

**Titanoxid (Rutil)
für VIS und IR-Bereich**

**Titanium Oxide (Rutile)
for VIS and IR-range**

Formula	TiO ₂
Growth method	Verneuil technique
Max. sizes, (mm)	∅ 25.4
Transmission range, (μm) (Thickness 6 mm)	0.43 - 6.0
Structure	tetragonal
Density (g/cm ³)	4.25
Melting point (°C)	1840
Hardness (Mohs)	7
Thermal expansion coefficient (10 ⁻⁶ /K)	vertical c-axis: 7.2 parallel c-axis: 9.9
Thermal conductivity (W m ⁻¹ K ⁻¹)	12.56
Specific heat capacity (J kg ⁻¹ K ⁻¹)	710
Solubility in water (g/100 cm ³)	
Solubility in acids	unessential
Solubility in organic solvents	
Wavelength (μm)	0.6
Refractive index n _o	2.61
n _e	2.90
Absorption coefficient (cm ⁻¹)	

Transmission spectrum:

