

N-WG320

Optical properties	
Reflection factor	
P_d	= 0,913
Spectral values guaranteed (d = 2 mm)	
λ_c ($\tau_i = 0,5$)	= 320 nm \pm 6 nm
λ_s ($\tau_{i,U} = 1E-05$)	= 280 nm
λ_p ($\tau_{i,L} = 0,99$)	= 470 nm
Refractive indices	
n_d (587,6 nm)	= 1,54
n_s (852 nm)	= 1,54
n_t (1014 nm)	= 1,53
Sellmeier coefficients	
valid from 440 nm to 1550 nm	
B_1	= 0,8861
B_2	= 0,4613
B_3	= 29,7610
C_1	= 9,024E-03 μm^2
C_2	= 8,3379E-03 μm^2
C_3	= 3197,045 μm^2
Internal quality	
Bubble class	1

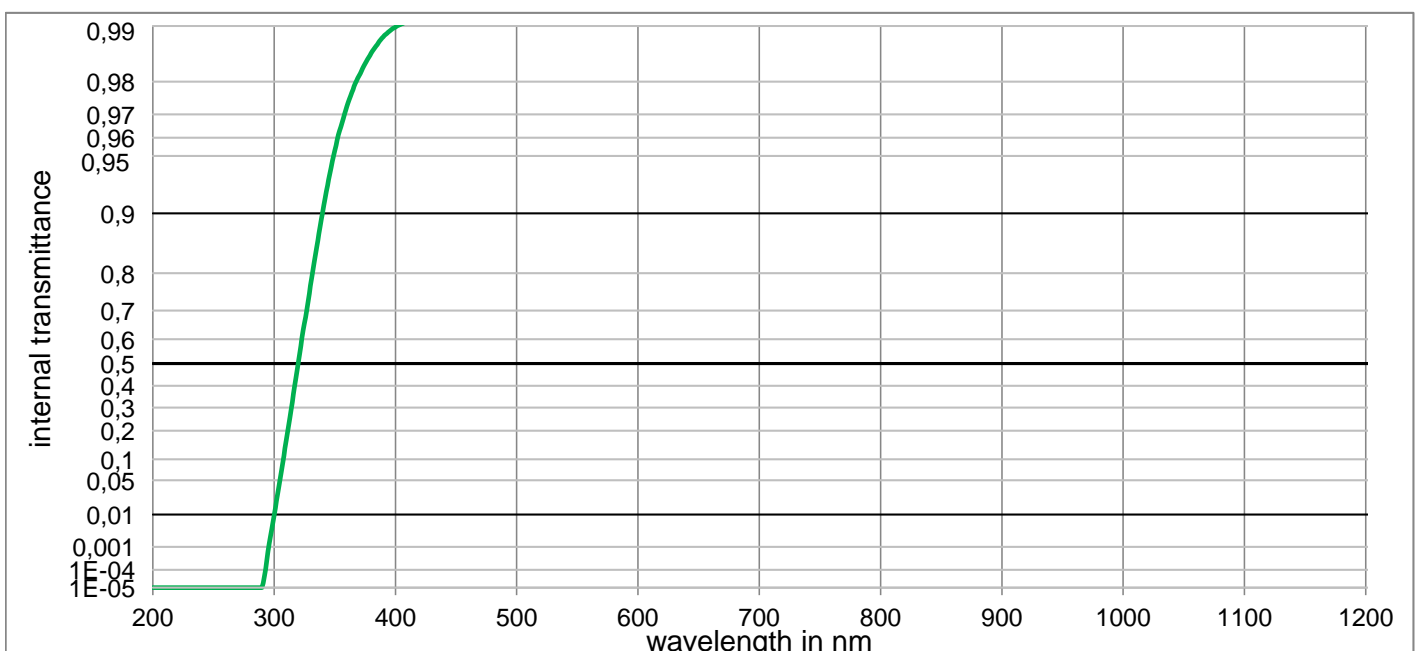
Mechanical properties	
Reference thickness	
d	= 2,00 mm
Density	
ρ	= 2,51 g/cm ³
Knoop hardness	
HK _[0.1/20]	= 610

Thermal properties	
Transformation temperature	
Tg	= 563 °C
Thermal expansion in 10⁻⁶/K	
α (-30°C/+70°C)	= 7,1
α (20°C/300°C)	= 8,4
Temperature coefficient	
Tk	= 0,06 nm/K

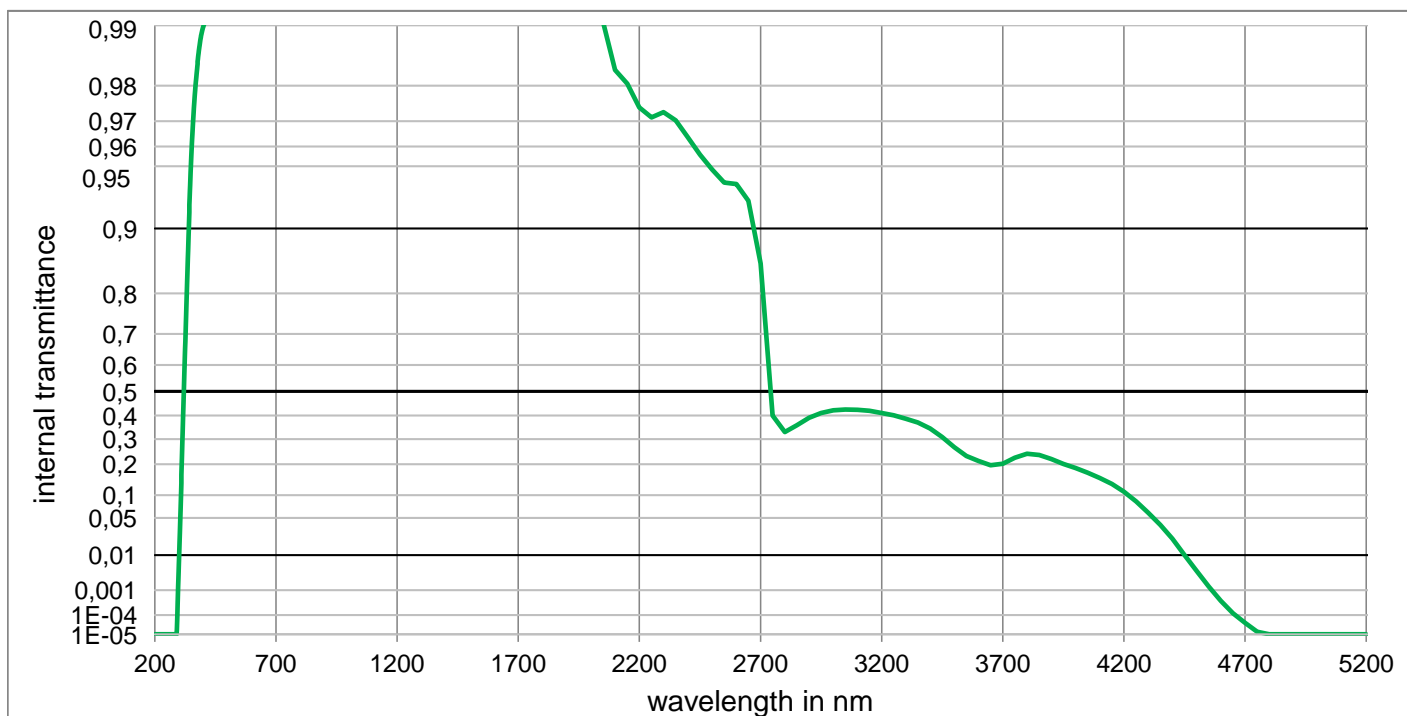
Chemical properties	
Chemical resistance	
FR class	= 0
SR class	= 1
AR class	= 2
Resistance against humidity	
Resistant glass	
see pocket catalogue "Optical Filter Glass 2020", chapter 5.5	

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



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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	9,940E-01	800	9,983E-01	1100	9,997E-01	2200	9,743E-01	3700	2,020E-01
210	< 1,0E-05	510	9,942E-01	810	9,984E-01	1110	9,998E-01	2250	9,713E-01	3750	2,246E-01
220	< 1,0E-05	520	9,945E-01	820	9,985E-01	1120	9,998E-01	2300	9,729E-01	3800	2,400E-01
230	< 1,0E-05	530	9,948E-01	830	9,985E-01	1130	9,998E-01	2350	9,702E-01	3850	2,356E-01
240	< 1,0E-05	540	9,950E-01	840	9,986E-01	1140	9,999E-01	2400	9,641E-01	3900	2,195E-01
250	< 1,0E-05	550	9,953E-01	850	9,987E-01	1150	9,999E-01	2450	9,562E-01	3950	2,012E-01
260	< 1,0E-05	560	9,955E-01	860	9,987E-01	1160	9,999E-01	2500	9,480E-01	4000	1,864E-01
270	< 1,0E-05	570	9,957E-01	870	9,988E-01	1170	9,999E-01	2550	9,400E-01	4050	1,692E-01
280	< 1,0E-05	580	9,959E-01	880	9,988E-01	1180	9,999E-01	2600	9,389E-01	4100	1,516E-01
290	< 1,0E-05	590	9,960E-01	890	9,989E-01	1190	9,999E-01	2650	9,264E-01	4150	1,323E-01
300	9,6E-03	600	9,962E-01	900	9,989E-01	1200	9,999E-01	2700	8,540E-01	4200	1,092E-01
310	1,6E-01	610	9,964E-01	910	9,990E-01	1250	9,999E-01	2750	4,000E-01	4250	8,440E-02
320	5,066E-01	620	9,965E-01	920	9,990E-01	1300	9,999E-01	2800	3,300E-01	4300	5,970E-02
330	7,700E-01	630	9,967E-01	930	9,990E-01	1350	9,999E-01	2850	3,585E-01	4350	3,896E-02
340	9,013E-01	640	9,968E-01	940	9,991E-01	1400	9,975E-01	2900	3,900E-01	4400	2,230E-02
350	9,533E-01	650	9,969E-01	950	9,991E-01	1450	9,999E-01	2950	4,109E-01	4450	1,000E-02
360	9,728E-01	660	9,970E-01	960	9,992E-01	1500	9,999E-01	3000	4,219E-01	4500	4,000E-03
370	9,814E-01	670	9,971E-01	970	9,992E-01	1550	9,999E-01	3050	4,249E-01	4550	1,318E-03
380	9,859E-01	680	9,972E-01	980	9,993E-01	1600	9,999E-01	3100	4,236E-01	4600	4,070E-04
390	9,885E-01	690	9,973E-01	990	9,993E-01	1650	9,999E-01	3150	4,194E-01	4650	1,191E-04
400	9,899E-01	700	9,974E-01	1000	9,993E-01	1700	9,998E-01	3200	4,100E-01	4700	4,227E-05
410	9,906E-01	710	9,975E-01	1010	9,994E-01	1750	9,990E-01	3250	4,011E-01	4750	1,390E-05
420	9,911E-01	720	9,976E-01	1020	9,994E-01	1800	9,980E-01	3300	3,864E-01	4800	< 1,000E-05
430	9,916E-01	730	9,977E-01	1030	9,995E-01	1850	9,969E-01	3350	3,700E-01	4850	< 1,000E-05
440	9,920E-01	740	9,978E-01	1040	9,995E-01	1900	9,957E-01	3400	3,450E-01	4900	< 1,000E-05
450	9,924E-01	750	9,979E-01	1050	9,995E-01	1950	9,943E-01	3450	3,093E-01	4950	< 1,000E-05
460	9,928E-01	760	9,980E-01	1060	9,996E-01	2000	9,930E-01	3500	2,669E-01	5000	< 1,000E-05
470	9,931E-01	770	9,981E-01	1070	9,996E-01	2050	9,904E-01	3550	2,314E-01	5050	< 1,000E-05
480	9,934E-01	780	9,982E-01	1080	9,996E-01	2100	9,833E-01	3600	2,120E-01	5100	< 1,000E-05
490	9,937E-01	790	9,983E-01	1090	9,997E-01	2150	9,805E-01	3650	1,961E-01	5150	< 1,000E-05