	6-6.5

