

Glass 8689

Technical Data

GlassType/Application	Borosilicate glass, highly UV-blocked, stabilised against solarisation, sealing glass to Tungsten Backlights		
Physical Data (approx. value)	Coefficient of mean linear thermal expansion $\alpha(20^{\circ}\text{C}; 300^{\circ}\text{C})$ (ISO 7991) 3.8 10^{-6}K^{-1} Transformation temperature T_g (ISO 7884-8)..... 515 $^{\circ}\text{C}$ Glass temperature at viscosity η in $\text{dPa}\cdot\text{s}$ 10^{13} (annealing point) (ISO 7884-4)..... 565 $^{\circ}\text{C}$ $10^{7.6}$ (softening point) (ISO 7884-3)..... 770 $^{\circ}\text{C}$ 10^4 (working point) (ISO 7884-2)..... 1110 $^{\circ}\text{C}$ Stress-optical coefficient K (DIN 52314)..... 3.9 $10^{-6}\text{mm}^2\cdot\text{N}^{-1}$ Density ρ at 25°C 2.27 $\text{g}\cdot\text{cm}^{-3}$ Modulus of elasticity E (Young's modulus) 65 $10^3\text{N}\cdot\text{mm}^{-2}$ Poisson's ratio μ 0.2 Thermal conductivity λ_w at 90°C 1.2 $\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ Log of the electric volume resistivity ($\Omega\cdot\text{cm}$) at 250°C 9.1 at 350°C 7.5 t_{k100} 314 $^{\circ}\text{C}$ Dielectric constant ε for 1 MHz at 25°C 5 Dielectric loss factor $\tan \delta$ for 1 MHz at 25°C 20 10^{-4} Refractive index n_d ($\lambda = 587.6 \text{ nm}$) 1.498		
Chemical Resistance	Hydrolytic resistance (ISO 719) Class HGB 3 Acid resistance (DIN 12116) Class S 3 Alkali resistance (ISO 695) Class A 3		
	The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm The glass is substantially free of arsenic.		

PT_TTS_1110 GB

Business Unit Tubing / 9/2017