

LiNbO₃ – Lithium Niobate

CRYSTAL GROWTH

| | |
|-----------------------------|-------------|
| Growth Method | Czochralski |
| Max. Diameter (inch) | Ø3" |

CRYSTALLOGRAPHIC PROPERTIES

| | |
|------------------------------|---------------|
| Crystal Structure | hexagonal |
| | a = 0.5148 |
| Lattice Constant (nm) | b = 0.5148 |
| | c = 1.3863 |
| | without twins |

PHYSICAL PROPERTIES

| | |
|--|--|
| Color | colorless |
| Density (g/cm³) | 4.64 |
| Melting Point (K) | 1527 |
| Thermal Expansion (10⁻⁶K⁻¹) | α ₁₁ = 15.4, α ₃₃ = 7.5 |
| Dielectric Constant | ε ₁₁ = 85, ε ₃₃ = 28.7 (unclamped) |
| Bandgap (eV) | 4 |
| Hardness (Mohs) | 5 |

