

European Technical Centre

As at: 2012

Chemical and Physical Properties of Knittel Microscope Slides

Typical composition (% by weight)	
Constituents	%
SiO ₂	72,3
Al ₂ O ₃	0,5
Fe ₂ O ₃	< 0,02
Na ₂ O	13,3
CaO	8,8
K ₂ 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 ³]	2500
Average coefficient of linear expansion between 20°C and 300°C, α [K ⁻¹]	9 x 10 ⁻⁶
Thermal conductivity, λ [W/mK]	1
Young's modulus, E [Pa]	7 x 10 ¹⁰
Poisson's ratio, μ	0,2
Alkaline resistance	Class 2
Acid resistance	Class 3
Hydrolytic resistance	Class 3