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| 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) acc. to ISO 7991 3,3 $10^{-6}K^{-1}$ | | |
| | Transformation temperature T_g 525 °C | | |
| | Glass temperature at viscosity η in dPa · s | | |
| | 10^{13} (annealing point)..... 560 °C | | |
| | $10^{7.6}$ (softening point)..... 825 °C | | |
| | 10^4 (working point)..... 1260 °C | | |
| | Stress-optical coefficient K 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 | | |
| | 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 | | |
| Chemical Composition | SiO ₂ B ₂ O ₃ Al ₂ O ₃ Na ₂ O K ₂ O | | |
| (components in approx. weight %) | 81 | 13 | 2 3,5 0,5 |
| | The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm. | | |