

FUSED SILICA UV Grade SiO2

Optical SiO2 (Fused Silica UV Grade)

Refractive Index at n_e	1.4601
Refractive Index at $n_F - n_C$	0.0068
Refractive Index at n_D	1.4584
Thermal Coefficient of Refractive Index at $n_e, ^\circ C^{-1}$ for $+20^\circ C$	$10 \cdot 10^{-6}$
Transmission Range, microns (thickness 10mm)	0.18, 3.5
Transmittance $t_i(l)$ vs. wavelength l	

Internal Transmittance $t_i(l)$ vs. wavelength l	
l, MKM	$t_i(l)$
0.170	0.63
0.200	0.96
0.400	0.999
0.500	0.999
0.700	0.999
0.900	0.999
1.000	0.999
1.385	0.880
2.000	0.999
2.200	0.580
2.300	0.880
2.380	0.950
2.500	0.790
2.720	0.000
2.800	0.000
2.900	0.295
3.000	0.670

Refractive Index n vs. wavelength l	
l, MKM	$n(l)$
0.1700	1.615
0.1850	1.575
0.2000	1.550
0.2144	1.5337
0.2803	1.4940
0.3021	1.4872
0.3650	1.4745
0.4046	1.4696
0.4358	1.4666
0.5461	1.4601
0.5876	1.4585
0.5893	1.4584
0.6438	1.4567
0.6563	1.4564
0.8621	1.4525
1.0830	1.4494
1.3950	1.4458
1.7091	1.4421
2.0581	1.4372
3.2439	1.4131

Thermal SiO2 (Fused Silica UV Grade)

Thermal Linear Expansion $a_t, ^\circ C^{-1}$ for $0, +50^\circ C$	$4.0 \cdot 10^{-6}$
Thermal Conductivity, $W/(m \cdot ^\circ C)$ at $20^\circ C$	1.35
Specific Heat Capacity, $J/(kg \cdot ^\circ C)$	728.0
Melting Point, $^\circ C$	1900

Mechanical SiO2 (Fused Silica UV Grade)

Density, g/cm^3 at $20^\circ C$	2.21
Poisson Ratio	0.17
Young Modulus (E), Pa	$7.36 \cdot 10^{10}$
Shear Modulus (G), Pa	$3.14 \cdot 10^{10}$

Chemical SiO2 (Fused Silica UV Grade)

Solubility	
in water	in acids
insoluble	insoluble

"Opto-Technological Laboratory" produces mirrors, lenses, windows, prisms, wedges, ball lenses, cylindrical lenses and others optical components according to customers' specifications and drawings out of fused silica UV grade .