

QUARTZ (HERAEUS)

Spectrosil® is a synthetic fused silica manufactured using a patented, environmentally friendly process that results in a virtually Chlorine-free material of exceptional purity which is bubble-free and fluorescence-free

Due to this ultra-high purity, the Spectrosil® 2000 (deep UV fluorescence free grade) series has excellent optical transmission in the deep UV with a useful range from 180 nm in the deep UV through to 2000 nm in the infrared

TYPICAL PROPERTIES

Viscosity Data

Strain Point	1080°C
Annealing Point	1200°C
Softening Point	1730°C
Max continuous temp	1050°C
Short term temp	1350°C
Thermal Expansion Coefficient (Average)	0.54 x 10 ⁻⁶ °C (0-600°C)
Refractive Index	ND1.45846 (587.56nm)
Density	2.2x103kg/m ³
Mohs Hardness	5.5-6.5
Knoop hardness	5800-6100 (N/mm ²)
Young's Modulus	73x10 ⁴ N/mm ²
Rigidity Modulus	31x10 ⁴ N/mm ²
Bending Strength	65 (N/mm ²)
Compressive Strength	72.0x9 N/m ²
Tensile Strength	55x106 N/m ²
Shear Strength	55x106 N/m ²

Note: these values may vary, depending on the thermal history of the glass

Wavelength (nm) Refractive Index

- 3001.488
- 3201.483
- 3401.479
- 3601.475
- 4001.470
- 5001.462

Note: these values may vary, depending on the thermal history of the glass