

European Technical Centre

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## Chemical and Physical Properties of Knittel Microscope Slides

Typical composition (% by weight)	
Constituents	%
SiO <sub>2</sub>	72,3
Al <sub>2</sub> O <sub>3</sub>	0,5
Fe <sub>2</sub> O <sub>3</sub>	< 0,02
Na <sub>2</sub> O	13,3
CaO	8,8
K <sub>2</sub> O	0,4
MgO	4,3

Typical light transmittance (TL) % (according to EN 410 & ISO 9050)	
1,0 mm	91,7

Typical solar direct transmittance (Te) % (according to EN 410)	
1,0 mm	91,6

Thickness tolerances	0,95 – 1,05 mm
Mean refractive index to visible radiation, n	1,5
Density, ρ [kg/m <sup>3</sup> ]	2500
Average coefficient of linear expansion between 20°C and 300°C, α [K <sup>-1</sup> ]	9 x 10 <sup>-6</sup>
Thermal conductivity, λ [W/mK]	1
Young's modulus, E [Pa]	7 x 10 <sup>10</sup>
Poisson's ratio, μ	0,2
Alkaline resistance	Class 2
Acid resistance	Class 3
Hydrolytic resistance	Class 3