

BG25

Optical properties	
Reflection factor	
P_d	= 0,920
Spectral values guaranteed	
τ_i (334 nm)	≤ 0,8
τ_i (405 nm)	≥ 0,93
τ_i (488 nm)	≤ 0,39
τ_i (725 nm)	≤ 0,36
Refractive indices	
n_F (486 nm)	= 1,52
n_e (546 nm)	= 1,51
n_d (587,6 nm)	= 1,51
Sellmeier coefficients	
valid from 400 nm to 1550 nm	
B_1	0,8738
B_2	0,3772
B_3	1,1188
C_1	9,601E-03 μm^2
C_2	1,1147E-02 μm^2
C_3	145,493 μm^2
Internal quality	
Bubble class	1

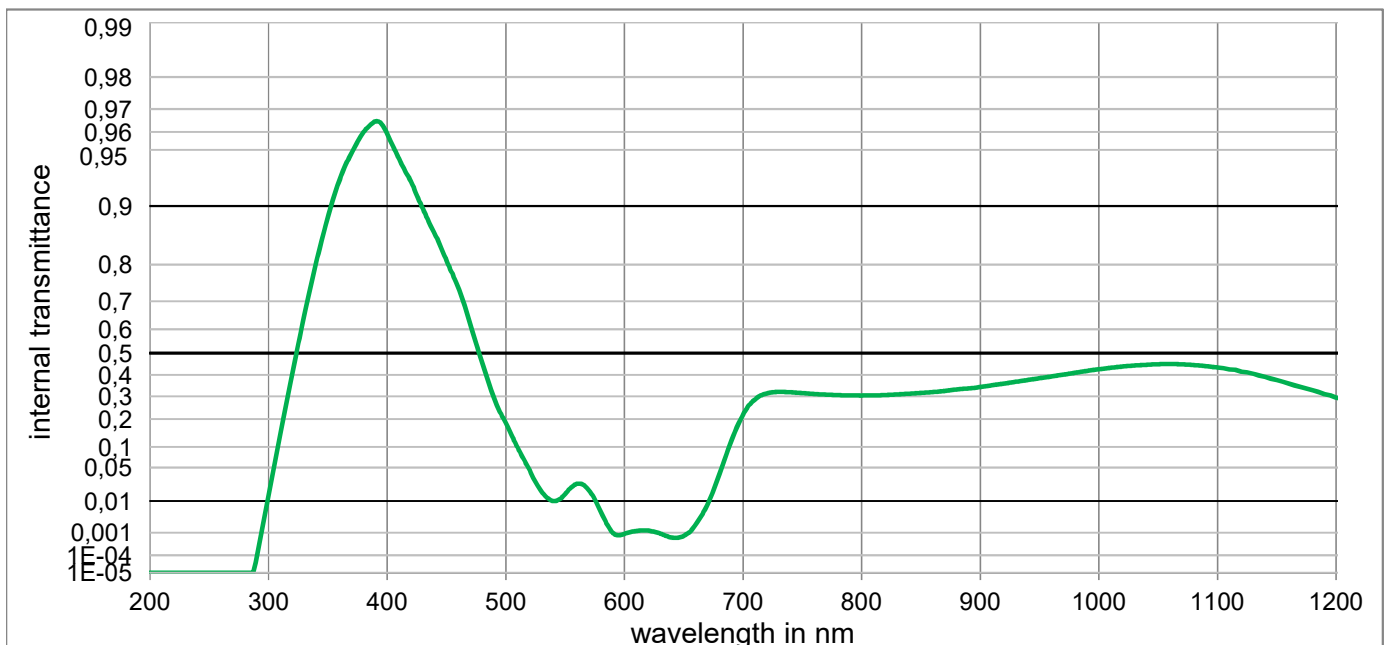
Mechanical properties	
Reference thickness	
d	= 1,00 mm
Density	
ρ	= 2,56 g/cm ³
Knoop hardness	
HK[0.1/20]	= 434

Thermal properties	
Transformation temperature	
T_g	= 459 °C
Thermal expansion in 10⁻⁶/K	
α (-30°C/+70°C)	= 8,9
α (20°C/300°C)	= 10,2

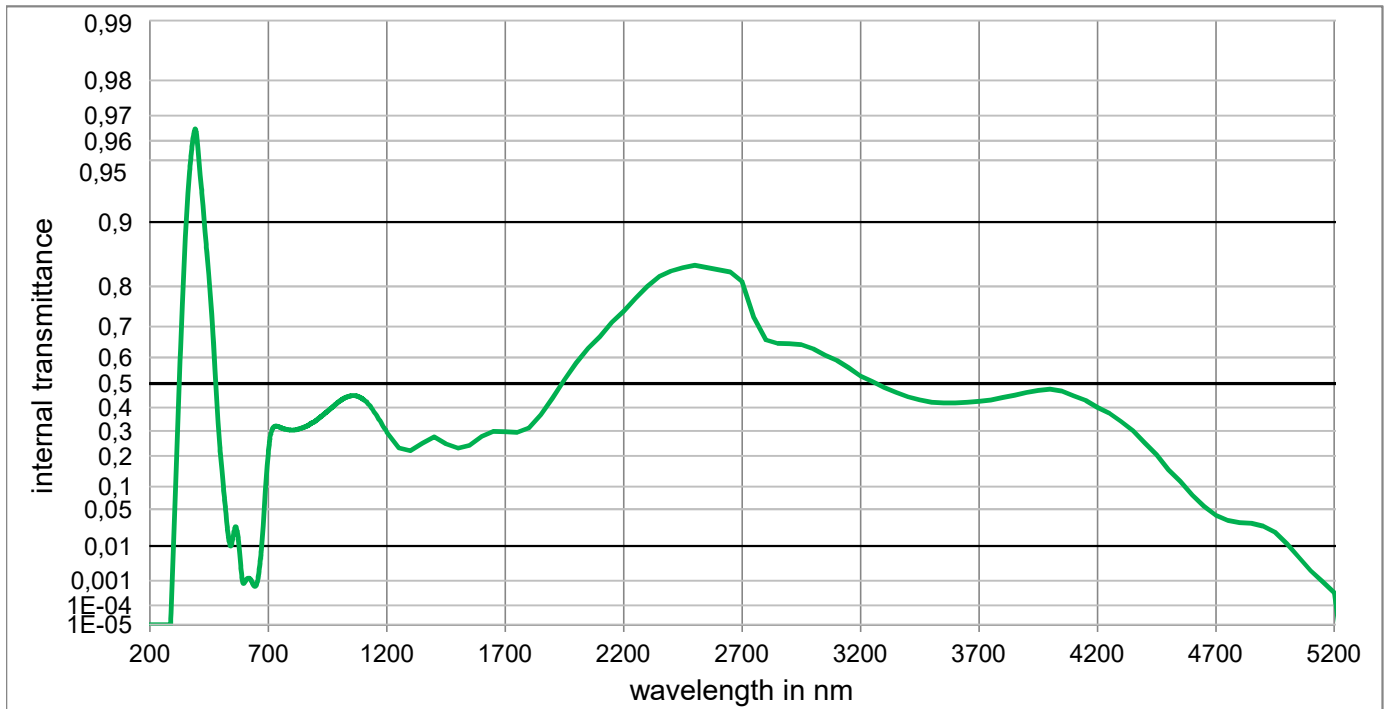
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 1

Colorimetric properties				
		1 mm	2 mm	3 mm
Illuminant D65	x	0,150	0,153	0,157
	y	0,055	0,027	0,021
	Y	5,0	1,8	1,1
	λ_d	463 nm	455 nm	451 nm
Illuminant A	P_e	0,934	0,985	0,993
	x	0,155	0,151	0,155
	y	0,093	0,035	0,024
	Y	2,6	0,7	0,4
Illuminant A	λ_d	470 nm	459 nm	454 nm
	P_e	0,903	0,981	0,992

Notes	
UV	
Transmission changes are possible under the action of intense ultraviolet radiation.	
Ionically colored glass	
Bandpass 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	1,830E-01	800	3,037E-01	1100	4,350E-01	2200	7,421E-01	3700	4,262E-01
210	< 1,0E-05	510	9,700E-02	810	3,043E-01	1110	4,263E-01	2250	7,743E-01	3750	4,322E-01
220	< 1,0E-05	520	4,500E-02	820	3,060E-01	1120	4,160E-01	2300	8,000E-01	3800	4,424E-01
230	< 1,0E-05	530	1,700E-02	830	3,089E-01	1130	4,069E-01	2350	8,200E-01	3850	4,517E-01
240	< 1,0E-05	540	1,000E-02	840	3,122E-01	1140	3,915E-01	2400	8,300E-01	3900	4,636E-01
250	< 1,0E-05	550	1,500E-02	850	3,157E-01	1150	3,759E-01	2450	8,363E-01	3950	4,721E-01
260	< 1,0E-05	560	2,499E-02	860	3,200E-01	1160	3,598E-01	2500	8,400E-01	4000	4,772E-01
270	< 1,0E-05	570	1,800E-02	870	3,250E-01	1170	3,452E-01	2550	8,363E-01	4050	4,700E-01
280	< 1,0E-05	580	5,153E-03	880	3,320E-01	1180	3,280E-01	2600	8,321E-01	4100	4,500E-01
290	8,5E-05	590	1,014E-03	890	3,368E-01	1190	3,108E-01	2650	8,278E-01	4150	4,305E-01
300	1,4E-02	600	9,099E-04	900	3,438E-01	1200	2,943E-01	2700	8,100E-01	4200	4,000E-01
310	1,4E-01	610	1,170E-03	910	3,517E-01	1250	2,318E-01	2750	7,251E-01	4250	3,761E-01
320	4,080E-01	620	1,212E-03	920	3,598E-01	1300	2,200E-01	2800	6,600E-01	4300	3,400E-01
330	6,550E-01	630	9,256E-04	930	3,683E-01	1350	2,496E-01	2850	6,478E-01	4350	3,006E-01
340	8,050E-01	640	6,433E-04	940	3,764E-01	1400	2,751E-01	2900	6,470E-01	4400	2,500E-01
350	8,870E-01	650	7,603E-04	950	3,850E-01	1450	2,462E-01	2950	6,436E-01	4450	2,046E-01
360	9,280E-01	660	1,998E-03	960	3,932E-01	1500	2,300E-01	3000	6,300E-01	4500	1,500E-01
370	9,480E-01	670	7,995E-03	970	4,017E-01	1550	2,420E-01	3050	6,079E-01	4550	1,146E-01
380	9,600E-01	680	3,800E-02	980	4,106E-01	1600	2,768E-01	3100	5,900E-01	4600	7,834E-02
390	9,650E-01	690	1,180E-01	990	4,192E-01	1650	2,980E-01	3150	5,621E-01	4650	5,508E-02
400	9,590E-01	700	2,190E-01	1000	4,270E-01	1700	2,963E-01	3200	5,300E-01	4700	4,000E-02
410	9,440E-01	710	2,860E-01	1010	4,338E-01	1750	2,946E-01	3250	5,086E-01	4750	3,296E-02
420	9,260E-01	720	3,140E-01	1020	4,398E-01	1800	3,133E-01	3300	4,840E-01	4800	3,000E-02
430	8,970E-01	730	3,205E-01	1030	4,442E-01	1850	3,693E-01	3350	4,636E-01	4850	2,924E-02
440	8,610E-01	740	3,190E-01	1040	4,475E-01	1900	4,400E-01	3400	4,449E-01	4900	2,576E-02
450	8,090E-01	750	3,150E-01	1050	4,501E-01	1950	5,145E-01	3450	4,330E-01	4950	1,968E-02
460	7,400E-01	760	3,109E-01	1060	4,513E-01	2000	5,800E-01	3500	4,228E-01	5000	1,132E-02
470	6,200E-01	770	3,079E-01	1070	4,498E-01	2050	6,325E-01	3550	4,200E-01	5050	5,236E-03
480	4,570E-01	780	3,057E-01	1080	4,465E-01	2100	6,700E-01	3600	4,200E-01	5100	2,178E-03
490	2,910E-01	790	3,043E-01	1090	4,416E-01	2150	7,124E-01	3650	4,228E-01	5150	9,397E-04