


KG3

Optical properties	
Reflection factor	
P_d	= 0,919
Spectral values guaranteed (d = 2 mm)	
$\lambda_c (\tau_i = 0,5)$	= nm nm
$\lambda_s (\tau_{i,U} =)$	= nm
$\lambda_p (\tau_{i,L} =)$	= nm
t_i (800 nm \leq	0,14
τ_i (900 nm \leq	0,03
Refractive indices	
n_d (587,6 nm)	= 1,52
n_s (852 nm)	= 1,51
n_t (1014 nm)	= 1,51
Sellmeier coefficients	
valid from 400 nm to 1600 nm	
B_1	= 1,1717
B_2	= 0,0980
B_3	= 0,0713
C_1	= 6,324E-03 μm^2
C_2	= 3,1092E-02 μm^2
C_3	= 10,066 μm^2
Internal quality	
Bubble class	3

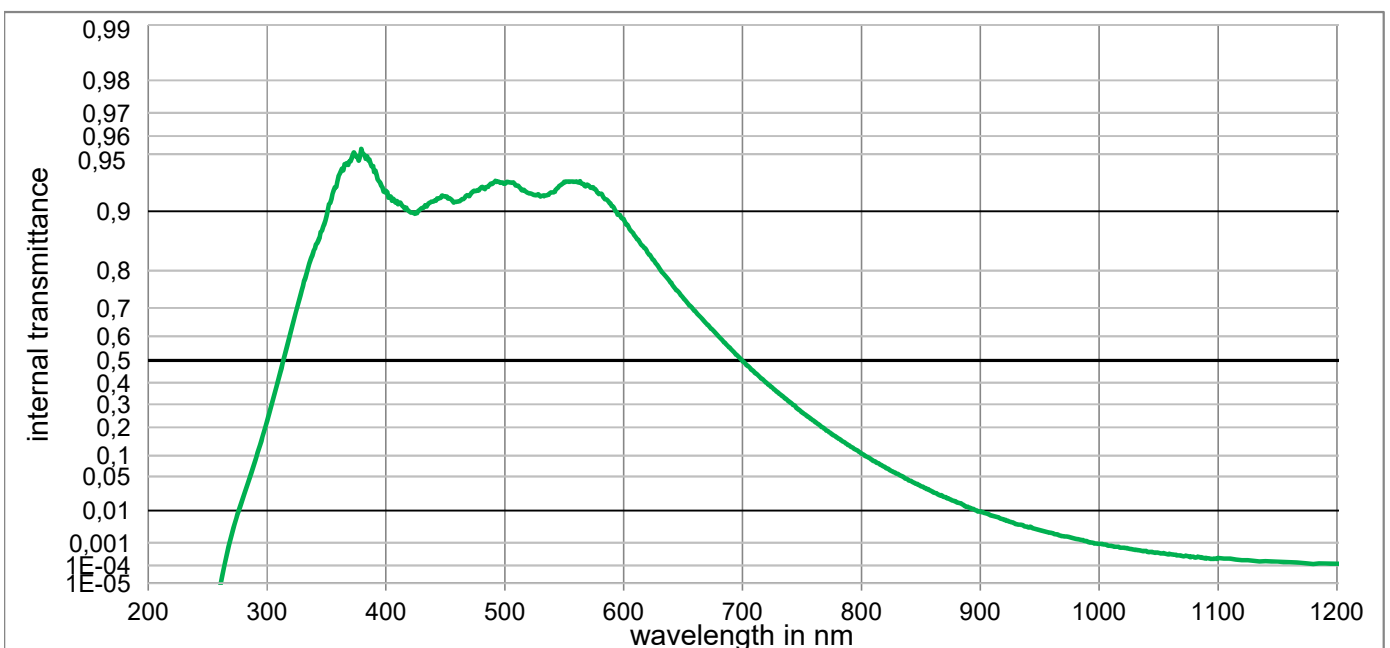
Mechanical properties	
Reference thickness	
d	= 2,00 mm
Density	
ρ	= 2,52 g/cm ³
Knoop hardness	
$HK_{[0,1/20]}$	= 442

Thermal properties	
Transformation temperature	
T_g	= 581 °C
Thermal expansion in 10⁻⁶/K	
$\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})}$	= 5,3
$\alpha_{(20^\circ\text{C}/300^\circ\text{C})}$	= 6,1

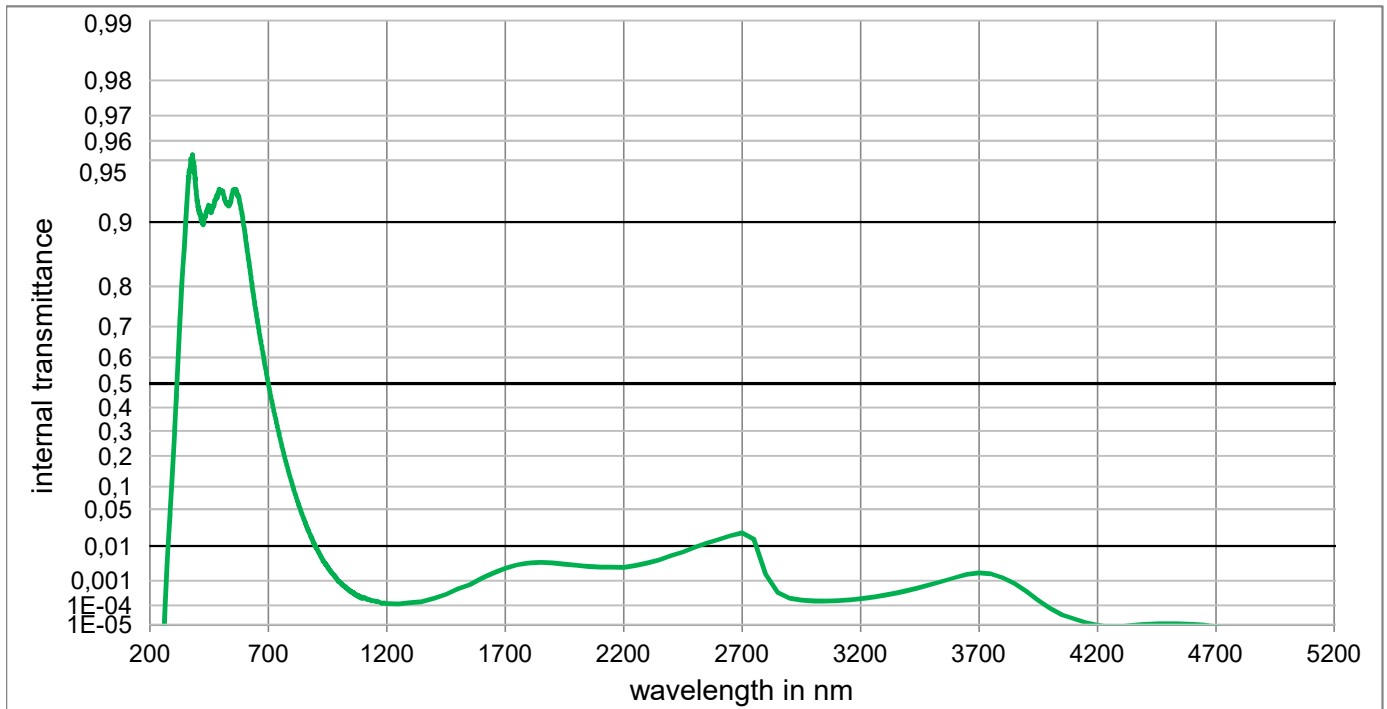
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 2
AR class	= 4
 <p>Long-term changes in the polished surface are possible under some circumstances.</p>	

Colorimetric properties				
		1 mm	2 mm	3 mm
Illuminant D65	x	0,309	0,306	0,303
	y	0,330	0,332	0,333
	Y	87,1	82,4	78,1
	λ_d	496 nm	496 nm	496 nm
	P_e	0,012	0,023	0,033
Illuminant A	x	0,442	0,437	0,432
	y	0,410	0,413	0,416
	Y	86,4	81,3	76,6
	λ_d	504 nm	505 nm	505 nm
	P_e	0,012	0,024	0,035

Notes	
UV	Transmission changes are possible under the action of intense ultraviolet radiation.
Ionically colored glass	
DIN 58131	
Disclaimer	
All data without tolerances are to be understood to be reference values	



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Internal transmittance τ_i at reference thickness
 The internal transmittance values, tabulated and graphically represented, are reference values only

λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i
200	< 1,0E-05	500	9,282E-01	800	1,066E-01	1100	2,334E-04	2200	2,727E-03	3700	1,822E-03
210	< 1,0E-05	510	9,265E-01	810	8,548E-02	1110	2,163E-04	2250	3,103E-03	3750	1,693E-03
220	< 1,0E-05	520	9,194E-01	820	6,913E-02	1120	1,828E-04	2300	3,642E-03	3800	1,292E-03
230	< 1,0E-05	530	9,162E-01	830	5,533E-02	1130	1,729E-04	2350	4,394E-03	3850	8,111E-04
240	< 1,0E-05	540	9,202E-01	840	4,313E-02	1140	1,649E-04	2400	5,839E-03	3900	4,055E-04
250	< 1,0E-05	550	9,298E-01	850	3,387E-02	1150	1,586E-04	2450	7,150E-03	3950	1,710E-04
260	< 1,0E-05	560	9,303E-01	860	2,668E-02	1160	1,510E-04	2500	9,398E-03	4000	7,230E-05
270	1,9E-03	570	9,267E-01	870	2,066E-02	1170	1,379E-04	2550	1,160E-02	4050	3,512E-05
280	2,1E-02	580	9,189E-01	880	1,585E-02	1180	1,201E-04	2600	1,403E-02	4100	2,115E-05
290	8,7E-02	590	9,059E-01	890	1,195E-02	1190	1,309E-04	2650	1,687E-02	4150	1,291E-05
300	2,3E-01	600	8,899E-01	900	9,471E-03	1200	1,227E-04	2700	1,917E-02	4200	< 1,000E-05
310	4,3E-01	610	8,645E-01	910	7,401E-03	1250	1,188E-04	2750	1,420E-02	4250	< 1,000E-05
320	6,184E-01	620	8,381E-01	920	5,677E-03	1300	1,322E-04	2800	1,641E-03	4300	< 1,000E-05
330	7,634E-01	630	8,054E-01	930	4,323E-03	1350	1,495E-04	2850	3,690E-04	4350	< 1,000E-05
340	8,445E-01	640	7,704E-01	940	3,458E-03	1400	2,072E-04	2900	2,146E-04	4400	1,042E-05
350	8,948E-01	650	7,303E-01	950	2,746E-03	1450	3,025E-04	2950	1,725E-04	4450	1,106E-05
360	9,343E-01	660	6,891E-01	960	2,212E-03	1500	4,975E-04	3000	1,586E-04	4500	1,106E-05
370	9,455E-01	670	6,451E-01	970	1,740E-03	1550	7,248E-04	3050	1,571E-04	4550	1,106E-05
380	9,509E-01	680	5,988E-01	980	1,401E-03	1600	1,222E-03	3100	1,649E-04	4600	1,042E-05
390	9,379E-01	690	5,497E-01	990	1,092E-03	1650	1,812E-03	3150	1,794E-04	4650	< 1,000E-05
400	9,217E-01	700	4,982E-01	1000	9,072E-04	1700	2,542E-03	3200	2,000E-04	4700	< 1,000E-05
410	9,079E-01	710	4,482E-01	1010	7,715E-04	1750	3,228E-03	3250	2,324E-04	4750	< 1,000E-05
420	8,992E-01	720	3,989E-01	1020	6,422E-04	1800	3,652E-03	3300	2,755E-04	4800	< 1,000E-05
430	9,037E-01	730	3,535E-01	1030	5,357E-04	1850	3,770E-03	3350	3,430E-04	4850	< 1,000E-05
440	9,112E-01	740	3,084E-01	1040	4,512E-04	1900	3,681E-03	3400	4,356E-04	4900	< 1,000E-05
450	9,159E-01	750	2,645E-01	1050	3,972E-04	1950	3,366E-03	3450	5,699E-04	4950	< 1,000E-05
460	9,109E-01	760	2,263E-01	1060	3,472E-04	2000	3,121E-03	3500	7,511E-04	5000	< 1,000E-05
470	9,167E-01	770	1,901E-01	1070	2,827E-04	2050	2,861E-03	3550	9,992E-04	5050	< 1,000E-05
480	9,250E-01	780	1,584E-01	1080	2,515E-04	2100	2,785E-03	3600	1,302E-03	5100	< 1,000E-05
490	9,288E-01	790	1,302E-01	1090	2,367E-04	2150	2,752E-03	3650	1,630E-03	5150	< 1,000E-05