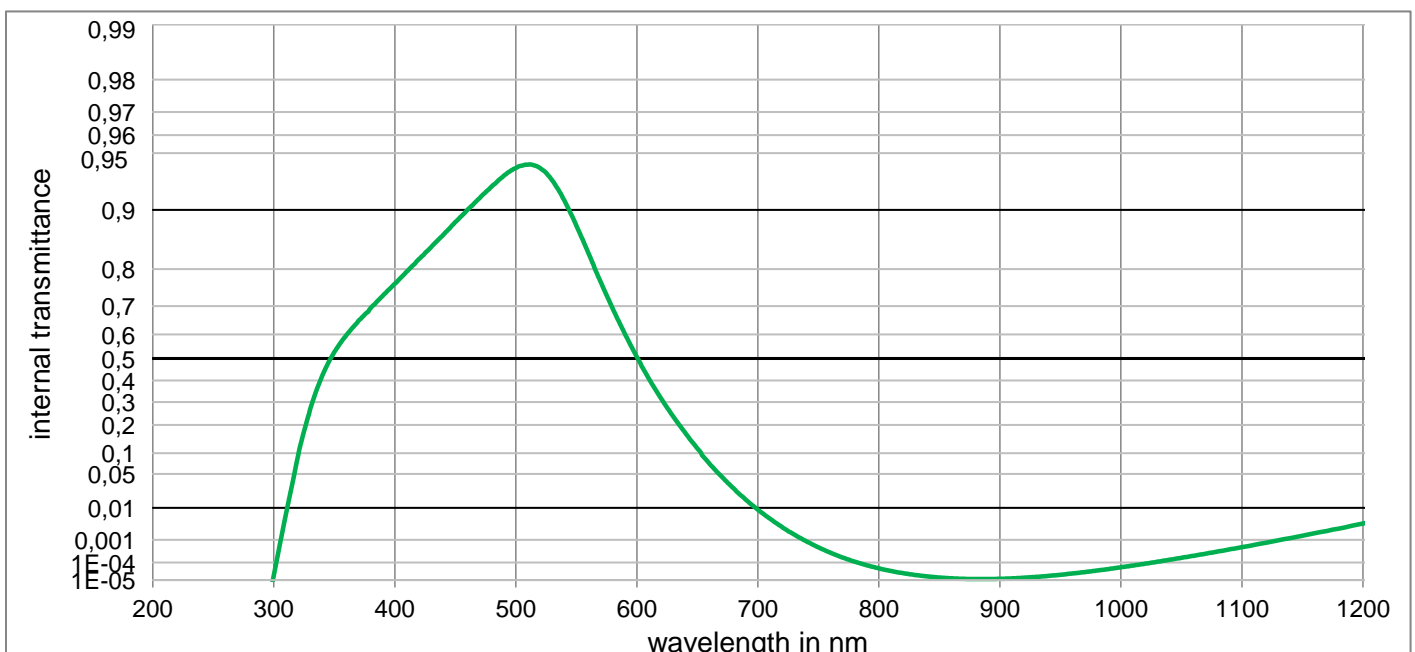
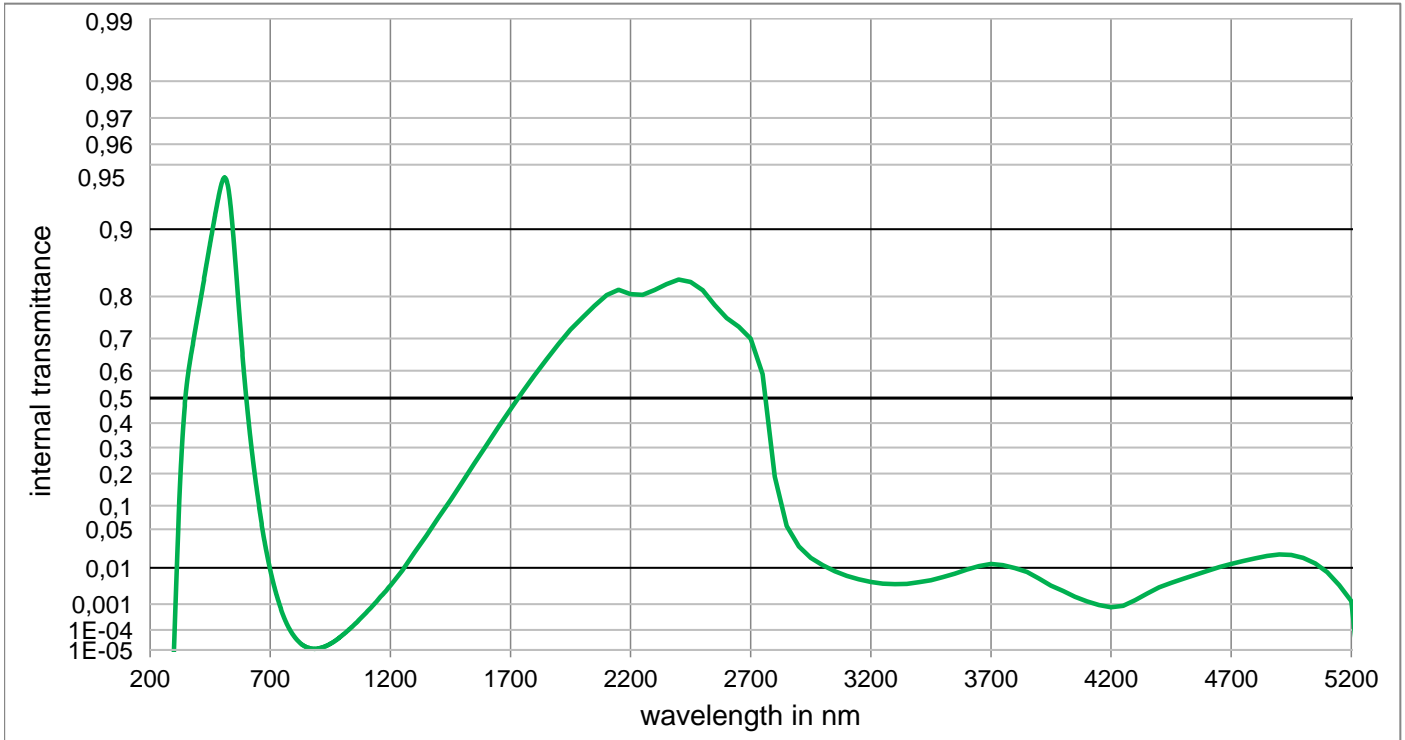


BG55

Optical properties	Mechanical properties	Colorimetric properties																					
Reflection factor	Reference thickness	1 mm 2 mm 3 mm																					
$P_d = 0,914$	$d = 1,00 \text{ mm}$	<table border="1"> <tr> <td rowspan="5">Illuminant D65</td> <td>x</td> <td>0,252</td> <td>0,220</td> <td>0,201</td> </tr> <tr> <td>y</td> <td>0,329</td> <td>0,328</td> <td>0,328</td> </tr> <tr> <td>Y</td> <td>68,9</td> <td>56,6</td> <td>48,2</td> </tr> <tr> <td>λ_d</td> <td>492 nm</td> <td>491 nm</td> <td>491 nm</td> </tr> <tr> <td>P_e</td> <td>0,223</td> <td>0,339</td> <td>0,409</td> </tr> </table>	Illuminant D65	x	0,252	0,220	0,201	y	0,329	0,328	0,328	Y	68,9	56,6	48,2	λ_d	492 nm	491 nm	491 nm	P_e	0,223	0,339	0,409
Illuminant D65	x			0,252	0,220	0,201																	
	y			0,329	0,328	0,328																	
	Y			68,9	56,6	48,2																	
	λ_d			492 nm	491 nm	491 nm																	
	P_e	0,223	0,339	0,409																			
Spectral values guaranteed	Density	<table border="1"> <tr> <td rowspan="5">Illuminant A</td> <td>x</td> <td>0,356</td> <td>0,302</td> <td>0,267</td> </tr> <tr> <td>y</td> <td>0,438</td> <td>0,452</td> <td>0,460</td> </tr> <tr> <td>Y</td> <td>61,7</td> <td>47,6</td> <td>39,0</td> </tr> <tr> <td>λ_d</td> <td>501 nm</td> <td>500 nm</td> <td>500 nm</td> </tr> <tr> <td>P_e</td> <td>0,208</td> <td>0,331</td> <td>0,413</td> </tr> </table>	Illuminant A	x	0,356	0,302	0,267	y	0,438	0,452	0,460	Y	61,7	47,6	39,0	λ_d	501 nm	500 nm	500 nm	P_e	0,208	0,331	0,413
Illuminant A	x			0,356	0,302	0,267																	
	y			0,438	0,452	0,460																	
	Y			61,7	47,6	39,0																	
	λ_d			501 nm	500 nm	500 nm																	
	P_e	0,208	0,331	0,413																			
τ_i (405 nm) $\geq 0,76$	$\rho = 2,65 \text{ g/cm}^3$																						
τ_i (514 nm) $\geq 0,93$	Knoop hardness																						
τ_i (633 nm) $\geq 0,18$	HK[0.1/20] = 504																						
τ_i (694 nm) $\leq 0,016$	Thermal properties																						
τ_i (1060 nm) $\leq 0,0005$	Transformation temperature																						
	$T_g = 453 \text{ }^\circ\text{C}$																						
	Thermal expansion in $10^{-6}/\text{K}$																						
	$\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})} = 7,2$																						
	$\alpha_{(20^\circ\text{C}/300^\circ\text{C})} = 9,1$																						
Refractive indices	Chemical properties	Notes Ionically colored glass Bandpass filter / Shortpass filter NIR cutoff filter ISO 23364:2021 Disclaimer All data without tolerances are to be understood to be reference values.																					
n_F (486 nm) = 1,546	Chemical resistance																						
n_e (546 nm) = 1,542	FR class = 0																						
n_d (587,6 nm) = 1,54	SR class = 2																						
	AR class = 2																						
Sellmeier coefficients	Resistance against humidity																						
valid from 400 nm to 1550 nm	Sensitive glass																						
B_1 = 1,3373	see pocket catalogue "Optical Filter Glass 2024", chapter 5.5																						
B_2 = 0,0002																							
B_3 = 0,8117																							
C_1 = 9,095E-03 μm^2																							
C_2 = 1,4952E-02 μm^2																							
C_3 = 100,000 μm^2																							
Internal quality																							
Bubble class = 2																							



BG55



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	< 1,000E-05	500	9,399E-01	800	4,934E-05	1100	5,093E-04	2200	8,044E-01	3700	1,209E-02
210	< 1,000E-05	510	9,424E-01	810	3,526E-05	1110	6,294E-04	2250	8,032E-01	3750	1,149E-02
220	< 1,000E-05	520	9,400E-01	820	2,638E-05	1120	7,757E-04	2300	8,123E-01	3800	9,901E-03
230	< 1,000E-05	530	9,303E-01	830	2,067E-05	1130	9,532E-04	2350	8,232E-01	3850	8,076E-03
240	< 1,000E-05	540	9,110E-01	840	1,694E-05	1140	1,167E-03	2400	8,313E-01	3900	5,598E-03
250	< 1,000E-05	550	8,792E-01	850	1,452E-05	1150	1,424E-03	2450	8,272E-01	3950	3,651E-03
260	< 1,000E-05	560	8,329E-01	860	1,297E-05	1160	1,739E-03	2500	8,119E-01	4000	2,558E-03
270	< 1,000E-05	570	7,701E-01	870	1,207E-05	1170	2,078E-03	2550	7,821E-01	4050	1,710E-03
280	< 1,000E-05	580	6,928E-01	880	1,167E-05	1180	2,505E-03	2600	7,532E-01	4100	1,227E-03
290	< 1,000E-05	590	6,029E-01	890	1,169E-05	1190	3,047E-03	2650	7,316E-01	4150	9,269E-04
300	1,878E-05	600	5,057E-01	900	1,211E-05	1200	3,660E-03	2700	6,993E-01	4200	7,882E-04
310	6,724E-03	610	4,085E-01	910	1,292E-05	1250	8,670E-03	2750	5,881E-01	4250	8,827E-04
320	9,213E-02	620	3,166E-01	920	1,416E-05	1300	2,062E-02	2800	1,888E-01	4300	1,344E-03
330	2,650E-01	630	2,354E-01	930	1,590E-05	1350	4,003E-02	2850	5,554E-02	4350	2,158E-03
340	4,212E-01	640	1,677E-01	940	1,824E-05	1400	7,197E-02	2900	2,645E-02	4400	3,245E-03
350	5,277E-01	650	1,149E-01	950	2,132E-05	1450	1,148E-01	2950	1,629E-02	4450	4,293E-03
360	5,980E-01	660	7,208E-02	960	2,533E-05	1500	1,710E-01	3000	1,137E-02	4500	5,522E-03
370	6,500E-01	670	4,508E-02	970	3,049E-05	1550	2,371E-01	3050	8,398E-03	4550	6,840E-03
380	6,932E-01	680	2,711E-02	980	3,711E-05	1600	3,093E-01	3100	6,519E-03	4600	8,465E-03
390	7,313E-01	690	1,583E-02	990	4,557E-05	1650	3,844E-01	3150	5,315E-03	4650	1,031E-02
400	7,648E-01	700	9,032E-03	1000	5,634E-05	1700	4,561E-01	3200	4,538E-03	4700	1,220E-02
410	7,945E-01	710	5,056E-03	1010	7,000E-05	1750	5,236E-01	3250	4,113E-03	4750	1,406E-02
420	8,214E-01	720	2,809E-03	1020	8,728E-05	1800	5,841E-01	3300	3,971E-03	4800	1,587E-02
430	8,447E-01	730	1,576E-03	1030	1,090E-04	1850	6,379E-01	3350	4,064E-03	4850	1,775E-02
440	8,657E-01	740	8,774E-04	1040	1,363E-04	1900	6,841E-01	3400	4,457E-03	4900	1,892E-02
450	8,842E-01	750	5,015E-04	1050	1,705E-04	1950	7,241E-01	3450	5,018E-03	4950	1,854E-02
460	8,999E-01	760	2,924E-04	1060	2,130E-04	2000	7,545E-01	3500	6,034E-03	5000	1,629E-02
470	9,131E-01	770	1,764E-04	1070	2,657E-04	2050	7,807E-01	3550	7,359E-03	5050	1,249E-02
480	9,246E-01	780	1,106E-04	1080	3,308E-04	2100	8,029E-01	3600	9,128E-03	5100	7,925E-03
490	9,338E-01	790	7,226E-05	1090	4,110E-04	2150	8,131E-01	3650	1,095E-02	5150	3,751E-03