



Chemical and physical properties

Microscope slides made of soda lime glass of the 3rd hydrolytic class
Thickness: 1 mm $\pm$ 0.05 mm

Chemical composition (approximative)

SiO ₂	Na ₂ O	CaO	MgO	Al ₂ O ₃	K ₂ O	SO ₃	Fe ₂ O ₃
72.6 %	13.0 %	8.8 %	4.3 %	0.6 %	0.3 %	0.2 %	0.1 %

Optical properties

Light transmittance acc. to EN 410 und ISO 9050 , T _L (Auge * D 65)	91.29 %
Solar direct transmittance acc. to EN 410, T _e	89.92 %
Solar direct transmittance acc. to ISO 9050, T _e	90.10 %
UV transmittance acc. to EN 410, T _{UV}	78.10 %
UV transmittance acc. to ISO 9050, T _{UV}	82.14 %
Refractive index (N _{ad}) at 589,3 nm	1.52

Mechanical properties

Density	2500 kg/m ³
Young's modulus	70 GPa
Poissons ratio	0.23
Hardness (Mohs)	6

Thermic properties

Coefficient of thermal expansion (20-300°C)	9x10 ⁻⁶ K ⁻¹
Thermal conductivity	1 W/(mK)
Strain point	Log η =14.5; T ~ 530 °C
Transformation temperature	Log η =12.3; T ~ 567 °C
Annealing point	Log η =13.0; T ~ 557 °C
Dilatometric start of softening	Log η =10.3; T ~ 598 °C
Softening point (η =Viscosity in Pa.s)	Log η = 7.6; T ~ 726 °C

Chemical properties

Alkaline resistance (ISO 695)	class 2
Acid resistance (ISO 8424)	class 3
Hydrolytic resistance (ISO 719)	class 3

Electrical properties

Specific resistivity	$10^{11} \Omega \text{ cm}$ (20 °C)
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