

OG530

Optical properties	
Reflection factor	
P_d	= 0,921
Spectral values guaranteed (d = 3 mm)	
λ_c ($\tau_i = 0,5$)	= 530 nm \pm 6 nm
λ_s ($\tau_{i,U} = 1E-05$)	= 460 nm
λ_p ($\tau_{i,L} = 0,93$)	= 600 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

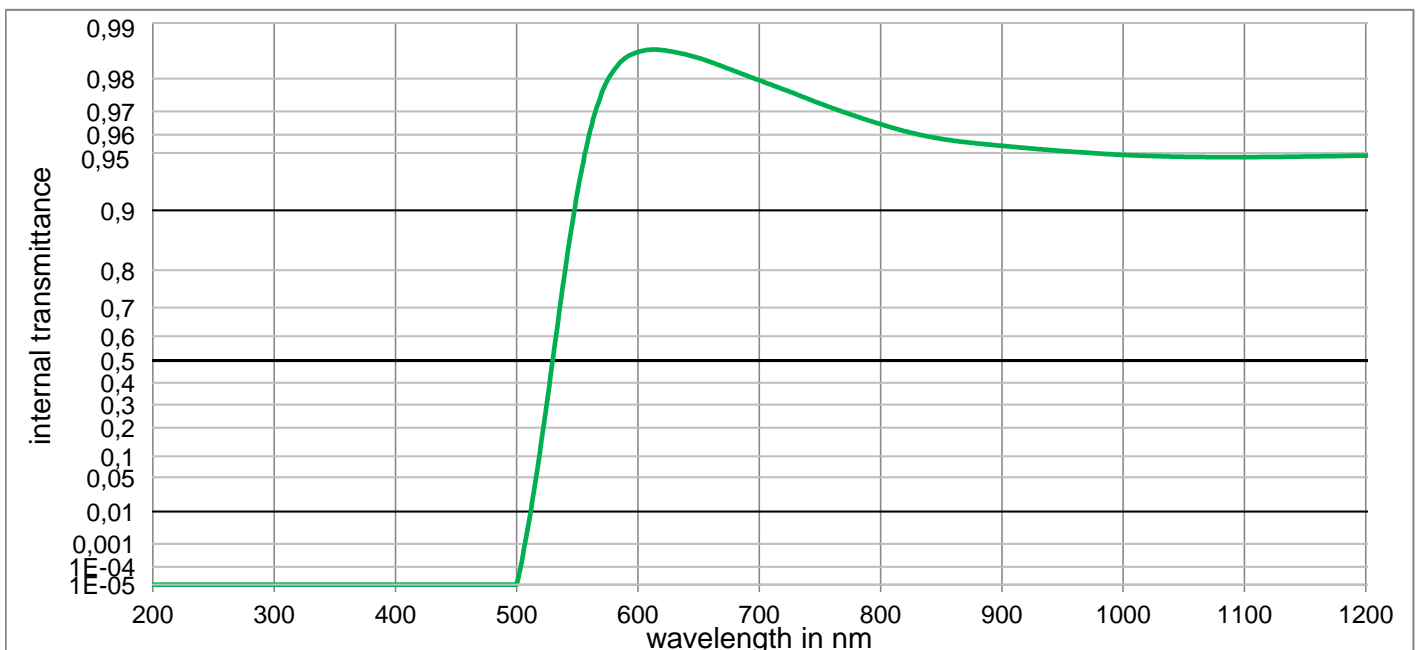
Mechanical properties	
Reference thickness	
d	= 3,00 mm
Density	
ρ	= 2,56 g/cm ³
Knoop hardness	
HK _[0.1/20]	= 450

Thermal properties	
Transformation temperature	
Tg	= 506 °C
Thermal expansion in 10⁻⁶/K	
α (-30°C/+70°C)	= 7,9
α (20°C/300°C)	= 9,0
Temperature coefficient	
Tk	= 0,11 nm/K

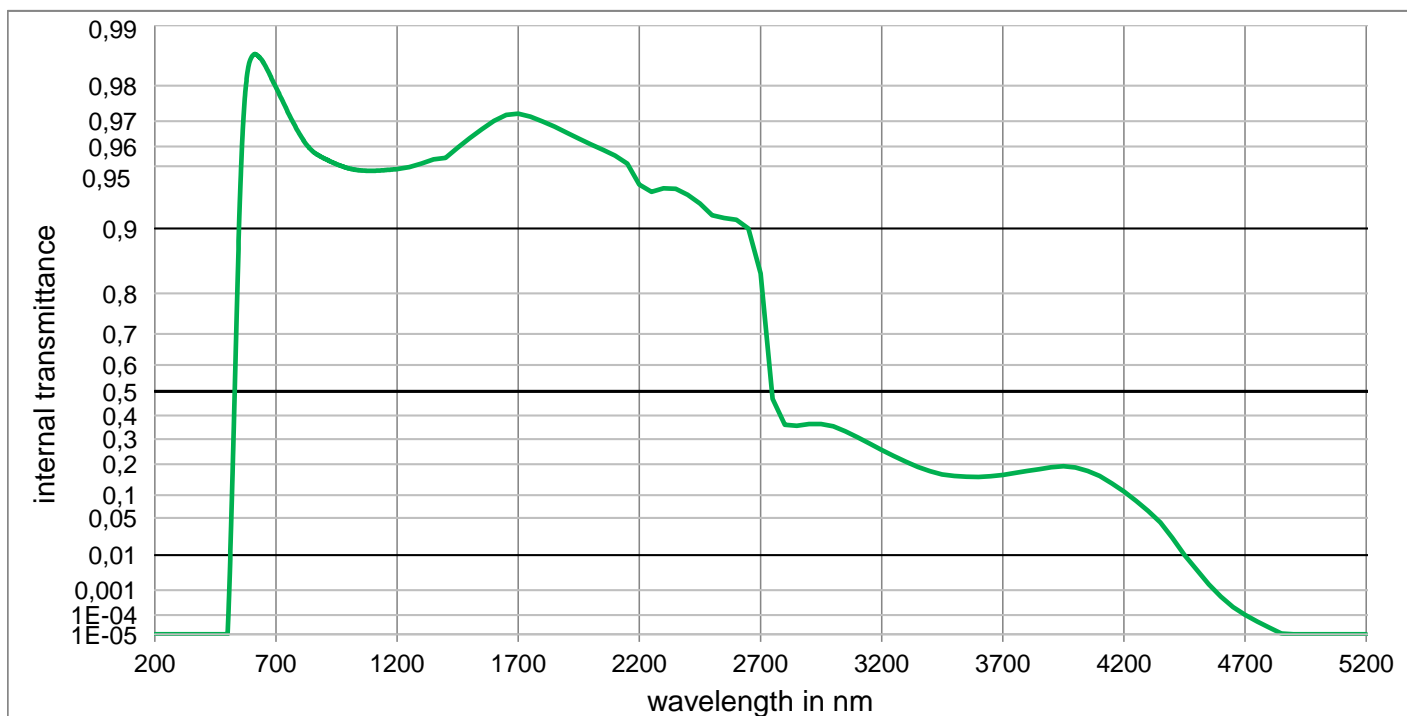
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 1
Resistance against humidity	
Resistant glass	
see pocket catalogue "Optical Filter Glass 2020", chapter 5.5	

Colormetric properties				
		1 mm	2 mm	3 mm
Illuminant D65	x	0,476	0,496	0,505
	y	0,501	0,498	0,490
	Y	73,6	68,7	65,6
	λ_d	576 nm	578 nm	579 nm
	P _e	0,938	0,985	0,990
Illuminant A	x	0,534	0,545	0,550
	y	0,457	0,452	0,447
	Y	81,4	77,8	75,4
	λ_d	584 nm	585 nm	586 nm
	P _e	0,943	0,979	0,984

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



OG530



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	9,649E-01	1100	9,474E-01	2200	9,385E-01	3700	1,617E-01
210	< 1,0E-05	510	5,189E-03	810	9,633E-01	1110	9,474E-01	2250	9,335E-01	3750	1,681E-01
220	< 1,0E-05	520	1,364E-01	820	9,617E-01	1120	9,475E-01	2300	9,360E-01	3800	1,751E-01
230	< 1,0E-05	530	5,140E-01	830	9,603E-01	1130	9,476E-01	2350	9,356E-01	3850	1,819E-01
240	< 1,0E-05	540	8,018E-01	840	9,591E-01	1140	9,477E-01	2400	9,311E-01	3900	1,888E-01
250	< 1,0E-05	550	9,191E-01	850	9,579E-01	1150	9,478E-01	2450	9,242E-01	3950	1,925E-01
260	< 1,0E-05	560	9,608E-01	860	9,570E-01	1160	9,479E-01	2500	9,136E-01	4000	1,884E-01
270	< 1,0E-05	570	9,760E-01	870	9,562E-01	1170	9,480E-01	2550	9,108E-01	4050	1,758E-01
280	< 1,0E-05	580	9,819E-01	880	9,555E-01	1180	9,481E-01	2600	9,091E-01	4100	1,579E-01
290	< 1,0E-05	590	9,846E-01	890	9,548E-01	1190	9,482E-01	2650	8,999E-01	4150	1,342E-01
300	< 1,0E-05	600	9,856E-01	900	9,542E-01	1200	9,484E-01	2700	8,375E-01	4200	1,099E-01
310	< 1,0E-05	610	9,861E-01	910	9,536E-01	1250	9,496E-01	2750	4,700E-01	4250	8,523E-02
320	< 1,000E-05	620	9,860E-01	920	9,529E-01	1300	9,515E-01	2800	3,608E-01	4300	6,292E-02
330	< 1,000E-05	630	9,856E-01	930	9,523E-01	1350	9,537E-01	2850	3,563E-01	4350	4,250E-02
340	< 1,000E-05	640	9,852E-01	940	9,517E-01	1400	9,545E-01	2900	3,638E-01	4400	2,287E-02
350	< 1,000E-05	650	9,845E-01	950	9,512E-01	1450	9,595E-01	2950	3,642E-01	4450	1,006E-02
360	< 1,000E-05	660	9,837E-01	960	9,506E-01	1500	9,637E-01	3000	3,540E-01	4500	4,333E-03
370	< 1,000E-05	670	9,828E-01	970	9,501E-01	1550	9,672E-01	3050	3,325E-01	4550	1,581E-03
380	< 1,000E-05	680	9,818E-01	980	9,497E-01	1600	9,701E-01	3100	3,076E-01	4600	5,943E-04
390	< 1,000E-05	690	9,807E-01	990	9,492E-01	1650	9,721E-01	3150	2,820E-01	4650	2,254E-04
400	< 1,000E-05	700	9,796E-01	1000	9,488E-01	1700	9,725E-01	3200	2,556E-01	4700	1,028E-04
410	< 1,000E-05	710	9,784E-01	1010	9,484E-01	1750	9,716E-01	3250	2,313E-01	4750	4,932E-05
420	< 1,000E-05	720	9,771E-01	1020	9,482E-01	1800	9,700E-01	3300	2,090E-01	4800	2,377E-05
430	< 1,000E-05	730	9,758E-01	1030	9,479E-01	1850	9,681E-01	3350	1,900E-01	4850	1,109E-05
440	< 1,000E-05	740	9,743E-01	1040	9,477E-01	1900	9,658E-01	3400	1,744E-01	4900	< 1,000E-05
450	< 1,000E-05	750	9,728E-01	1050	9,476E-01	1950	9,634E-01	3450	1,637E-01	4950	< 1,000E-05
460	< 1,000E-05	760	9,713E-01	1060	9,475E-01	2000	9,610E-01	3500	1,583E-01	5000	< 1,000E-05
470	< 1,000E-05	770	9,697E-01	1070	9,474E-01	2050	9,584E-01	3550	1,556E-01	5050	< 1,000E-05
480	< 1,000E-05	780	9,681E-01	1080	9,474E-01	2100	9,556E-01	3600	1,548E-01	5100	< 1,000E-05
490	< 1,000E-05	790	9,665E-01	1090	9,474E-01	2150	9,515E-01	3650	1,570E-01	5150	< 1,000E-05