

SAVOSIL™

Product Information

Silica Glass, Quartz

Property

Optical Properties

Transmittance visible (468 nm, 10 mm sample, Internal)	99.40 %
Fluorescence	Free
Radiation damage (Δ transmission in 105 cycles 100mi/cm ²)	<0.25 %
Refractive Index	1.46345 (486 nm)

Mechanical Properties

Density	2.20 (g/cm ³)
Knoop hardness	5219 (N/mm ²)
Vickers hardness	7701 (N/mm ²)
Elasticity modulus	71.76 (Gpa)
Shear modulus	30.69 (Gpa)
Poisson's ratio	0.164

Thermal Properties

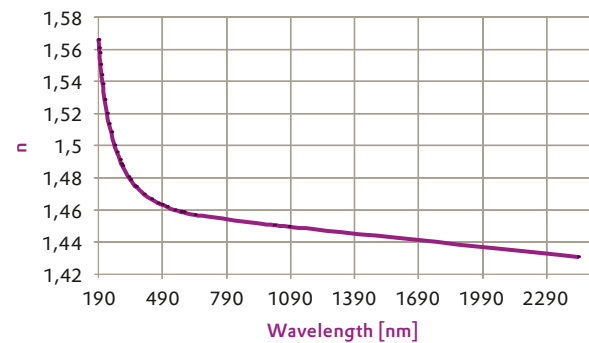
Viscosity at temperature (°C)	
for log n=14.6 (strain point)	958 °C
for log n=13.0 (annealing point)	1029 °C
Thermal expansion coefficient	5.8x10 ⁻⁷ K ⁻¹

Property

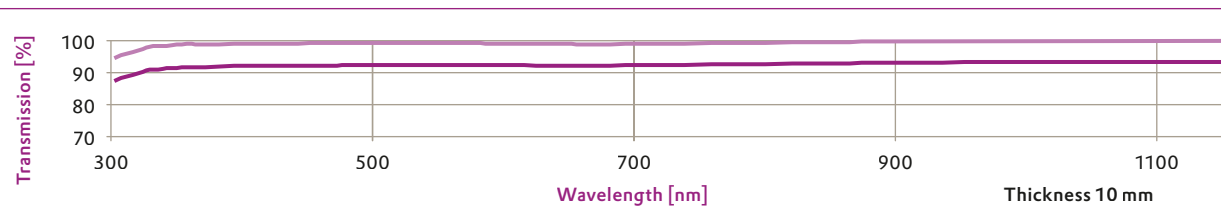
Chemical Properties

Weight loss after treatment with H ₂ O 95 °C, 40 h	0.0006 mg/cm ³
Weight loss after treatment with HNO ₃ 95 °C, 40 h	0
Weight loss after treatment with NaOH 95 °C, 40 h	0.09 mg/cm ³
OH content	1–700 ppm

SAVOSIL™ Refractive Index (n)



SAVOSIL™ Spectrum



— SAVOSIL™ internal (excluding reflection losses) — SAVOSIL™ as measured (including reflection losses)

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Africa/Latin America**

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