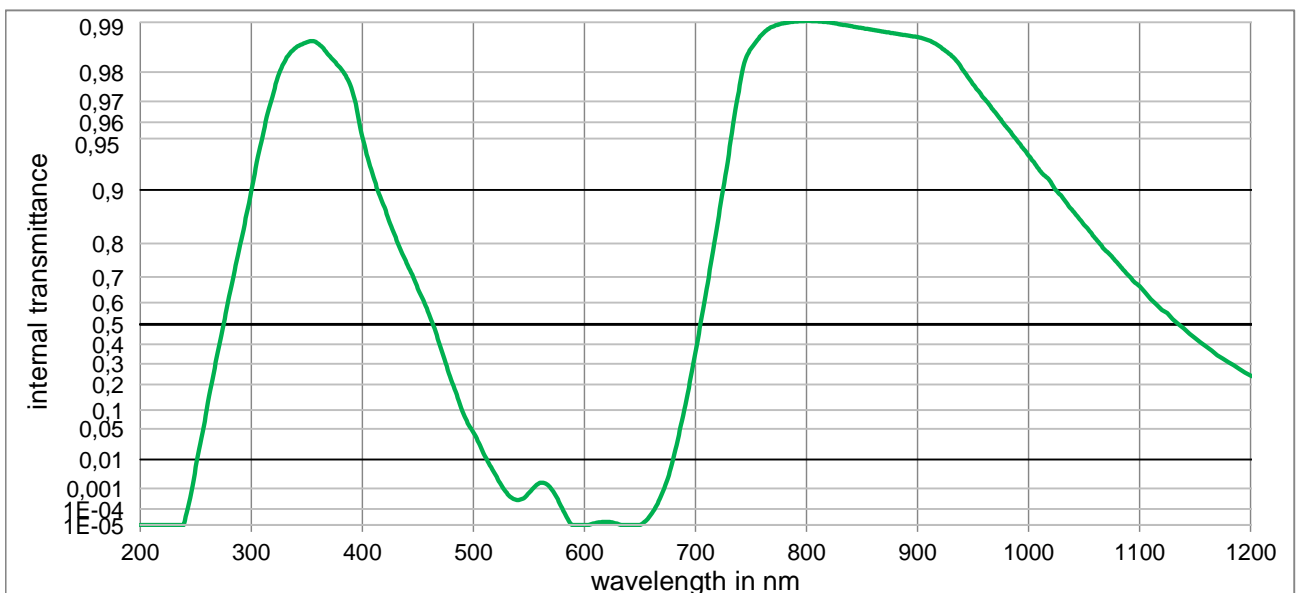
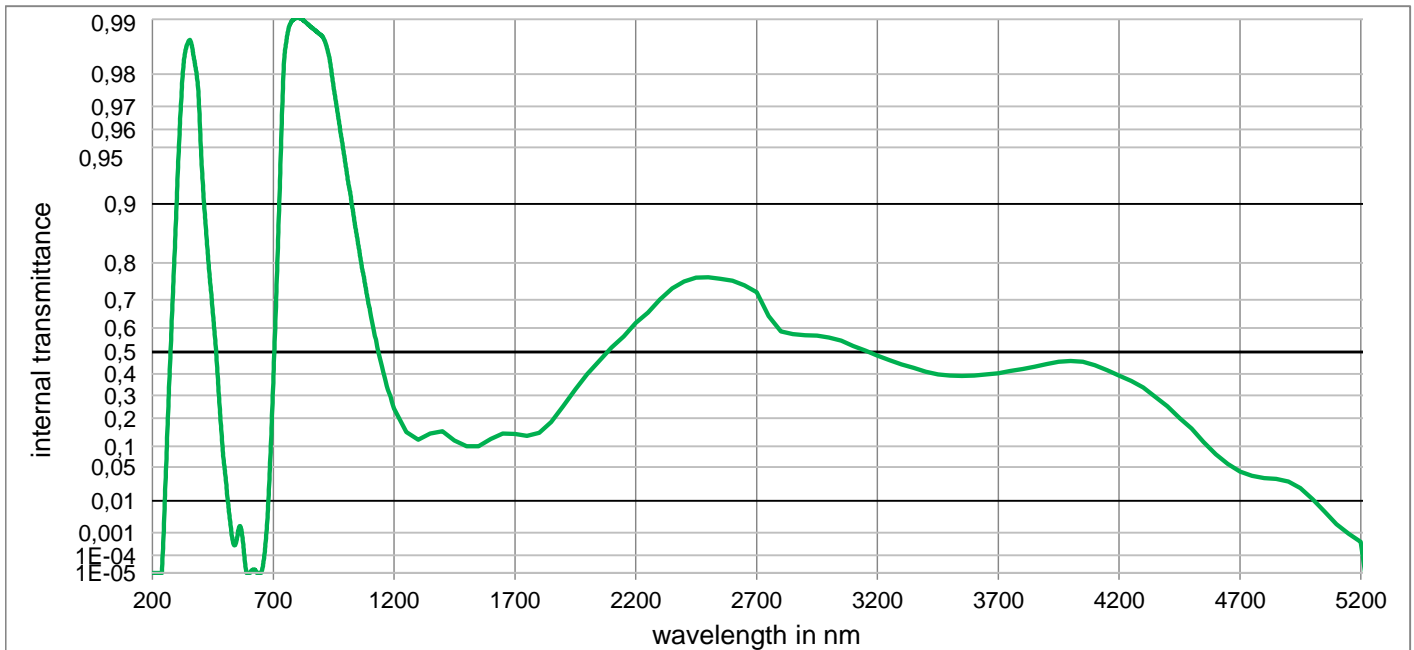


BG3

Optical properties		Mechanical properties		Colorimetric properties			
Reflection factor		Reference thickness		1 mm 2 mm 3 mm			
$P_d = 0,921$		$d = 1,00 \text{ mm}$		Illuminant D65	x	0,154 0,160 0,163	
Spectral values guaranteed		Density			y	0,029 0,018 0,014	
$\tau_i (365 \text{ nm}) \geq 0,94$	$\rho = 2,55 \text{ g/cm}^3$		Y		2,0 0,8 0,5		
$\tau_i (633 \text{ nm}) \leq 0,00005$	Knoop hardness		λ_d		455 nm 448 nm 444 nm		
	HK[0.1/20] = 438		P_e		0,979 0,993 0,996		
		Thermal properties		Illuminant A	x	0,160 0,166 0,170	
		Transformation temperature			y	0,042 0,024 0,020	
		$T_g = 478 \text{ }^\circ\text{C}$			Y	0,9 0,3 0,2	
		Thermal expansion in $10^{-6}/\text{K}$			λ_d	458 nm 447 nm 440 nm	
		$\alpha (-30^\circ\text{C}/+70^\circ\text{C}) = 8,8$			P_e	0,958 0,977 0,978	
		$\alpha (20^\circ\text{C}/300^\circ\text{C}) = 10,1$		Notes			
Refractive indices				UV			
$n_F (486 \text{ nm}) = 1,52$			Transmission changes are possible under the action of intense ultraviolet radiation.				
$n_e (546 \text{ nm}) = 1,51$			Ionically colored glass				
$n_d (587,6 \text{ nm}) = 1,51$			Bandpass filter / Shortpass filter				
Sellmeier coefficients				DIN 58131			
valid from 300 nm to 1600 nm			Disclaimer				
$B_1 = 0,8735$			All data without tolerances are to be understood to be reference values.				
$B_2 = 0,3716$							
$B_3 = 1,1076$							
$C_1 = 9,390\text{E-}03 \text{ } \mu\text{m}^2$							
$C_2 = 1,0998\text{E-}02 \text{ } \mu\text{m}^2$							
$C_3 = 145,898 \text{ } \mu\text{m}^2$							
Internal quality							
Bubble class	1						
		Chemical properties					
		Chemical resistance					
		FR class = 0					
		SR class = 1					
		AR class = 1					
		Resistance against humidity					
		Sensitive glass					
		see pocket catalogue "Optical Filter Glass 2020", chapter 5.5					



BG3



Internal transmittance t_i at reference thickness											
The internal transmittance values, tabulated and graphically represented, are reference values only											
λ /nm	t_i	λ /nm	t_i	λ /nm	t_i	λ /nm	t_i	λ /nm	t_i	λ /nm	t_i
200	< 1,000E-05	500	4,300E-02	800	9,902E-01	1100	6,665E-01	2200	6,200E-01	3700	4,038E-01
210	< 1,000E-05	510	1,276E-02	810	9,901E-01	1110	6,152E-01	2250	6,566E-01	3750	4,132E-01
220	< 1,000E-05	520	3,214E-03	820	9,900E-01	1120	5,680E-01	2300	7,009E-01	3800	4,226E-01
230	< 1,000E-05	530	6,442E-04	830	9,897E-01	1130	5,247E-01	2350	7,349E-01	3850	4,330E-01
240	1,871E-05	540	2,973E-04	840	9,895E-01	1140	4,800E-01	2400	7,538E-01	3900	4,462E-01
250	6,053E-03	550	6,182E-04	850	9,892E-01	1150	4,319E-01	2450	7,642E-01	3950	4,557E-01
260	1,030E-01	560	1,673E-03	860	9,889E-01	1160	3,884E-01	2500	7,651E-01	4000	4,600E-01
270	3,640E-01	570	1,000E-03	870	9,886E-01	1170	3,432E-01	2550	7,613E-01	4050	4,557E-01
280	6,260E-01	580	1,108E-04	880	9,883E-01	1180	3,081E-01	2600	7,557E-01	4100	4,400E-01
290	7,980E-01	590	< 1,000E-05	890	9,880E-01	1190	2,727E-01	2650	7,434E-01	4150	4,170E-01
300	8,990E-01	600	< 1,000E-05	900	9,877E-01	1200	2,412E-01	2700	7,236E-01	4200	3,915E-01
310	9,510E-01	610	1,340E-05	910	9,872E-01	1250	1,462E-01	2750	6,443E-01	4250	3,670E-01
320	9,734E-01	620	1,611E-05	920	9,860E-01	1300	1,200E-01	2800	5,868E-01	4300	3,368E-01
330	9,828E-01	630	1,167E-05	930	9,842E-01	1350	1,406E-01	2850	5,764E-01	4350	2,925E-01
340	9,858E-01	640	< 1,000E-05	940	9,810E-01	1400	1,500E-01	2900	5,717E-01	4400	2,500E-01
350	9,868E-01	650	< 1,000E-05	950	9,764E-01	1450	1,179E-01	2950	5,698E-01	4450	2,000E-01
360	9,866E-01	660	4,721E-05	960	9,712E-01	1500	1,000E-01	3000	5,623E-01	4500	1,600E-01
370	9,842E-01	670	5,929E-04	970	9,651E-01	1550	1,000E-01	3050	5,481E-01	4550	1,132E-01
380	9,812E-01	680	1,040E-02	980	9,574E-01	1600	1,236E-01	3100	5,264E-01	4600	7,780E-02
390	9,752E-01	690	1,004E-01	990	9,484E-01	1650	1,406E-01	3150	5,066E-01	4650	5,610E-02
400	9,510E-01	700	3,590E-01	1000	9,369E-01	1700	1,400E-01	3200	4,840E-01	4700	4,159E-02
410	9,160E-01	710	6,550E-01	1010	9,230E-01	1750	1,330E-01	3250	4,632E-01	4750	3,483E-02
420	8,740E-01	720	8,460E-01	1020	9,099E-01	1800	1,443E-01	3300	4,443E-01	4800	3,170E-02
430	8,150E-01	730	9,380E-01	1030	8,909E-01	1850	1,849E-01	3350	4,274E-01	4850	3,076E-02
440	7,450E-01	740	9,760E-01	1040	8,680E-01	1900	2,500E-01	3400	4,100E-01	4900	2,729E-02
450	6,580E-01	750	9,856E-01	1050	8,428E-01	1950	3,283E-01	3450	3,981E-01	4950	2,004E-02
460	5,500E-01	760	9,881E-01	1060	8,133E-01	2000	4,000E-01	3500	3,915E-01	5000	1,099E-02
470	3,930E-01	770	9,894E-01	1070	7,800E-01	2050	4,623E-01	3550	3,896E-01	5050	5,082E-03
480	2,220E-01	780	9,899E-01	1080	7,463E-01	2100	5,200E-01	3600	3,915E-01	5100	2,032E-03
490	9,700E-02	790	9,901E-01	1090	7,060E-01	2150	5,670E-01	3650	3,981E-01	5150	9,099E-04