

N-WG305

Optical properties	
Reflection factor	
$P_d = 0,918$	
Spectral values guaranteed (d = 2 mm)	
$\lambda_c (\tau_i = 0,5)$	= 305 nm \pm 6 nm
$\lambda_s (\tau_{i,U} = 1E-05)$	= 260 nm
$\lambda_p (\tau_{i,L} = 0,99)$	= 420 nm
Refractive indices	
$n_d (587,6 \text{ nm})$	= 1,52
$n_s (852 \text{ nm})$	= 1,52
$n_t (1014 \text{ nm})$	= 1,51
Sellmeier coefficients	
valid from 440 nm to 1550 nm	
B_1	= 1,2190
B_2	= 0,0699
B_3	= 106,2629
C_1	= 5,560E-03 μm^2
C_2	= 5,5370E-02 μm^2
C_3	= 10043,976 μm^2
Internal quality	
Bubble class	1

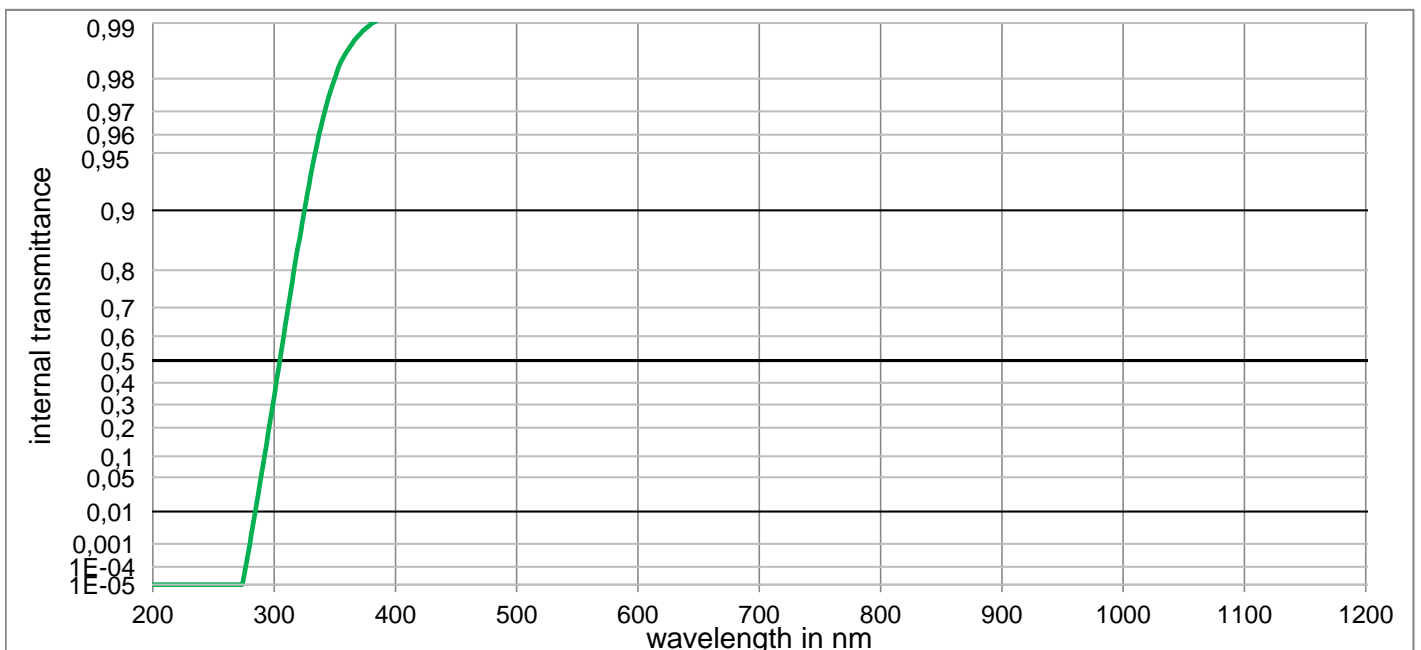
Mechanical properties	
Reference thickness	
$d = 2,00 \text{ mm}$	
Density	
$\rho = 2,51 \text{ g/cm}^3$	
Knoop hardness	
$HK_{[0.1/20]} = 610$	

Thermal properties	
Transformation temperature	
$T_g = 562 \text{ }^\circ\text{C}$	
Thermal expansion in $10^{-6}/\text{K}$	
$\alpha (-30^\circ\text{C}/+70^\circ\text{C})$	= 7,1
$\alpha (20^\circ\text{C}/300^\circ\text{C})$	= 8,4
Temperature coefficient	
$Tk = 0,06 \text{ nm/K}$	

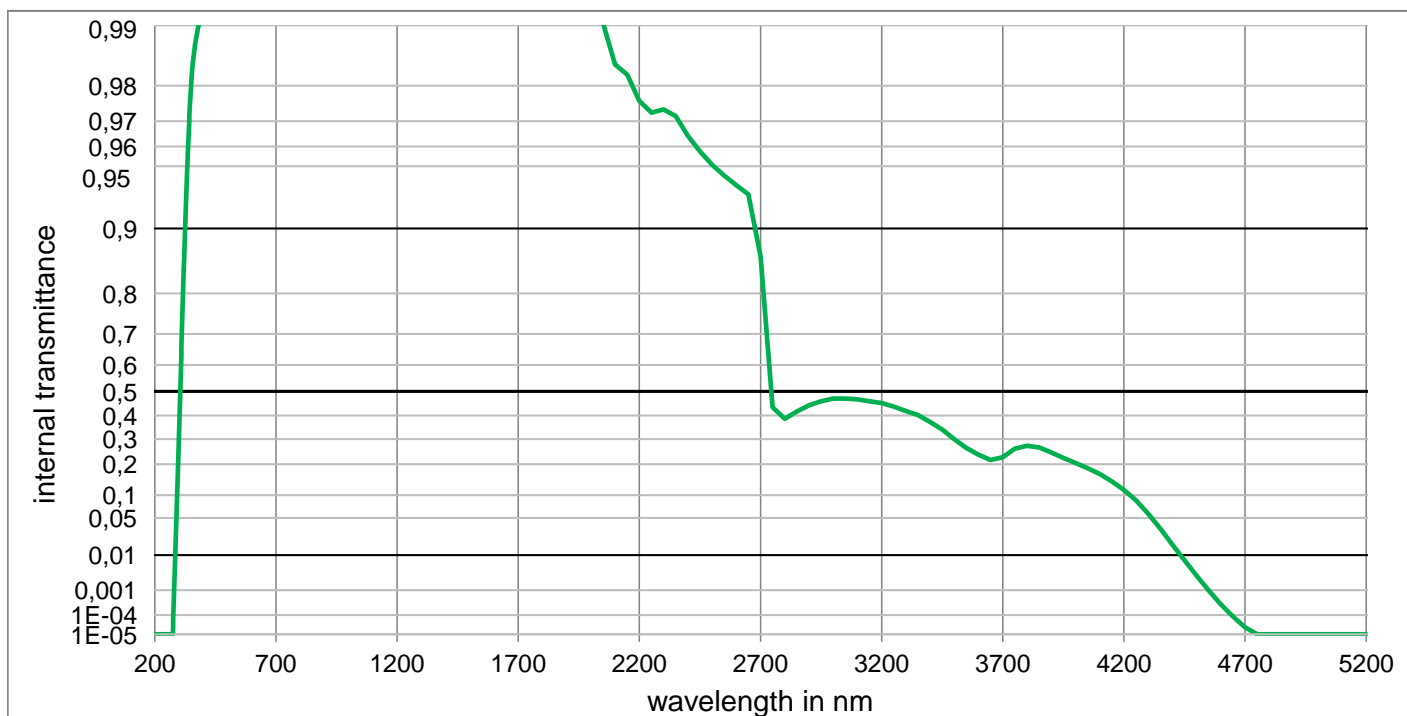
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 2
Resistance against humidity	
Resistant glass	
see pocket catalogue "Optical Filter Glass 2020", chapter 5.5	

Colormetric properties			
	1 mm	2 mm	3 mm
Illuminant D65	x		
	y		
	Y		
	λ_d		
	P_e		
Illuminant A	x		
	y		
	Y		
	λ_d		
	P_e		

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



N-WG305



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	9,949E-01	800	9,987E-01	1100	9,999E-01	2200	9,762E-01	3700	2,268E-01
210	< 1,0E-05	510	9,952E-01	810	9,987E-01	1110	9,999E-01	2250	9,728E-01	3750	2,600E-01
220	< 1,0E-05	520	9,954E-01	820	9,988E-01	1120	9,999E-01	2300	9,738E-01	3800	2,730E-01
230	< 1,0E-05	530	9,957E-01	830	9,988E-01	1130	9,999E-01	2350	9,717E-01	3850	2,656E-01
240	< 1,0E-05	540	9,959E-01	840	9,989E-01	1140	9,999E-01	2400	9,647E-01	3900	2,457E-01
250	< 1,0E-05	550	9,961E-01	850	9,990E-01	1150	9,999E-01	2450	9,577E-01	3950	2,240E-01
260	< 1,0E-05	560	9,962E-01	860	9,990E-01	1160	9,999E-01	2500	9,508E-01	4000	2,042E-01
270	< 1,0E-05	570	9,964E-01	870	9,991E-01	1170	9,999E-01	2550	9,445E-01	4050	1,853E-01
280	1,0E-03	580	9,965E-01	880	9,991E-01	1180	9,999E-01	2600	9,380E-01	4100	1,650E-01
290	6,2E-02	590	9,967E-01	890	9,992E-01	1190	9,999E-01	2650	9,315E-01	4150	1,400E-01
300	3,4E-01	600	9,968E-01	900	9,993E-01	1200	9,999E-01	2700	8,640E-01	4200	1,144E-01
310	6,6E-01	610	9,970E-01	910	9,993E-01	1250	9,999E-01	2750	4,342E-01	4250	8,660E-02
320	8,507E-01	620	9,971E-01	920	9,994E-01	1300	9,999E-01	2800	3,856E-01	4300	5,780E-02
330	9,332E-01	630	9,972E-01	930	9,994E-01	1350	9,999E-01	2850	4,168E-01	4350	3,380E-02
340	9,668E-01	640	9,973E-01	940	9,995E-01	1400	9,970E-01	2900	4,433E-01	4400	1,700E-02
350	9,800E-01	650	9,975E-01	950	9,995E-01	1450	9,994E-01	2950	4,594E-01	4450	7,444E-03
360	9,857E-01	660	9,976E-01	960	9,996E-01	1500	9,999E-01	3000	4,707E-01	4500	2,938E-03
370	9,884E-01	670	9,977E-01	970	9,996E-01	1550	9,999E-01	3050	4,707E-01	4550	9,640E-04
380	9,899E-01	680	9,977E-01	980	9,997E-01	1600	9,999E-01	3100	4,679E-01	4600	2,931E-04
390	9,907E-01	690	9,978E-01	990	9,997E-01	1650	9,995E-01	3150	4,600E-01	4650	8,511E-05
400	9,914E-01	700	9,979E-01	1000	9,998E-01	1700	9,988E-01	3200	4,518E-01	4700	2,483E-05
410	9,920E-01	710	9,980E-01	1010	9,998E-01	1750	9,979E-01	3250	4,376E-01	4750	< 1,000E-05
420	9,924E-01	720	9,981E-01	1020	9,999E-01	1800	9,969E-01	3300	4,188E-01	4800	< 1,000E-05
430	9,928E-01	730	9,982E-01	1030	9,999E-01	1850	9,958E-01	3350	4,017E-01	4850	< 1,000E-05
440	9,931E-01	740	9,983E-01	1040	9,999E-01	1900	9,943E-01	3400	3,724E-01	4900	< 1,000E-05
450	9,935E-01	750	9,983E-01	1050	9,999E-01	1950	9,927E-01	3450	3,401E-01	4950	< 1,000E-05
460	9,937E-01	760	9,984E-01	1060	9,999E-01	2000	9,916E-01	3500	2,997E-01	5000	< 1,000E-05
470	9,940E-01	770	9,985E-01	1070	9,999E-01	2050	9,902E-01	3550	2,637E-01	5050	< 1,000E-05
480	9,943E-01	780	9,985E-01	1080	9,999E-01	2100	9,843E-01	3600	2,360E-01	5100	< 1,000E-05
490	9,946E-01	790	9,986E-01	1090	9,999E-01	2150	9,824E-01	3650	2,164E-01	5150	< 1,000E-05