

NG5

Optical properties	
Reflection factor	
$P_d = 0,923$	
Spectral values guaranteed	
τ_i (405 nm)	= 0,56 ± 0,03
τ_i (546 nm)	= 0,57 ± 0,03
τ_i (694 nm)	= 0,62 ± 0,03
Refractive indices	
n_d (587,6 nm) = 1,5	
Sellmeier coefficients	
on request	
Internal quality	
Bubble class	2

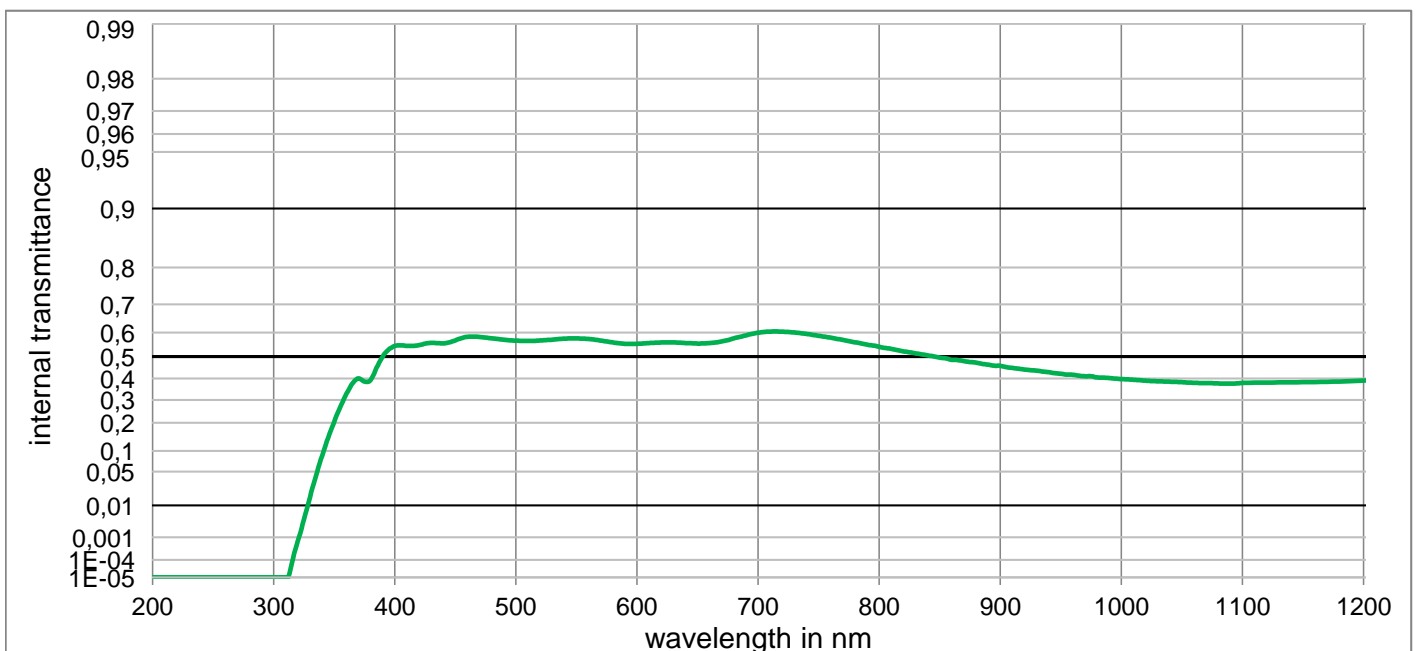
Mechanical properties	
Reference thickness	
d = 1,00 mm	
Density	
$\rho = 2,42 \text{ g/cm}^3$	
Knoop hardness	
HK[0.1/20] = 435	

Thermal properties	
Transformation temperature	
$T_g = 474 \text{ }^\circ\text{C}$	
Thermal expansion in $10^{-6}/\text{K}$	
α (-30°C/+70°C)	= 6,6
α (20°C/300°C)	= 7,1

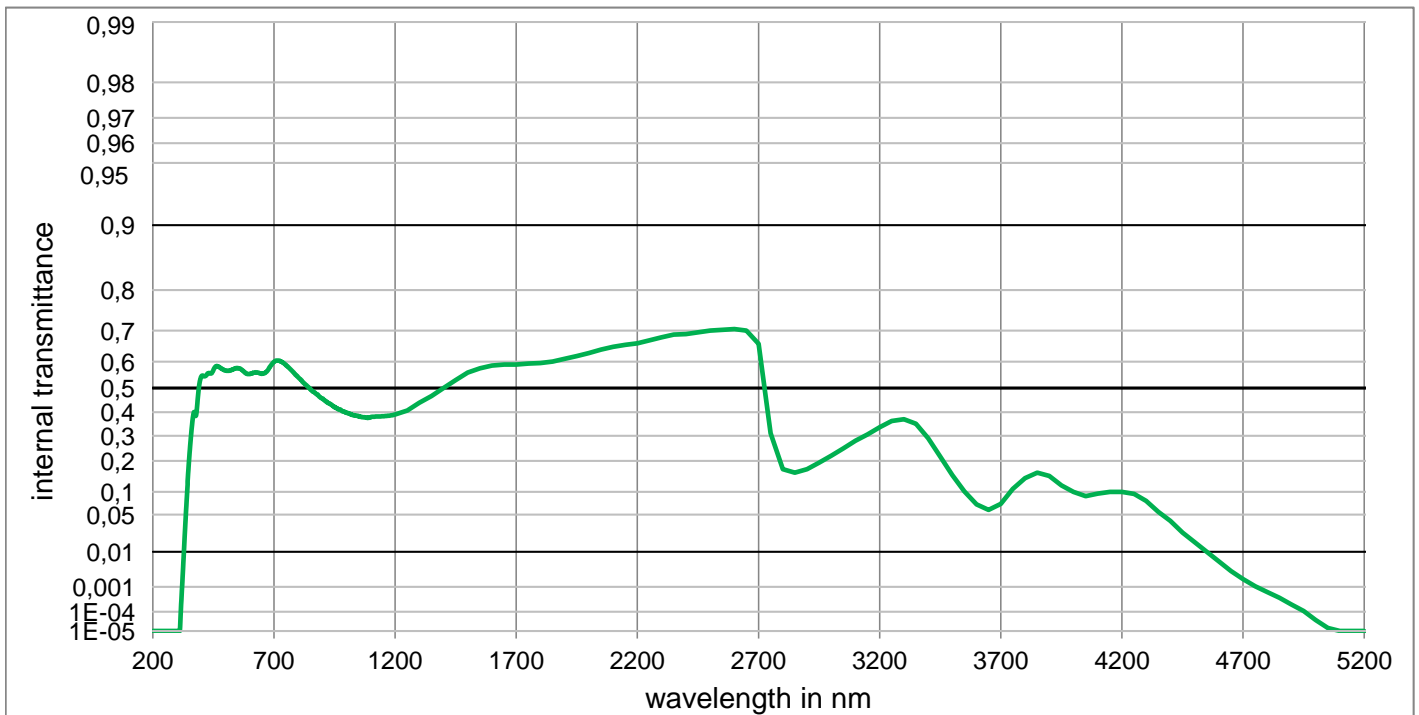
Chemical properties	
Chemical resistance	
FR class	= 1
SR class	= 3.2
AR class	= 2

Colorimetric properties				
		1 mm	2 mm	3 mm
Illuminant D65	x			
	y			
	Y			
	λ_d			
	P_e			
Illuminant A	x			
	y			
	Y			
	λ_d			
	P_e			

Notes	
Ionically colored glass	
Neutral density filter	
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	5,677E-01	800	5,424E-01	1100	3,794E-01	2200	6,619E-01	3700	7,110E-02
210	< 1,0E-05	510	5,667E-01	810	5,337E-01	1110	3,808E-01	2250	6,707E-01	3750	1,077E-01
220	< 1,0E-05	520	5,684E-01	820	5,230E-01	1120	3,812E-01	2300	6,800E-01	3800	1,400E-01
230	< 1,0E-05	530	5,717E-01	830	5,142E-01	1130	3,816E-01	2350	6,883E-01	3850	1,583E-01
240	< 1,0E-05	540	5,757E-01	840	5,055E-01	1140	3,821E-01	2400	6,900E-01	3900	1,473E-01
250	< 1,0E-05	550	5,767E-01	850	4,955E-01	1150	3,827E-01	2450	6,949E-01	3950	1,180E-01
260	< 1,0E-05	560	5,747E-01	860	4,857E-01	1160	3,835E-01	2500	7,000E-01	4000	1,000E-01
270	< 1,0E-05	570	5,682E-01	870	4,796E-01	1170	3,845E-01	2550	7,022E-01	4050	8,913E-02
280	< 1,0E-05	580	5,605E-01	880	4,735E-01	1180	3,858E-01	2600	7,044E-01	4100	9,550E-02
290	< 1,0E-05	590	5,549E-01	890	4,636E-01	1190	3,875E-01	2650	7,000E-01	4150	1,000E-01
300	< 1,0E-05	600	5,548E-01	900	4,585E-01	1200	3,900E-01	2700	6,600E-01	4200	1,000E-01
310	< 1,0E-05	610	5,579E-01	910	4,487E-01	1250	4,075E-01	2750	3,108E-01	4250	9,441E-02
320	7,413E-04	620	5,602E-01	920	4,416E-01	1300	4,400E-01	2800	1,700E-01	4300	7,762E-02
330	1,600E-02	630	5,604E-01	930	4,364E-01	1350	4,676E-01	2850	1,583E-01	4350	5,495E-02
340	8,600E-02	640	5,578E-01	940	4,293E-01	1400	5,000E-01	2900	1,700E-01	4400	4,000E-02
350	2,050E-01	650	5,558E-01	950	4,220E-01	1450	5,321E-01	2950	1,935E-01	4450	2,512E-02
360	3,280E-01	660	5,576E-01	960	4,175E-01	1500	5,600E-01	3000	2,200E-01	4500	1,622E-02
370	4,012E-01	670	5,643E-01	970	4,104E-01	1550	5,761E-01	3050	2,485E-01	4550	1,000E-02
380	3,930E-01	680	5,773E-01	980	4,050E-01	1600	5,857E-01	3100	2,800E-01	4600	5,821E-03
390	5,000E-01	690	5,891E-01	990	4,022E-01	1650	5,900E-01	3150	3,057E-01	4650	3,192E-03
400	5,456E-01	700	5,993E-01	1000	3,974E-01	1700	5,900E-01	3200	3,364E-01	4700	1,820E-03
410	5,460E-01	710	6,038E-01	1010	3,941E-01	1750	5,930E-01	3250	3,628E-01	4750	1,038E-03
420	5,487E-01	720	6,035E-01	1020	3,900E-01	1800	5,952E-01	3300	3,700E-01	4800	6,561E-04
430	5,587E-01	730	6,003E-01	1030	3,870E-01	1850	6,000E-01	3350	3,511E-01	4850	3,981E-04
440	5,564E-01	740	5,948E-01	1040	3,850E-01	1900	6,100E-01	3400	2,900E-01	4900	2,104E-04
450	5,690E-01	750	5,873E-01	1050	3,830E-01	1950	6,194E-01	3450	2,170E-01	4950	1,079E-04
460	5,833E-01	760	5,797E-01	1060	3,800E-01	2000	6,300E-01	3500	1,500E-01	5000	3,917E-05
470	5,828E-01	770	5,707E-01	1070	3,790E-01	2050	6,414E-01	3550	1,012E-01	5050	1,503E-05
480	5,770E-01	780	5,610E-01	1080	3,770E-01	2100	6,500E-01	3600	7,000E-02	5100	< 1,000E-05
490	5,715E-01	790	5,511E-01	1090	3,760E-01	2150	6,568E-01	3650	5,860E-02	5150	< 1,000E-05