

GG400

Optical properties	
Reflection factor	
P_d	= 0,918
Spectral values guaranteed (d = 3 mm)	
$\lambda_{i,0,5}$	= 400 nm ± 6 nm
$\lambda_s (\tau_{i,U} = 1E-05)$	= 340 nm
$\lambda_p (\tau_{i,L} = 0,93)$	= 480 nm
Refractive indices	
n_d (587,6 nm)	= 1,52
n_s (852 nm)	= 1,52
n_t (1014 nm)	= 1,51
Sellmeier coefficients	
on request	
Internal quality	
Bubble class	3

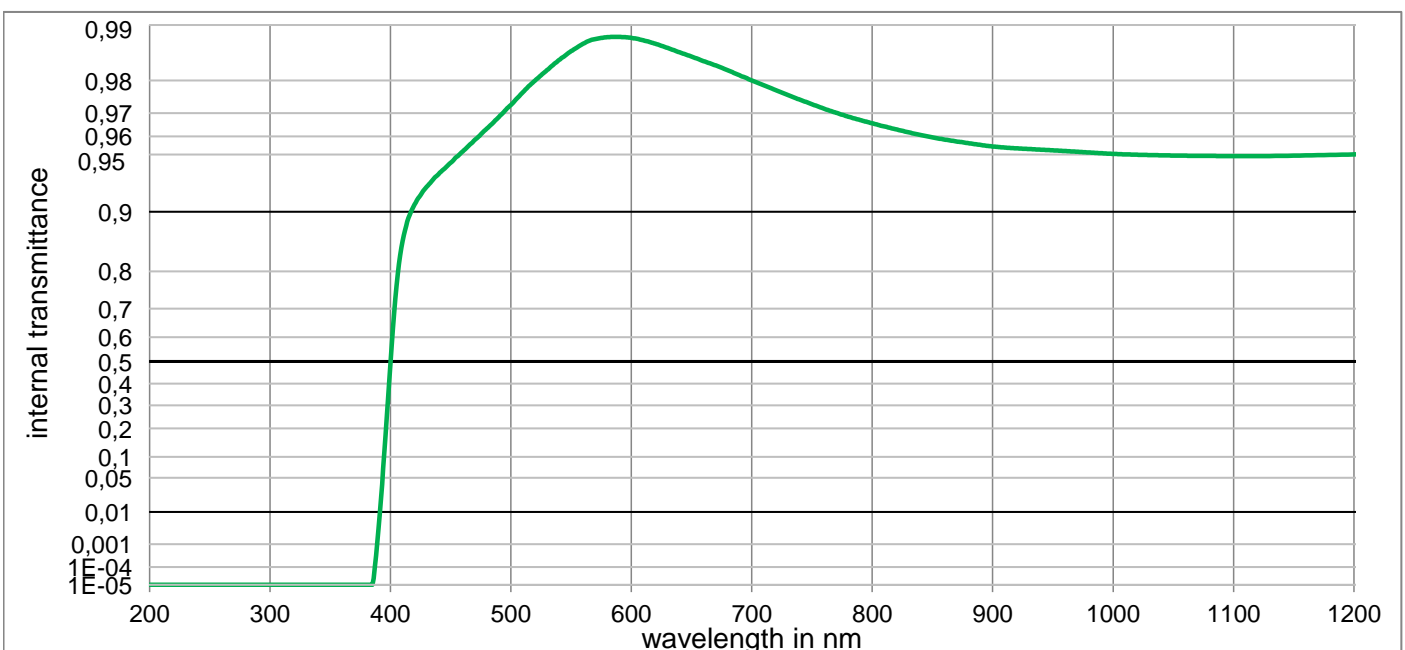
Mechanical properties	
Reference thickness	
d	= 3,00 mm
Density	
ρ	= 2,55 g/cm ³
Knoop hardness	
$HK_{[0,1/20]}$	= 463

Thermal properties	
Transformation temperature	
T_g	= 537 °C
Thermal expansion in 10⁻⁶/K	
α (-30°C/+70°C)	= 7,9
α (20°C/300°C)	= 9,1
Temperature coefficient	
Tk	= 0,07 nm/K

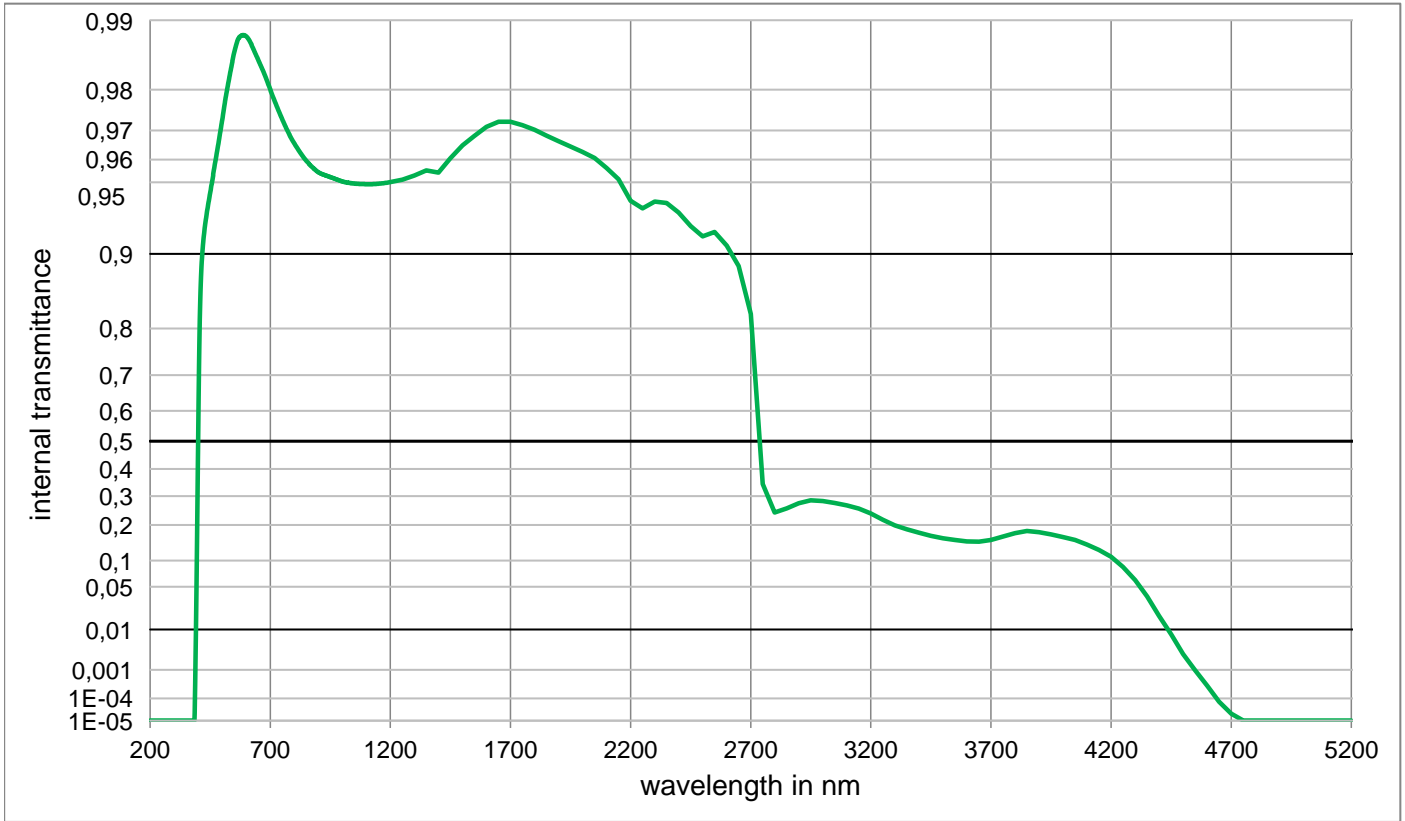
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 1
Resistance against humidity	
Robust glass	
see pocket catalogue "Optical Filter Glass 2024", chapter 5.5	

Colorimetric properties				
	1 mm	2 mm	3 mm	
Illuminant D65	x	0,314	0,315	0,316
	y	0,331	0,333	0,335
	Y	91,2	90,7	90,2
	λ_d	570 nm	571 nm	571 nm
	P_e	0,009	0,017	0,025
Illuminant A	x	0,448	0,449	0,450
	y	0,408	0,409	0,410
	Y	91,2	90,8	90,4
	λ_d	581 nm	581 nm	581 nm
	P_e	0,011	0,022	0,032

Notes	
Stricking glass	
Longpass filter	
ISO 23364:2021	
Disclaimer	
All data without tolerances are to be understood to be reference values.	



GG400



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	9,729E-01	800	9,660E-01	1100	9,491E-01	2200	9,401E-01	3700	1,537E-01
210	< 1,0E-05	510	9,769E-01	810	9,646E-01	1110	9,491E-01	2250	9,355E-01	3750	1,636E-01
220	< 1,0E-05	520	9,800E-01	820	9,633E-01	1120	9,491E-01	2300	9,397E-01	3800	1,740E-01
230	< 1,0E-05	530	9,825E-01	830	9,620E-01	1130	9,491E-01	2350	9,388E-01	3850	1,810E-01
240	< 1,0E-05	540	9,845E-01	840	9,607E-01	1140	9,492E-01	2400	9,329E-01	3900	1,771E-01
250	< 1,0E-05	550	9,861E-01	850	9,595E-01	1150	9,493E-01	2450	9,234E-01	3950	1,704E-01
260	< 1,0E-05	560	9,873E-01	860	9,584E-01	1160	9,494E-01	2500	9,154E-01	4000	1,625E-01
270	< 1,0E-05	570	9,881E-01	870	9,574E-01	1170	9,496E-01	2550	9,190E-01	4050	1,540E-01
280	< 1,0E-05	580	9,883E-01	880	9,565E-01	1180	9,497E-01	2600	9,076E-01	4100	1,405E-01
290	< 1,0E-05	590	9,884E-01	890	9,555E-01	1190	9,499E-01	2650	8,878E-01	4150	1,266E-01
300	< 1,0E-05	600	9,883E-01	900	9,547E-01	1200	9,501E-01	2700	8,248E-01	4200	1,089E-01
310	< 1,0E-05	610	9,879E-01	910	9,541E-01	1250	9,512E-01	2750	3,440E-01	4250	8,600E-02
320	< 1,000E-05	620	9,874E-01	920	9,537E-01	1300	9,533E-01	2800	2,420E-01	4300	6,050E-02
330	< 1,000E-05	630	9,867E-01	930	9,533E-01	1350	9,555E-01	2850	2,560E-01	4350	3,670E-02
340	< 1,000E-05	640	9,859E-01	940	9,529E-01	1400	9,545E-01	2900	2,740E-01	4400	1,800E-02
350	< 1,000E-05	650	9,852E-01	950	9,525E-01	1450	9,605E-01	2950	2,848E-01	4450	7,910E-03
360	< 1,000E-05	660	9,843E-01	960	9,521E-01	1500	9,652E-01	3000	2,819E-01	4500	2,760E-03
370	< 1,000E-05	670	9,834E-01	970	9,517E-01	1550	9,683E-01	3050	2,755E-01	4550	9,780E-04
380	< 1,000E-05	680	9,824E-01	980	9,512E-01	1600	9,710E-01	3100	2,667E-01	4600	3,000E-04
390	3,430E-03	690	9,812E-01	990	9,508E-01	1650	9,725E-01	3150	2,557E-01	4650	7,345E-05
400	4,907E-01	700	9,800E-01	1000	9,504E-01	1700	9,725E-01	3200	2,381E-01	4700	2,171E-05
410	8,588E-01	710	9,788E-01	1010	9,501E-01	1750	9,715E-01	3250	2,170E-01	4750	< 1,000E-05
420	9,082E-01	720	9,774E-01	1020	9,499E-01	1800	9,702E-01	3300	1,987E-01	4800	< 1,000E-05
430	9,259E-01	730	9,760E-01	1030	9,497E-01	1850	9,684E-01	3350	1,864E-01	4850	< 1,000E-05
440	9,365E-01	740	9,746E-01	1040	9,495E-01	1900	9,666E-01	3400	1,757E-01	4900	< 1,000E-05
450	9,448E-01	750	9,731E-01	1050	9,494E-01	1950	9,648E-01	3450	1,659E-01	4950	< 1,000E-05
460	9,518E-01	760	9,716E-01	1060	9,493E-01	2000	9,629E-01	3500	1,586E-01	5000	< 1,000E-05
470	9,583E-01	770	9,702E-01	1070	9,492E-01	2050	9,606E-01	3550	1,536E-01	5050	< 1,000E-05
480	9,636E-01	780	9,687E-01	1080	9,491E-01	2100	9,565E-01	3600	1,499E-01	5100	< 1,000E-05
490	9,686E-01	790	9,673E-01	1090	9,491E-01	2150	9,515E-01	3650	1,493E-01	5150	< 1,000E-05