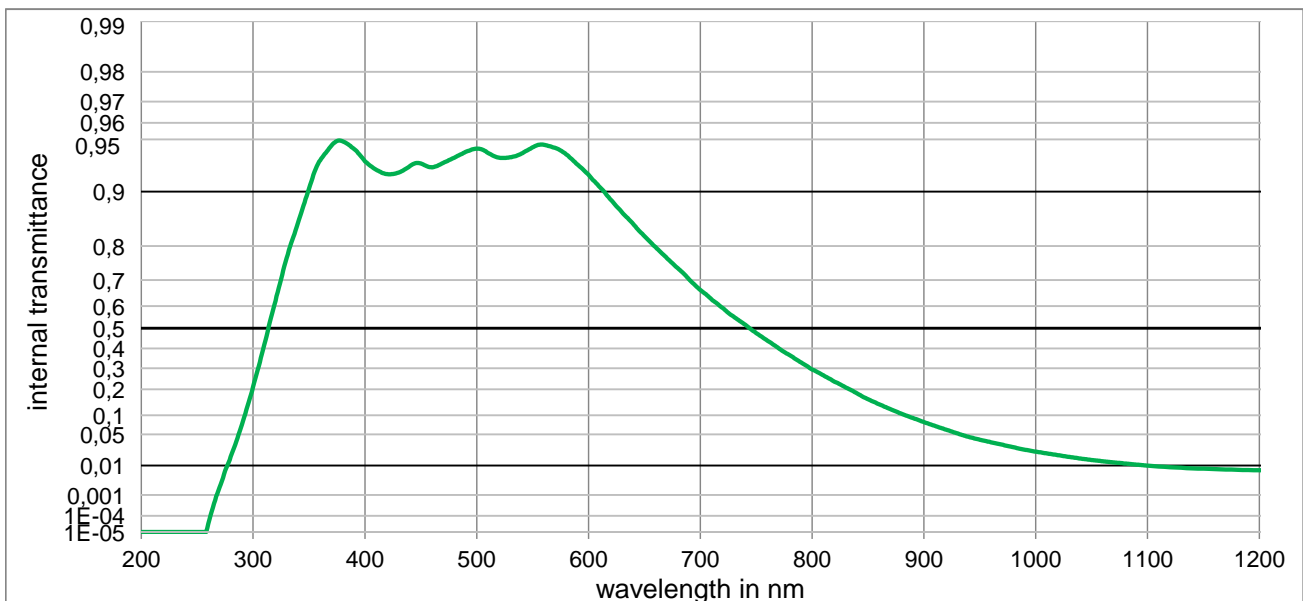
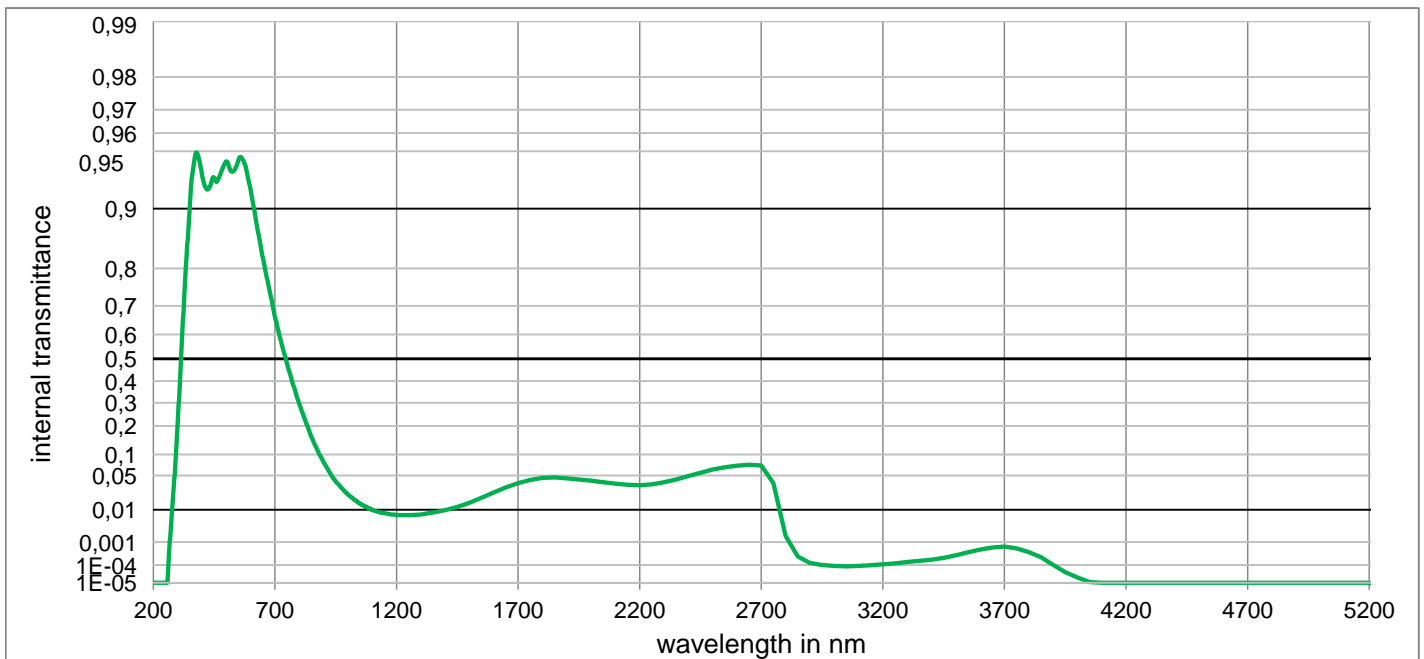


KG1

Optical properties	Mechanical properties	Colormetric properties																					
Reflection factor	Reference thickness	1 mm 2 mm 3 mm																					
$P_d = 0,920$	$d = 2,00 \text{ mm}$	<table border="1"> <tr> <td rowspan="5">Illuminant D65</td> <td>x</td> <td>0,311</td> <td>0,309</td> <td>0,307</td> </tr> <tr> <td>y</td> <td>0,330</td> <td>0,331</td> <td>0,332</td> </tr> <tr> <td>Y</td> <td>88,7</td> <td>85,6</td> <td>82,6</td> </tr> <tr> <td>λ_d</td> <td>497 nm</td> <td>497 nm</td> <td>498 nm</td> </tr> <tr> <td>P_e</td> <td>0,006</td> <td>0,013</td> <td>0,018</td> </tr> </table>	Illuminant D65	x	0,311	0,309	0,307	y	0,330	0,331	0,332	Y	88,7	85,6	82,6	λ_d	497 nm	497 nm	498 nm	P_e	0,006	0,013	0,018
Illuminant D65	x			0,311	0,309	0,307																	
	y			0,330	0,331	0,332																	
	Y			88,7	85,6	82,6																	
	λ_d			497 nm	497 nm	498 nm																	
	P_e	0,006	0,013	0,018																			
Spectral values guaranteed	Density	<table border="1"> <tr> <td rowspan="5">Illuminant A</td> <td>x</td> <td>0,444</td> <td>0,441</td> <td>0,438</td> </tr> <tr> <td>y</td> <td>0,409</td> <td>0,411</td> <td>0,413</td> </tr> <tr> <td>Y</td> <td>88,4</td> <td>84,9</td> <td>81,6</td> </tr> <tr> <td>λ_d</td> <td>505 nm</td> <td>505 nm</td> <td>505 nm</td> </tr> <tr> <td>P_e</td> <td>0,007</td> <td>0,014</td> <td>0,021</td> </tr> </table>	Illuminant A	x	0,444	0,441	0,438	y	0,409	0,411	0,413	Y	88,4	84,9	81,6	λ_d	505 nm	505 nm	505 nm	P_e	0,007	0,014	0,021
Illuminant A	x			0,444	0,441	0,438																	
	y			0,409	0,411	0,413																	
	Y			88,4	84,9	81,6																	
	λ_d			505 nm	505 nm	505 nm																	
	P_e	0,007	0,014	0,021																			
τ_i (365 nm) $\geq 0,89$	$\rho = 2,52 \text{ g/cm}^3$																						
τ_i (500 nm) $\geq 0,92$	Knoop hardness																						
τ_i (600 nm) $\geq 0,88$	HK[0.1/20] = 456																						
τ_i (700 nm) $\leq 0,68$	Thermal properties																						
τ_i (800 nm) $\leq 0,33$	Transformation temperature																						
τ_i (900 nm) $\leq 0,1$	$T_g = 599 \text{ }^\circ\text{C}$																						
τ_i (1060 nm) $\leq 0,02$	Thermal expansion in $10^{-6}/\text{K}$																						
τ_i (2200 nm) $\leq 0,06$	$\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})} = 5,3$																						
Refractive indices	$\alpha_{(20^\circ\text{C}/300^\circ\text{C})} = 6,1$																						
n_F (486 nm) = 1,52	Chemical properties																						
n_e (546 nm) = 1,51	Chemical resistance																						
n_d (587,6 nm) = 1,51	FR class = 0																						
	SR class = 2																						
	AR class = 3																						
Sellmeier coefficients	Resistance against humidity																						
valid from 400 nm to 1550 nm	Delicate glass																						
B_1 = 0,3376	see pocket catalogue "Optical Filter Glass 2020", chapter 5.5																						
B_2 = 0,9188																							
B_3 = 1,8816																							
C_1 = 3,461E-03 μm^2																							
C_2 = 9,9076E-03 μm^2																							
C_3 = 181,405 μm^2																							
Internal quality																							
Bubble class = 3																							
		Notes																					
		UV																					
		Transmission changes are possible under the action of intense ultraviolet radiation.																					
		Ionically colored glass																					
		Shortpass filter																					
		Heat protection filter																					
		DIN 58131																					
		Disclaimer																					
		All data without tolerances are to be understood to be reference values.																					



KG1



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	9,434E-01	800	2,936E-01	1100	9,948E-03	2200	3,377E-02	3700	6,632E-04
210	< 1,0E-05	510	9,402E-01	810	2,650E-01	1110	9,410E-03	2250	3,523E-02	3750	5,698E-04
220	< 1,0E-05	520	9,362E-01	820	2,349E-01	1120	8,986E-03	2300	3,829E-02	3800	3,991E-04
230	< 1,0E-05	530	9,364E-01	830	2,082E-01	1130	8,642E-03	2350	4,292E-02	3850	2,350E-04
240	< 1,0E-05	540	9,395E-01	840	1,824E-01	1140	8,360E-03	2400	4,886E-02	3900	1,033E-04
250	< 1,0E-05	550	9,444E-01	850	1,581E-01	1150	8,157E-03	2450	5,536E-02	3950	4,236E-05
260	3,5E-05	560	9,463E-01	860	1,377E-01	1160	7,950E-03	2500	6,181E-02	4000	2,104E-05
270	2,0E-03	570	9,440E-01	870	1,206E-01	1170	7,750E-03	2550	6,692E-02	4050	1,117E-05
280	1,7E-02	580	9,389E-01	880	1,047E-01	1180	7,580E-03	2600	7,069E-02	4100	< 1,000E-05
290	7,3E-02	590	9,302E-01	890	9,150E-02	1190	7,453E-03	2650	7,279E-02	4150	< 1,000E-05
300	2,1E-01	600	9,199E-01	900	7,971E-02	1200	7,350E-03	2700	7,150E-02	4200	< 1,000E-05
310	4,2E-01	610	9,060E-01	910	6,939E-02	1250	7,200E-03	2750	3,692E-02	4250	< 1,000E-05
320	6,222E-01	620	8,887E-01	920	6,017E-02	1300	7,570E-03	2800	1,650E-03	4300	< 1,000E-05
330	7,690E-01	630	8,693E-01	930	5,187E-02	1350	8,490E-03	2850	2,541E-04	4350	< 1,000E-05
340	8,500E-01	640	8,481E-01	940	4,499E-02	1400	9,840E-03	2900	1,282E-04	4400	< 1,000E-05
350	9,040E-01	650	8,230E-01	950	3,971E-02	1450	1,182E-02	2950	9,931E-05	4450	< 1,000E-05
360	9,340E-01	660	7,970E-01	960	3,543E-02	1500	1,472E-02	3000	8,892E-05	4500	< 1,000E-05
370	9,456E-01	670	7,690E-01	970	3,157E-02	1550	1,909E-02	3050	8,612E-05	4550	< 1,000E-05
380	9,487E-01	680	7,380E-01	980	2,790E-02	1600	2,463E-02	3100	9,044E-05	4600	< 1,000E-05
390	9,433E-01	690	7,020E-01	990	2,477E-02	1650	3,097E-02	3150	9,750E-05	4650	< 1,000E-05
400	9,330E-01	700	6,640E-01	1000	2,230E-02	1700	3,707E-02	3200	1,074E-04	4700	< 1,000E-05
410	9,251E-01	710	6,280E-01	1010	2,029E-02	1750	4,196E-02	3250	1,208E-04	4750	< 1,000E-05
420	9,205E-01	720	5,921E-01	1020	1,846E-02	1800	4,558E-02	3300	1,397E-04	4800	< 1,000E-05
430	9,222E-01	730	5,530E-01	1030	1,677E-02	1850	4,635E-02	3350	1,594E-04	4850	< 1,000E-05
440	9,284E-01	740	5,170E-01	1040	1,525E-02	1900	4,488E-02	3400	1,805E-04	4900	< 1,000E-05
450	9,309E-01	750	4,770E-01	1050	1,404E-02	1950	4,284E-02	3450	2,178E-04	4950	< 1,000E-05
460	9,274E-01	760	4,393E-01	1060	1,300E-02	2000	4,076E-02	3500	2,881E-04	5000	< 1,000E-05
470	9,315E-01	770	4,012E-01	1070	1,212E-02	2050	3,830E-02	3550	3,919E-04	5050	< 1,000E-05
480	9,362E-01	780	3,658E-01	1080	1,133E-02	2100	3,616E-02	3600	5,113E-04	5100	< 1,000E-05
490	9,408E-01	790	3,290E-01	1090	1,062E-02	2150	3,447E-02	3650	6,113E-04	5150	< 1,000E-05