

SrTiO₃ for Research and Development



CrysTec

KRISTALLTECHNOLOGIE

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| Growth Method: | Verneuil |
| Crystal Structure: | cubic, twinfree, Perovskite structure at 105.5 K phase transition to tetragonal |
| Density (25°C): | 5.12 g/cm ³ |
| Lattice Constant: | a = 0,3905 nm |
| Colour: | colourless to pale yellow |

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| Physical Properties: | |
| Melting Point: | 2353 K |
| Hardness: | 6.0 - 6.5 (Mohs) |
| Thermal Conductivity: | 12 W/m K (100°C) |
| Thermal Expansion: | $9 \times 10^{-6} \text{ K}^{-1}$ |
| Dielectric Constant: | 300 |
| Loss Tangent | 2×10^{-2} (77 K, 10 GHz) |
| Refractive Index | n = 2.41 |
| Reciprocal Dispersion | 13 |
| Transmission Range | 0.395 - 5 μm |

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| Orientation: | (100), (110), (111) |
| Standard Size: | 10 x 10 mm ² , 10 x 5 mm ² |
| Standard Thickness: | 0.5 mm, 1 mm |
| Surface: | one- or both side epipolished |

► For further information please feel free to ask.