

Glass Type/Application	Amber glass Pharmaceutical primary packaging for oralia and solid dosage																	
Physical Data (approx. value)	Coefficient of mean linear thermal expansion $\alpha(20^\circ\text{C}; 300^\circ\text{C})$ acc. to ISO 7991 .....	$7.8 \cdot 10^{-6}\text{K}^{-1}$																
	Transformation Temperature $T_g$ .....	535 °C																
	Glass temperature at viscosity $\eta$ in $\text{dPa} \cdot \text{s}$ $10^{13}$ (annealing point).....	540 °C																
	$10^{7.6}$ (softening point) .....	720 °C																
	$10^4$ (working point) .....	1050 °C																
	Density $\rho$ at 25°C .....	2.50 $\text{g} \cdot \text{cm}^{-3}$																
Chemical Data	Hydrolytic resistance acc. to ISO 719 .....	Class HGB 2																
	acc. to Ph. Eur. .....	Type III																
	acc. to USP .....	Type III																
	Acid resistance (DIN 12116) .....	Class S 2																
	Alkali resistance (ISO 695) .....	Class A 2																
Chemical Composition (main components in approx. weight %)	SiO <sub>2</sub>	67	B <sub>2</sub> O <sub>3</sub>	5	Al <sub>2</sub> O <sub>3</sub>	7	Fe <sub>2</sub> O <sub>3</sub>	2	Na <sub>2</sub> O	12	K <sub>2</sub> O	1	BaO	< 0.5	CaO	1	MnO <sub>2</sub>	5
	The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm.																	
Transmission (exemplary spectrum)	<p>— 1.0 mm</p>																	