

Titanium Oxide (Rutile)

Formula	TiO ₂
Crystal Growth	
Growth Method	Verneuil
Max. Diameter (inch)	Ø1"
Crystallographic Properties	
Crystal Structure	tetragonal
Lattice Constant (nm)	a = 0.4593 c = 0.2959
Physical Properties	
Color	pale yellow
Density (g/cm ³)	4.25
Melting Point (K)	2113
Thermal Expansion (10 ⁻⁶ K ⁻¹)	9.19 c, 7.2 ⊥ c
Dielectric Constant	170 c, 88 ⊥ c
Loss Tangent (@ 77K, 10GHz)	17x10 ⁻³
Hardness (Mohs)	6.5

