

GlassType/Application Borosilicate glass 3.3 acc. to ISO 3585, chemically and thermally highly resistant
 General-purpose glass for apparatus for the chemical industry, for pipelines and lab glassware

Physical Data			
Coefficient of mean linear thermal expansion			
α (20°C;300°C) (ISO 7991)	3.3	$10^{-6}K^{-1}$	
Transformation temperature T_g (ISO 7884-8).....	525	°C	
Glass temperature at viscosity η in dPa·s			
10^{13} (annealing point) (ISO 7884-4).....	560	°C	
$10^{7.6}$ (softening point) (ISO 7884-3).....	825	°C	
10^4 (working point) (ISO 7884-2).....	1260	°C	
Stress-optical coefficient K (DIN 52314).....	4.0	$10^{-6}mm^2 \cdot N^{-1}$	
Density ρ at 25°C	2.23	$g \cdot cm^{-3}$	
Modulus of elasticity E (Young's modulus)	63	$10^3N \cdot mm^{-2}$	
Poisson's ratio μ	0.2		
Thermal conductivity λ_w at 90°C	1.2	$W \cdot m^{-1} \cdot K^{-1}$	
Log of the electric volume resistivity ($\Omega \cdot cm$)			
at 250°C	8.0		
at 350°C	6.5		
t_{k100}	250	°C	
Dielectric constant ϵ for 1 MHz at 25°C	4.6		
Dielectric loss factor $\tan \delta$ for 1 MHz at 25°C	37	10^{-4}	
Refractive index n_d ($\lambda = 587.6$ nm)	1.473		

Chemical Resistance			
Hydrolytic resistance (ISO 719)	Class	HGB 1	
Acid resistance (DIN 12116)	Class	S 1	
Alkali resistance (ISO 695)	Class	A 2	

The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm

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