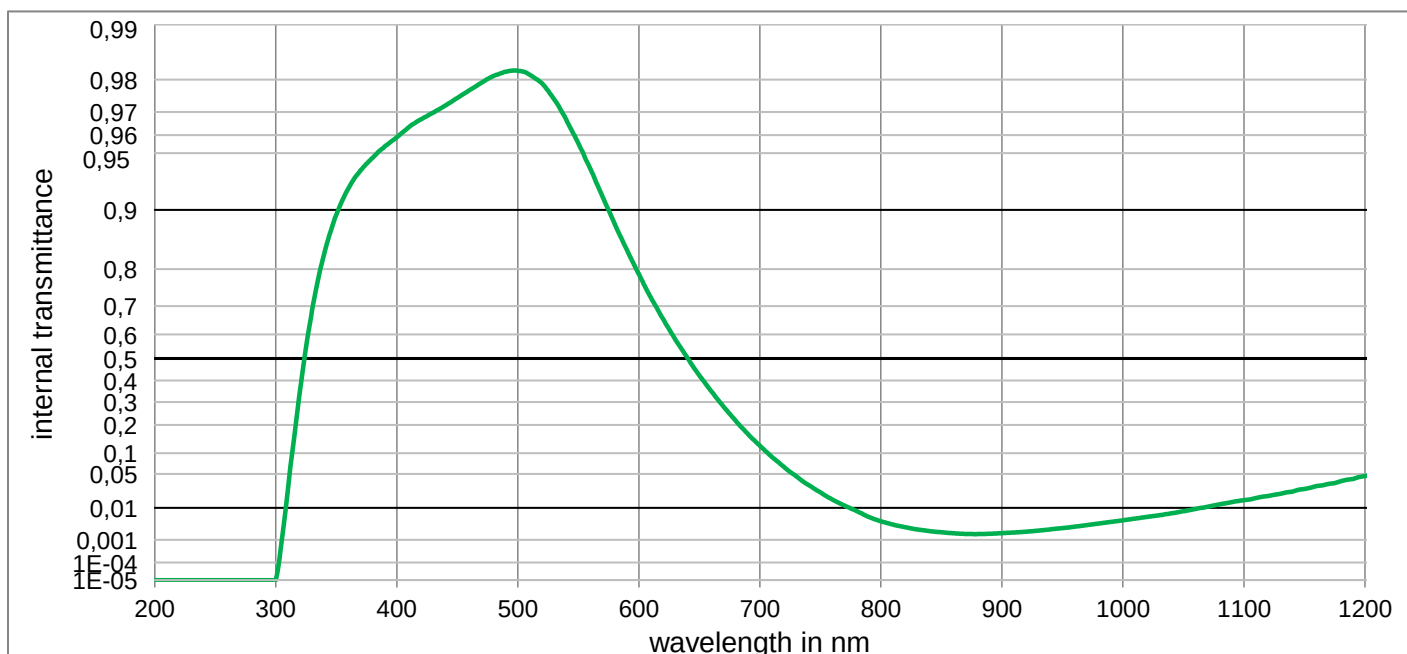
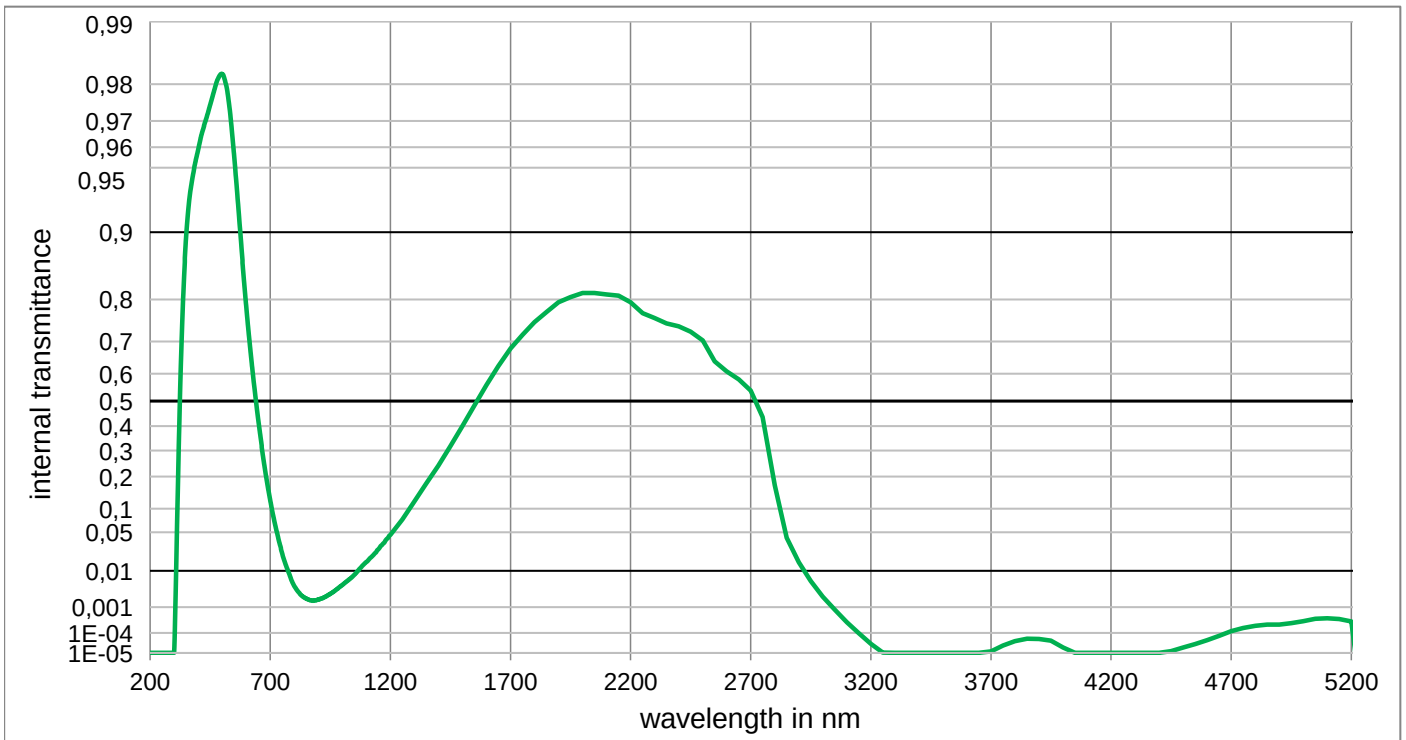


Optical properties		Mechanical properties		Colorimetric properties				
Reflection factor		Reference thickness		1 mm 2 mm 3 mm				
P _d = 0,916		d = 1,00 mm		Illuminant D65	x	0,283	0,262	0,246
Spectral values guaranteed		Density			y	0,327	0,324	0,321
τ _i (350 nm)	≥ 0,8	ρ = 2,74 g/cm³			Y	82,1	74,8	69,0
τ _i (405 nm)	≥ 0,93	Knoop hardness			λ _d	491 nm	490 nm	490 nm
τ _i (514 nm)	≥ 0,97	HK[0.1/20] = 383			P _e	0,108	0,188	0,250
τ _i (633 nm)	≤ 0,57	Thermal properties		Illuminant A	x	0,406	0,374	0,348
τ _i (694 nm)	≤ 0,16	Transformation temperature			y	0,421	0,430	0,436
τ _i (1060 nm)	≤ 0,02	Tg = 313 °C			Y	78,0	68,4	61,3
Refractive indices		Thermal expansion in 10 ⁻⁶ /K			λ _d	501 nm	500 nm	500 nm
n _F (486 nm) = 1,536		α _(-30°C/+70°C) = 11,9			P _e	0,094	0,168	0,227
n _e (546 nm) = 1,532		α _(20°C/200°C) = 13,7		Notes				
n _d (587,6 nm) = 1,53		Chemical properties		Ionically colored glass Bandpass filter / Shortpass filter NIR cutoff filter				
Sellmeier coefficients		Chemical resistance						
valid from 435 nm to 1550 nm		FR class = 0						
B ₁ 0,9300		SR class = 5.1						
B ₂ 0,3779		AR class = 3		ISO 23364:2021				
B ₃ 1,0478		Resistance against humidity		Disclaimer				
C ₁ 8,617E-03 μm²		Sensitive glass						
C ₂ 1,0398E-02 μm²		see pocket catalogue "Optical Filter Glass 2024", chapter 5.5		All data without tolerances are to be understood to be reference values.				
C ₃ 149,651 μm²		Internal quality						
Bubble class 1								



BG40

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	9,821E-01	800	4,252E-03	1100	1,533E-02	2200	7,945E-01	3700	1,213E-05
210	< 1,000E-05	510	9,812E-01	810	3,366E-03	1110	1,712E-02	2250	7,709E-01	3750	2,518E-05
220	< 1,000E-05	520	9,790E-01	820	2,780E-03	1120	1,901E-02	2300	7,600E-01	3800	4,169E-05
230	< 1,000E-05	530	9,745E-01	830	2,340E-03	1130	2,123E-02	2350	7,473E-01	3850	5,395E-05
240	< 1,000E-05	540	9,670E-01	840	2,062E-03	1140	2,354E-02	2400	7,400E-01	3900	5,333E-05
250	< 1,000E-05	550	9,556E-01	850	1,880E-03	1150	2,665E-02	2450	7,266E-01	3950	4,335E-05
260	< 1,000E-05	560	9,390E-01	860	1,734E-03	1160	3,051E-02	2500	7,030E-01	4000	2,000E-05
270	< 1,000E-05	570	9,150E-01	870	1,644E-03	1170	3,350E-02	2550	6,408E-01	4050	< 1,000E-05
280	< 1,000E-05	580	8,820E-01	880	1,622E-03	1180	3,747E-02	2600	6,079E-01	4100	< 1,000E-05
290	< 1,000E-05	590	8,400E-01	890	1,670E-03	1190	4,112E-02	2650	5,805E-01	4150	< 1,000E-05
300	< 1,000E-05	600	7,880E-01	900	1,752E-03	1200	4,588E-02	2700	5,400E-01	4200	< 1,000E-05
310	2,600E-02	610	7,260E-01	910	1,850E-03	1250	7,450E-02	2750	4,363E-01	4250	< 1,000E-05
320	3,560E-01	620	6,570E-01	920	1,964E-03	1300	1,200E-01	2800	1,700E-01	4300	< 1,000E-05
330	6,860E-01	630	5,810E-01	930	2,136E-03	1350	1,762E-01	2850	4,150E-02	4350	< 1,000E-05
340	8,320E-01	640	5,030E-01	940	2,360E-03	1400	2,400E-01	2900	1,510E-02	4400	< 1,000E-05
350	8,940E-01	650	4,240E-01	950	2,607E-03	1450	3,185E-01	2950	5,754E-03	4450	1,256E-05
360	9,230E-01	660	3,490E-01	960	2,880E-03	1500	4,000E-01	3000	2,153E-03	4500	2,000E-05
370	9,380E-01	670	2,790E-01	970	3,228E-03	1550	4,825E-01	3050	8,072E-04	4550	2,958E-05
380	9,470E-01	680	2,170E-01	980	3,631E-03	1600	5,600E-01	3100	2,818E-04	4600	4,645E-05
390	9,540E-01	690	1,650E-01	990	4,064E-03	1650	6,258E-01	3150	9,840E-05	4650	7,362E-05
400	9,590E-01	700	1,230E-01	1000	4,527E-03	1700	6,800E-01	3200	3,000E-05	4700	1,197E-04
410	9,638E-01	710	8,900E-02	1010	5,091E-03	1750	7,181E-01	3250	1,033E-05	4750	1,618E-04
420	9,671E-01	720	6,400E-02	1020	5,708E-03	1800	7,500E-01	3300	< 1,000E-05	4800	2,000E-04
430	9,698E-01	730	4,570E-02	1030	6,370E-03	1850	7,737E-01	3350	< 1,000E-05	4850	2,286E-04
440	9,723E-01	740	3,200E-02	1040	7,145E-03	1900	7,945E-01	3400	< 1,000E-05	4900	2,286E-04
450	9,748E-01	750	2,267E-02	1050	8,180E-03	1950	8,048E-01	3450	< 1,000E-05	4950	2,600E-04
460	9,771E-01	760	1,580E-02	1060	9,350E-03	2000	8,124E-01	3500	< 1,000E-05	5000	3,126E-04
470	9,792E-01	770	1,138E-02	1070	1,068E-02	2050	8,124E-01	3550	< 1,000E-05	5050	3,802E-04
480	9,809E-01	780	8,250E-03	1080	1,221E-02	2100	8,100E-01	3600	< 1,000E-05	5100	3,981E-04
490	9,819E-01	790	5,710E-03	1090	1,384E-02	2150	8,076E-01	3650	< 1,000E-05	5150	3,758E-04