Data Sheet

NG1

Optical properties			
Reflection factor			
P_d	=	0,918	
Spectral values guaranteed			
τ_i (546 nm)	<	0,0001	
Refractive indices			
n_F (486 nm)	=	1,53	
n_e (546 nm)	=	1,53	
n_d (587,6 nm)	=	1,52	
Sellmeier coefficients			
valid from 440 nm to 1550 nm			
B_1		0,8361	
B_2		0,4344	
B_3		0,8624	
C_1		1,081E-02	µm²
C_2		1,1185E-02	µm²
C_3		100,000	µm²
Internal quality			
Bubble class		2	

Mechanical properties		
Reference thickness		
d	=	1,00 mm
Density		
ρ	=	2,48 g/cm³
Knoop hardness		
HK[0.1/20]	=	418

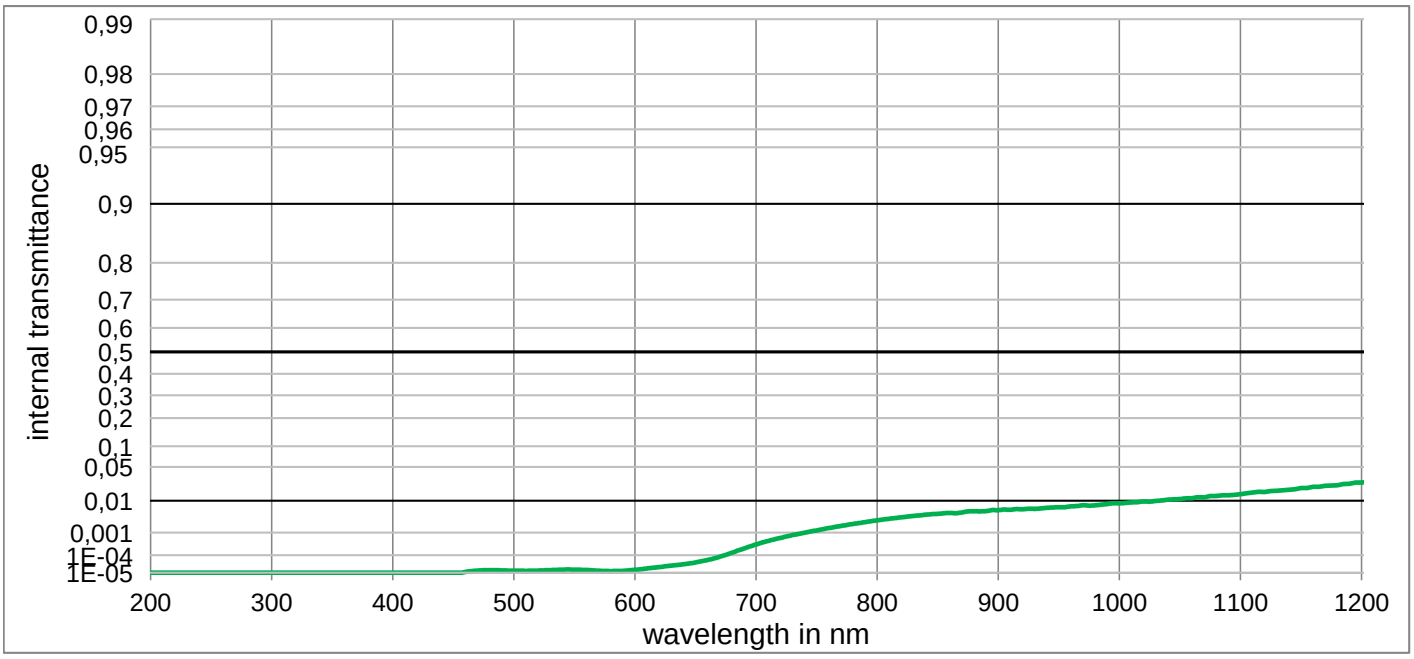
Thermal properties		
Transformation temperature		
Tg	=	461 °C
Thermal expansion in		**10^{-6}/K**
$\alpha_{(-30°C/+70°C)}$	=	6,5
$\alpha_{(20°C/300°C)}$	=	7,0

Chemical properties		
Chemical resistance		
FR class	=	1
SR class	=	2.2
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			
Illuminant D65 y			
Illuminant D65 Y			
Illuminant D65 λ_d			
Illuminant D65 P_e			
Illuminant A x			
Illuminant A y			
Illuminant A Y			
Illuminant A λ_d			
Illuminant A P_e			

Notes
Ionically colored glass
Neutral density filter
DIN 58131

Disclaimer
All data without tolerances are to be understood to be reference values.



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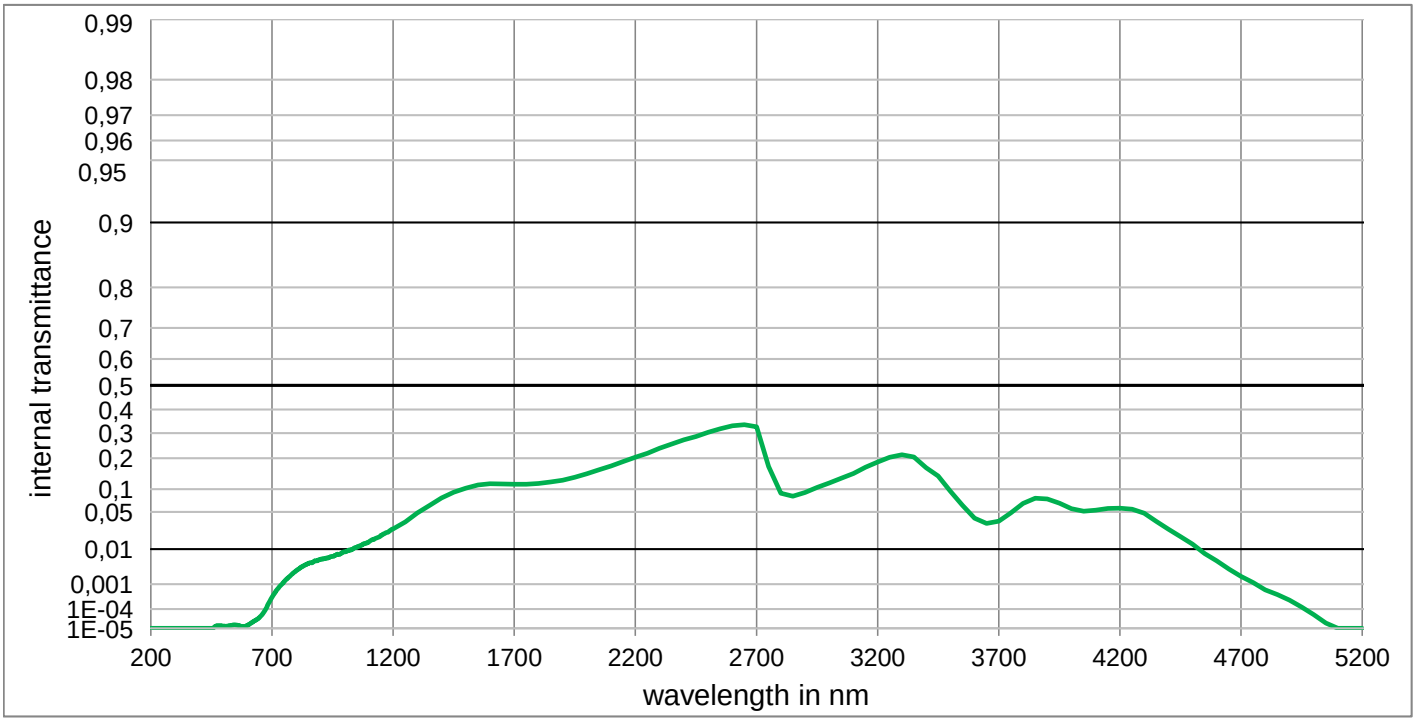
NG1



Internal transmittance ti 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	1,340E-05	800	2,710E-03	1100	1,444E-02	2200	2,037E-01	3700	3,550E-02
210	< 1,0E-05	510	1,317E-05	810	3,039E-03	1110	1,580E-02	2250	2,186E-01	3750	4,830E-02
220	< 1,0E-05	520	1,365E-05	820	3,391E-03	1120	1,615E-02	2300	2,378E-01	3800	6,600E-02
230	< 1,0E-05	530	1,459E-05	830	3,730E-03	1130	1,720E-02	2350	2,555E-01	3850	7,740E-02
240	< 1,0E-05	540	1,559E-05	840	4,067E-03	1140	1,811E-02	2400	2,719E-01	3900	7,590E-02
250	< 1,0E-05	550	1,559E-05	850	4,328E-03	1150	1,976E-02	2450	2,853E-01	3950	6,660E-02
260	< 1,0E-05	560	1,482E-05	860	4,614E-03	1160	2,103E-02	2500	3,031E-01	4000	5,590E-02
270	< 1,0E-05	570	1,338E-05	870	4,761E-03	1170	2,212E-02	2550	3,186E-01	4050	5,129E-02
280	< 1,0E-05	580	1,272E-05	880	5,150E-03	1180	2,265E-02	2600	3,308E-01	4100	5,300E-02
290	< 1,0E-05	590	1,315E-05	890	5,234E-03	1190	2,446E-02	2650	3,354E-01	4150	5,610E-02
300	< 1,0E-05	600	1,533E-05	900	5,543E-03	1200	2,600E-02	2700	3,265E-01	4200	5,670E-02
310	< 1,0E-05	610	1,841E-05	910	5,665E-03	1250	3,480E-02	2750	1,700E-01	4250	5,495E-02
320	< 1,000E-05	620	2,208E-05	920	5,865E-03	1300	4,830E-02	2800	8,940E-02	4300	4,786E-02
330	< 1,000E-05	630	2,692E-05	930	6,039E-03	1350	6,230E-02	2850	8,230E-02	4350	3,548E-02
340	< 1,000E-05	640	3,251E-05	940	6,463E-03	1400	7,810E-02	2900	9,160E-02	4400	2,570E-02
350	< 1,000E-05	650	4,074E-05	950	6,682E-03	1450	9,190E-02	2950	1,043E-01	4450	1,862E-02
360	< 1,000E-05	660	5,559E-05	960	7,102E-03	1500	1,029E-01	3000	1,171E-01	4500	1,288E-02
370	< 1,000E-05	670	8,318E-05	970	7,607E-03	1550	1,114E-01	3050	1,313E-01	4550	7,762E-03
380	< 1,000E-05	680	1,321E-04	980	7,578E-03	1600	1,150E-01	3100	1,469E-01	4600	5,129E-03
390	< 1,000E-05	690	2,104E-04	990	8,216E-03	1650	1,143E-01	3150	1,675E-01	4650	3,020E-03
400	< 1,000E-05	700	3,243E-04	1000	8,560E-03	1700	1,136E-01	3200	1,860E-01	4700	1,820E-03
410	< 1,000E-05	710	4,624E-04	1010	9,052E-03	1750	1,136E-01	3250	2,040E-01	4750	1,122E-03
420	< 1,000E-05	720	6,152E-04	1020	9,580E-03	1800	1,157E-01	3300	2,129E-01	4800	6,310E-04
430	< 1,000E-05	730	7,998E-04	1030	9,838E-03	1850	1,200E-01	3350	2,044E-01	4850	4,169E-04
440	< 1,000E-05	740	9,863E-04	1040	1,064E-02	1900	1,256E-01	3400	1,661E-01	4900	2,455E-04
450	< 1,000E-05	750	1,208E-03	1050	1,101E-02	1950	1,349E-01	3450	1,384E-01	4950	1,230E-04
460	1,119E-05	760	1,469E-03	1060	1,158E-02	2000	1,455E-01	3500	9,440E-02	5000	5,495E-05
470	1,365E-05	770	1,738E-03	1070	1,212E-02	2050	1,590E-01	3550	6,250E-02	5050	1,995E-05
480	1,434E-05	780	2,046E-03	1080	1,309E-02	2100	1,718E-01	3600	4,000E-02	5100	< 1,000E-05
490	1,409E-05	790	2,360E-03	1090	1,361E-02	2150	1,876E-01	3650	3,270E-02	5150	< 1,000E-05