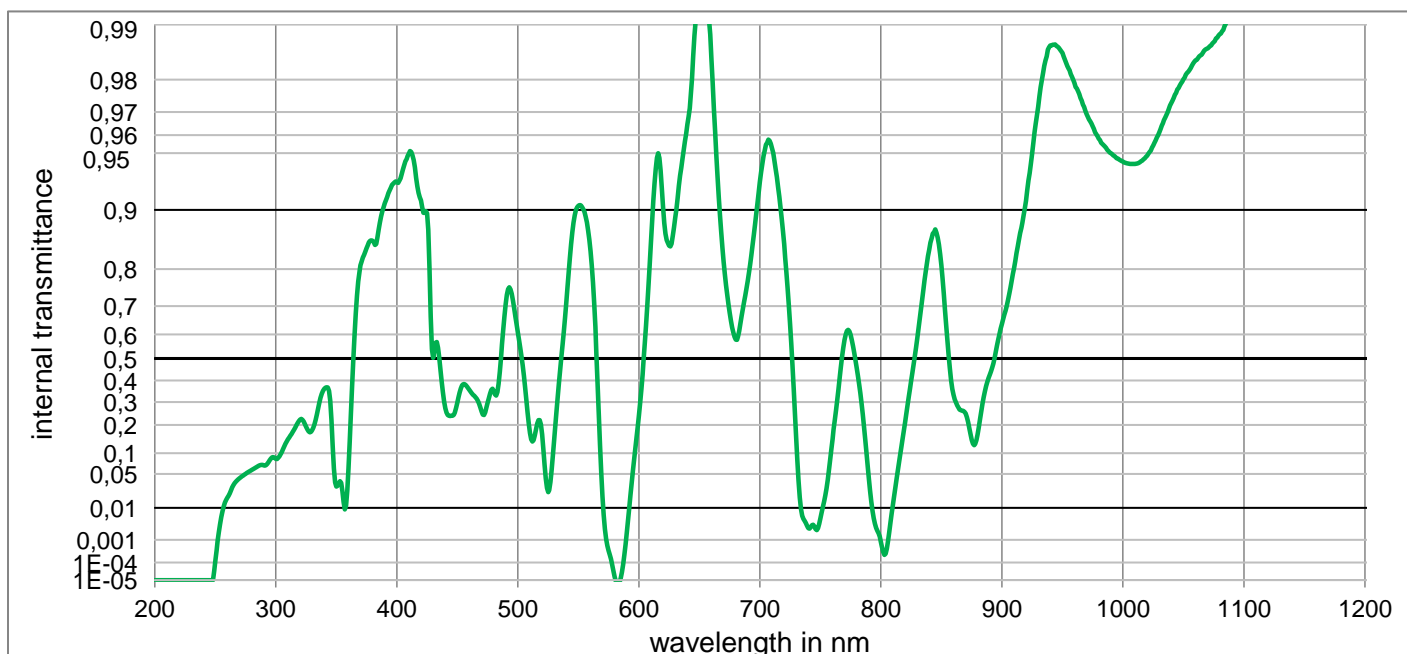


## BG36

Optical properties	Mechanical properties	Colorimetric properties																					
<b>Reflection factor</b>	<b>Reference thickness</b>	1 mm    2 mm    3 mm																					
$P_d = 0,877$	$d = 1,00 \text{ mm}$	<table border="1"> <tr> <td rowspan="5">Illuminant D65</td> <td>x</td> <td>0,344</td> <td>0,395</td> <td>0,429</td> </tr> <tr> <td>y</td> <td>0,327</td> <td>0,356</td> <td>0,370</td> </tr> <tr> <td>Y</td> <td>39,5</td> <td>29,0</td> <td>23,5</td> </tr> <tr> <td><math>\lambda_d</math></td> <td>622 nm</td> <td>591 nm</td> <td>590 nm</td> </tr> <tr> <td><math>P_e</math></td> <td>0,082</td> <td>0,305</td> <td>0,437</td> </tr> </table>	Illuminant D65	x	0,344	0,395	0,429	y	0,327	0,356	0,370	Y	39,5	29,0	23,5	$\lambda_d$	622 nm	591 nm	590 nm	$P_e$	0,082	0,305	0,437
Illuminant D65	x			0,344	0,395	0,429																	
	y			0,327	0,356	0,370																	
	Y			39,5	29,0	23,5																	
	$\lambda_d$			622 nm	591 nm	590 nm																	
	$P_e$	0,082	0,305	0,437																			
<b>Spectral values guaranteed</b>	<b>Density</b>	<table border="1"> <tr> <td rowspan="5">Illuminant A</td> <td>x</td> <td>0,495</td> <td>0,534</td> <td>0,557</td> </tr> <tr> <td>y</td> <td>0,387</td> <td>0,390</td> <td>0,389</td> </tr> <tr> <td>Y</td> <td>41,4</td> <td>32,2</td> <td>26,9</td> </tr> <tr> <td><math>\lambda_d</math></td> <td>628 nm</td> <td>600 nm</td> <td>599 nm</td> </tr> <tr> <td><math>P_e</math></td> <td>0,185</td> <td>0,478</td> <td>0,628</td> </tr> </table>	Illuminant A	x	0,495	0,534	0,557	y	0,387	0,390	0,389	Y	41,4	32,2	26,9	$\lambda_d$	628 nm	600 nm	599 nm	$P_e$	0,185	0,478	0,628
Illuminant A	x			0,495	0,534	0,557																	
	y			0,387	0,390	0,389																	
	Y			41,4	32,2	26,9																	
	$\lambda_d$			628 nm	600 nm	599 nm																	
	$P_e$	0,185	0,478	0,628																			
$\tau_i (405 \text{ nm}) \geq 0,9$	$\rho = 3,59 \text{ g/cm}^3$																						
$\tau_i (450 \text{ nm}) \leq 0,42$	<b>Knoop hardness</b>																						
$\tau_i (650 \text{ nm}) \geq 0,9$	HK[0.1/20] = 701																						
$\tau_i (800 \text{ nm}) \leq 0,01$	<b>Thermal properties</b>																						
	<b>Transformation temperature</b>																						
	$T_g = 657 \text{ }^\circ\text{C}$																						
	<b>Thermal expansion in <math>10^{-6}/\text{K}</math></b>																						
	$\alpha (-30^\circ\text{C}/+70^\circ\text{C}) = 6,1$																						
	$\alpha (20^\circ\text{C}/300^\circ\text{C}) = 7,2$																						
<b>Refractive indices</b>	<b>Chemical properties</b>	<b>Notes</b>																					
	<b>Chemical resistance</b>																						
$n_d (587,6 \text{ nm}) = 1,69$	FR class = 1	Ionically colored glass																					
	SR class = 52.2	Multi bandpass filter																					
<b>Sellmeier coefficients</b>	AR class = 1.2																						
on request	<b>Resistance against humidity</b>	ISO 23364:2021																					
	Resistant glass																						
	see pocket catalogue "Optical Filter Glass 2024", chapter 5.5	<b>Disclaimer</b>																					
<b>Internal quality</b>		All data without tolerances are to be understood to be reference values.																					
Bubble class 3																							



## BG36



**Internal transmittance  $\tau_i$  at reference thickness**  
 The internal transmittance values, tabulated and graphically represented, are reference values only

$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$
200	< 1,000E-05	500	6,084E-01	800	8,615E-04	1100	9,947E-01	2200	7,840E-01	3700	5,636E-04
210	< 1,000E-05	510	1,685E-01	810	1,212E-02	1110	9,956E-01	2250	7,370E-01	3750	4,498E-04
220	< 1,000E-05	520	1,625E-01	820	2,111E-01	1120	9,965E-01	2300	5,570E-01	3800	5,035E-04
230	< 1,000E-05	530	1,386E-01	830	5,842E-01	1130	9,973E-01	2350	3,641E-01	3850	6,764E-04
240	< 1,000E-05	540	7,084E-01	840	8,398E-01	1140	9,979E-01	2400	2,940E-01	3900	8,872E-04
250	1,297E-04	550	9,047E-01	850	8,090E-01	1150	9,981E-01	2450	2,914E-01	3950	1,054E-03
260	1,734E-02	560	8,367E-01	860	3,330E-01	1160	9,979E-01	2500	3,250E-01	4000	9,311E-04
270	4,220E-02	570	1,873E-02	870	2,481E-01	1170	9,974E-01	2550	3,616E-01	4050	6,485E-04
280	5,797E-02	580	1,610E-05	880	1,625E-01	1180	9,966E-01	2600	5,320E-01	4100	4,112E-04
290	6,801E-02	590	1,816E-03	890	4,256E-01	1190	9,956E-01	2650	6,110E-01	4150	2,000E-04
300	8,428E-02	600	2,413E-01	900	6,394E-01	1200	9,946E-01	2700	6,740E-01	4200	8,913E-05
310	1,446E-01	610	8,512E-01	910	8,023E-01	1250	9,950E-01	2750	6,170E-01	4250	3,746E-05
320	2,223E-01	620	9,037E-01	920	9,102E-01	1300	9,890E-01	2800	4,856E-01	4300	1,710E-05
330	1,781E-01	630	8,899E-01	930	9,718E-01	1350	8,689E-01	2850	4,360E-01	4350	< 1,000E-05
340	3,601E-01	640	9,649E-01	940	9,870E-01	1400	5,130E-01	2900	4,455E-01	4400	< 1,000E-05
350	2,978E-02	650	9,962E-01	950	9,857E-01	1450	4,112E-01	2950	4,570E-01	4450	< 1,000E-05
360	6,104E-02	660	9,844E-01	960	9,792E-01	1500	1,930E-01	3000	4,695E-01	4500	< 1,000E-05
370	8,080E-01	670	8,158E-01	970	9,692E-01	1550	2,365E-01	3050	4,748E-01	4550	< 1,000E-05
380	8,558E-01	680	5,792E-01	980	9,582E-01	1600	4,754E-01	3100	4,767E-01	4600	< 1,000E-05
390	9,077E-01	690	7,712E-01	990	9,499E-01	1650	6,889E-01	3150	4,720E-01	4650	< 1,000E-05
400	9,286E-01	700	9,289E-01	1000	9,445E-01	1700	8,240E-01	3200	4,547E-01	4700	< 1,000E-05
410	9,496E-01	710	9,529E-01	1010	9,429E-01	1750	8,730E-01	3250	3,980E-01	4750	< 1,000E-05
420	9,107E-01	720	8,502E-01	1020	9,484E-01	1800	7,951E-01	3300	3,137E-01	4800	< 1,000E-05
430	5,033E-01	730	1,533E-01	1030	9,614E-01	1850	5,949E-01	3350	2,154E-01	4850	< 1,000E-05
440	2,722E-01	740	2,600E-03	1040	9,731E-01	1900	4,433E-01	3400	1,186E-01	4900	< 1,000E-05
450	2,957E-01	750	5,260E-03	1050	9,801E-01	1950	4,709E-01	3450	4,861E-02	4950	< 1,000E-05
460	3,560E-01	760	1,460E-01	1060	9,843E-01	2000	5,741E-01	3500	1,952E-02	5000	< 1,000E-05
470	2,574E-01	770	5,782E-01	1070	9,865E-01	2050	6,600E-01	3550	6,251E-03	5050	< 1,000E-05
480	3,513E-01	780	4,586E-01	1080	9,887E-01	2100	7,230E-01	3600	2,675E-03	5100	< 1,000E-05
490	7,056E-01	790	4,187E-02	1090	9,918E-01	2150	7,680E-01	3650	1,009E-03	5150	< 1,000E-05