

OG570

Optical properties	
Reflection factor	
P_d	= 0,921
Spectral values guaranteed (d = 3 mm)	
λ_c ($\tau_i = 0,5$)	= 570 nm \pm 6 nm
λ_s ($\tau_{i,U} = 1E-05$)	= 500 nm
λ_p ($\tau_{i,L} = 0,93$)	= 640 nm
Refractive indices	
n_d (587,6 nm)	= 1,51
n_s (852 nm)	= 1,51
n_t (1014 nm)	= 1,50
Sellmeier coefficients	
on request	
Internal quality	
Bubble class	3

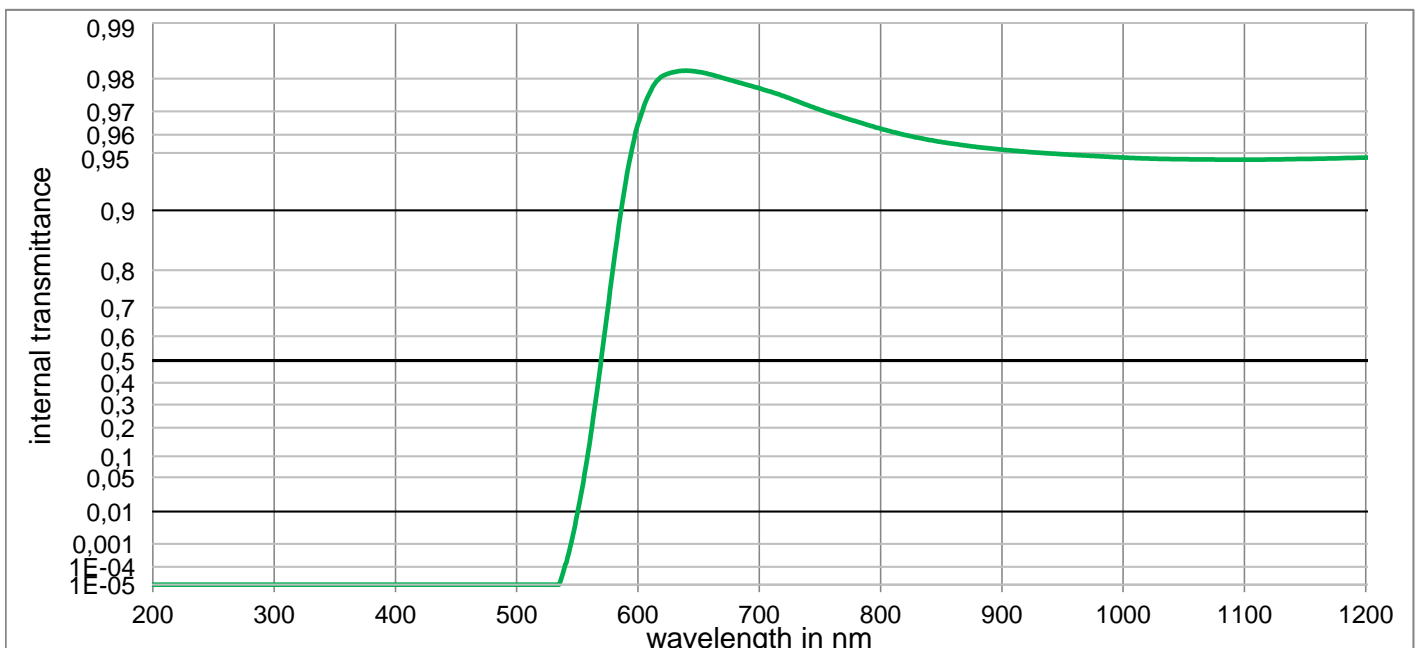
Mechanical properties	
Reference thickness	
d	= 3,00 mm
Density	
ρ	= 2,74 g/cm ³
Knoop hardness	
HK _[0.1/20]	= 455

Thermal properties	
Transformation temperature	
Tg	= 510 °C
Thermal expansion in 10⁻⁶/K	
α (-30°C/+70°C)	= 7,9
α (20°C/300°C)	= 9,0
Temperature coefficient	
Tk	= 0,12 nm/K

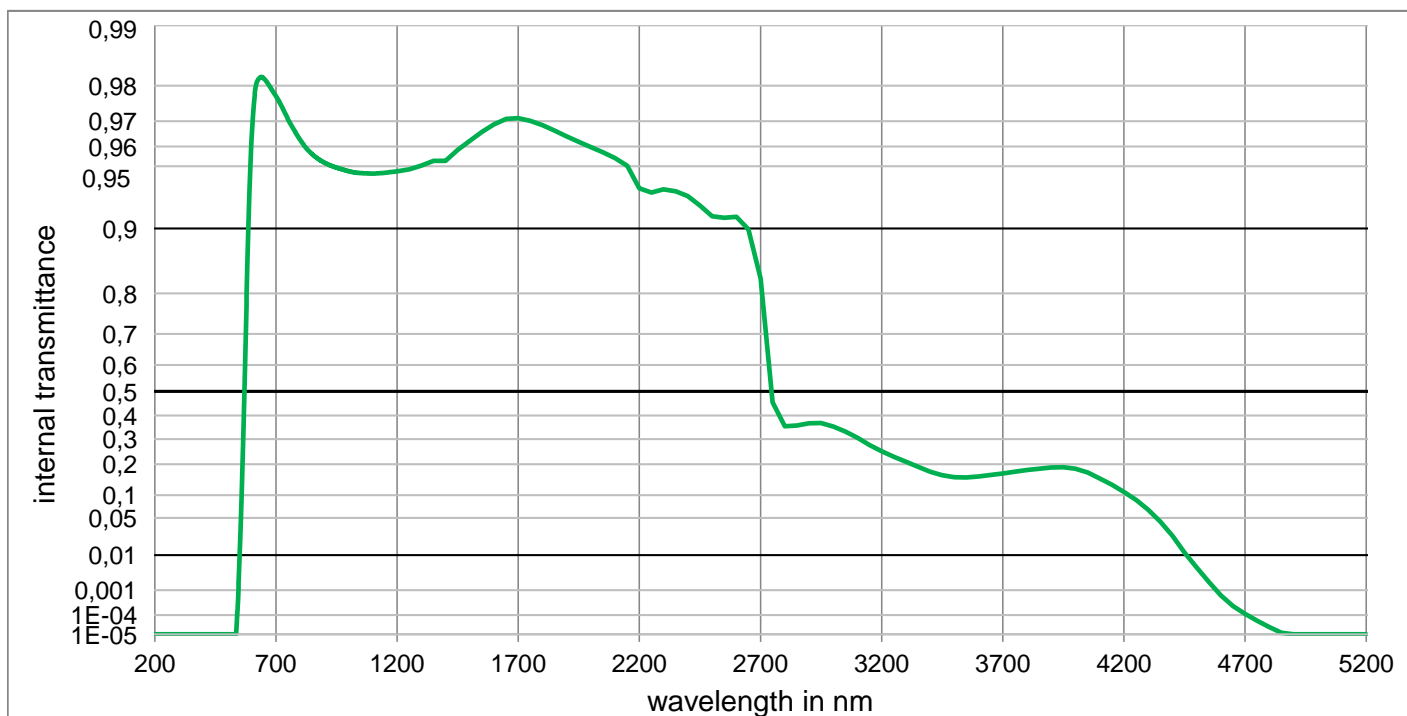
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 1
Resistance against humidity	
Resistant glass	
see pocket catalogue "Optical Filter Glass 2020", chapter 5.5	

Colormetric properties				
		1 mm	2 mm	3 mm
Illuminant D65	x	0,566	0,600	0,611
	y	0,412	0,399	0,389
	Y	42,7	36,1	32,9
	λ_d	591 nm	595 nm	597 nm
	P_e	0,941	0,998	1,000
Illuminant A	x	0,600	0,619	0,627
	y	0,394	0,380	0,372
	Y	55,7	49,4	46,0
	λ_d	596 nm	598 nm	600 nm
	P_e	0,964	0,999	1,000

Notes	
Stricking glass	
Longpass filter	
DIN 58131	
Disclaimer	
All data without tolerances are to be understood to be reference values.	



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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	< 1,000E-05	800	9,629E-01	1100	9,457E-01	2200	9,360E-01	3700	1,671E-01
210	< 1,0E-05	510	< 1,000E-05	810	9,613E-01	1110	9,458E-01	2250	9,328E-01	3750	1,730E-01
220	< 1,0E-05	520	< 1,000E-05	820	9,599E-01	1120	9,458E-01	2300	9,352E-01	3800	1,787E-01
230	< 1,0E-05	530	< 1,000E-05	830	9,586E-01	1130	9,459E-01	2350	9,337E-01	3850	1,839E-01
240	< 1,0E-05	540	1,275E-04	840	9,574E-01	1140	9,461E-01	2400	9,302E-01	3900	1,879E-01
250	< 1,0E-05	550	8,832E-03	850	9,563E-01	1150	9,462E-01	2450	9,224E-01	3950	1,893E-01
260	< 1,0E-05	560	1,386E-01	860	9,553E-01	1160	9,464E-01	2500	9,125E-01	4000	1,838E-01
270	< 1,0E-05	570	5,166E-01	870	9,544E-01	1170	9,465E-01	2550	9,111E-01	4050	1,700E-01
280	< 1,0E-05	580	8,155E-01	880	9,535E-01	1180	9,467E-01	2600	9,121E-01	4100	1,503E-01
290	< 1,0E-05	590	9,299E-01	890	9,527E-01	1190	9,469E-01	2650	8,991E-01	4150	1,297E-01
300	< 1,0E-05	600	9,649E-01	900	9,520E-01	1200	9,470E-01	2700	8,288E-01	4200	1,090E-01
310	< 1,0E-05	610	9,764E-01	910	9,513E-01	1250	9,483E-01	2750	4,551E-01	4250	8,758E-02
320	< 1,000E-05	620	9,806E-01	920	9,507E-01	1300	9,503E-01	2800	3,544E-01	4300	6,582E-02
330	< 1,000E-05	630	9,816E-01	930	9,502E-01	1350	9,529E-01	2850	3,574E-01	4350	4,375E-02
340	< 1,000E-05	640	9,819E-01	940	9,497E-01	1400	9,529E-01	2900	3,675E-01	4400	2,518E-02
350	< 1,000E-05	650	9,816E-01	950	9,492E-01	1450	9,584E-01	2950	3,676E-01	4450	1,145E-02
360	< 1,000E-05	660	9,810E-01	960	9,488E-01	1500	9,625E-01	3000	3,531E-01	4500	4,940E-03
370	< 1,000E-05	670	9,802E-01	970	9,483E-01	1550	9,661E-01	3050	3,320E-01	4550	1,875E-03
380	< 1,000E-05	680	9,793E-01	980	9,479E-01	1600	9,689E-01	3100	3,052E-01	4600	6,610E-04
390	< 1,000E-05	690	9,784E-01	990	9,475E-01	1650	9,708E-01	3150	2,759E-01	4650	2,500E-04
400	< 1,000E-05	700	9,775E-01	1000	9,471E-01	1700	9,711E-01	3200	2,507E-01	4700	1,134E-04
410	< 1,000E-05	710	9,764E-01	1010	9,468E-01	1750	9,701E-01	3250	2,286E-01	4750	5,284E-05
420	< 1,000E-05	720	9,752E-01	1020	9,465E-01	1800	9,686E-01	3300	2,093E-01	4800	2,512E-05
430	< 1,000E-05	730	9,737E-01	1030	9,463E-01	1850	9,666E-01	3350	1,906E-01	4850	1,226E-05
440	< 1,000E-05	740	9,722E-01	1040	9,461E-01	1900	9,643E-01	3400	1,730E-01	4900	< 1,000E-05
450	< 1,000E-05	750	9,706E-01	1050	9,460E-01	1950	9,620E-01	3450	1,604E-01	4950	< 1,000E-05
460	< 1,000E-05	760	9,691E-01	1060	9,459E-01	2000	9,597E-01	3500	1,540E-01	5000	< 1,000E-05
470	< 1,000E-05	770	9,676E-01	1070	9,458E-01	2050	9,572E-01	3550	1,536E-01	5050	< 1,000E-05
480	< 1,000E-05	780	9,661E-01	1080	9,458E-01	2100	9,544E-01	3600	1,568E-01	5100	< 1,000E-05
490	< 1,000E-05	790	9,644E-01	1090	9,457E-01	2150	9,502E-01	3650	1,618E-01	5150	< 1,000E-05