Data Sheet

GG495

Optical properties		
Reflection factor		
P_d	=	0,917
Spectral values guaranteed (d = 3 mm)		
$\lambda_{i\,0,5}$	=	495 nm ± 6 nm
λ_s ($\tau_{i,U}$ = 1E-05)	=	430 nm
λ_p ($\tau_{i,L}$ = 0,92)	=	560 nm
Refractive indices		
n_d (587,6 nm)	=	1,52
n_s (852 nm)	=	1,52
n_t (1014 nm)	=	1,51
Sellmeier coefficients		
valid from 400 nm to 2400 nm		
B_1	=	1,2863
B_2	=	0,0012
B_3	=	0,8815
C_1	=	9,397E-03 µm²
C_2	=	1,5104E-01 µm²
C_3	=	106,389 µm²
Internal quality		
Bubble class		3

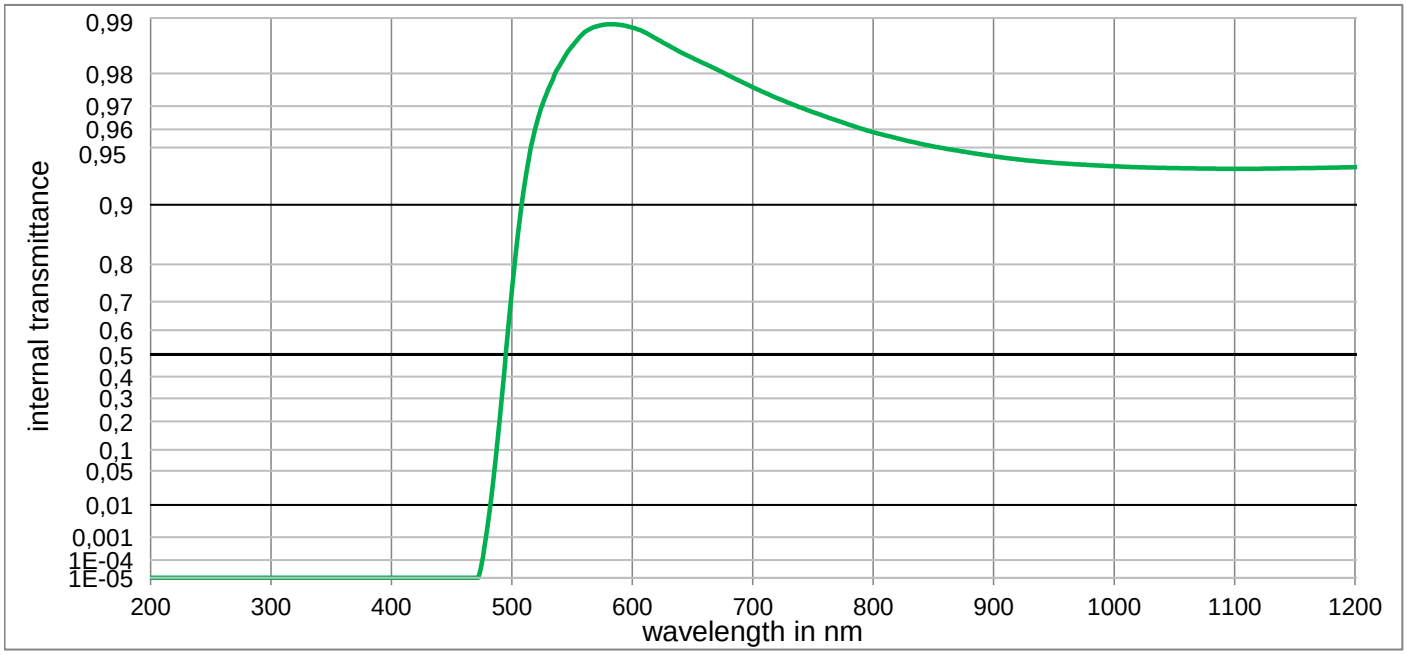
Mechanical properties		
Reference thickness		
d	=	3,00 mm
Density		
ρ	=	2,56 g/cm³
Knoop hardness		
$HK_{[0.1/20]}$	=	501

Thermal properties		
Transformation temperature		
Tg	=	535 °C
Thermal expansion in		**10^{-6}/K**
$\alpha_{(-30°C/+70°C)}$	=	8,1
$\alpha_{(20°C/300°C)}$	=	9,4
Temperature coefficient		
Tk	=	0,1 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 2024", chapter 5.5		

Colormetric properties		1 mm	2 mm	3 mm
Illuminant D65	x	0,422	0,433	0,438
	y	0,514	0,525	0,527
	Y	86,7	85,1	84,0
	λ_d	570 nm	571 nm	571 nm
	P_e	0,824	0,887	0,904
Illuminant A	x	0,502	0,507	0,509
	y	0,469	0,472	0,472
	Y	89,5	88,5	87,7
	λ_d	580 nm	581 nm	581 nm
	P_e	0,807	0,862	0,880

Notes
Stricking glass
Longpass filter
ISO 23364:2021
Disclaimer
All data without tolerances are to be understood to be reference values.



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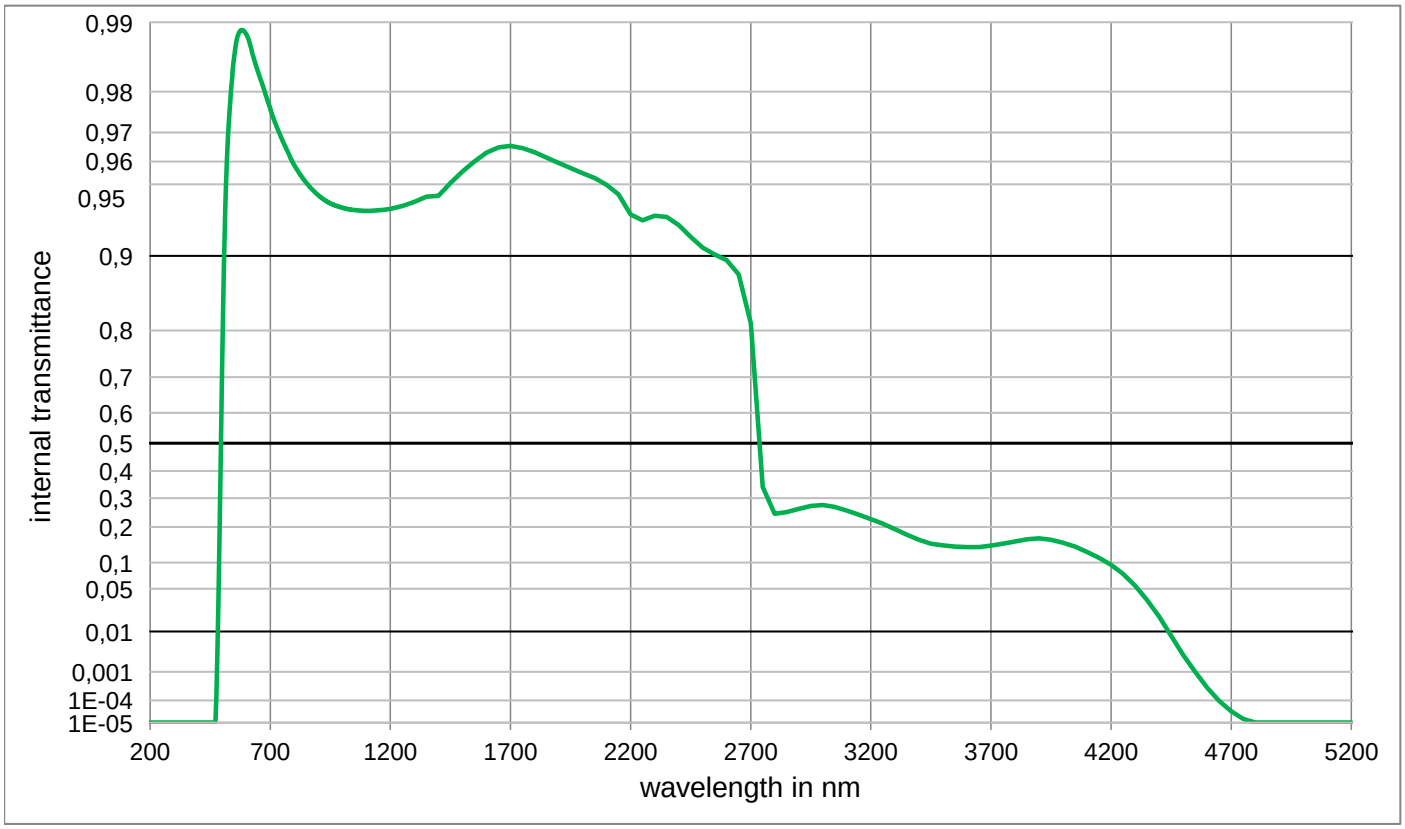

Internal transmittance ti at reference thickness
The internal transmittance values, tabulated and graphically represented, are reference values only

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	7,321E-01	800	9,586E-01	1100	9,352E-01	2200	9,329E-01	3700	1,435E-01
210	< 1,0E-05	510	9,185E-01	810	9,569E-01	1110	9,352E-01	2250	9,289E-01	3750	1,488E-01
220	< 1,0E-05	520	9,617E-01	820	9,553E-01	1120	9,352E-01	2300	9,320E-01	3800	1,553E-01
230	< 1,0E-05	530	9,755E-01	830	9,537E-01	1130	9,353E-01	2350	9,313E-01	3850	1,619E-01
240	< 1,0E-05	540	9,821E-01	840	9,522E-01	1140	9,355E-01	2400	9,256E-01	3900	1,643E-01
250	< 1,0E-05	550	9,858E-01	850	9,507E-01	1150	9,356E-01	2450	9,166E-01	3950	1,600E-01
260	< 1,0E-05	560	9,880E-01	860	9,493E-01	1160	9,357E-01	2500	9,077E-01	4000	1,521E-01
270	< 1,0E-05	570	9,889E-01	870	9,481E-01	1170	9,359E-01	2550	9,014E-01	4050	1,405E-01
280	< 1,0E-05	580	9,892E-01	880	9,468E-01	1180	9,360E-01	2600	8,958E-01	4100	1,265E-01
290	< 1,0E-05	590	9,891E-01	890	9,456E-01	1190	9,362E-01	2650	8,808E-01	4150	1,113E-01
300	< 1,0E-05	600	9,887E-01	900	9,443E-01	1200	9,364E-01	2700	8,125E-01	4200	9,490E-02
310	< 1,0E-05	610	9,881E-01	910	9,432E-01	1250	9,382E-01	2750	3,410E-01	4250	7,570E-02
320	< 1,000E-05	620	9,870E-01	920	9,422E-01	1300	9,407E-01	2800	2,445E-01	4300	5,470E-02
330	< 1,000E-05	630	9,859E-01	930	9,413E-01	1350	9,435E-01	2850	2,499E-01	4350	3,490E-02
340	< 1,000E-05	640	9,847E-01	940	9,405E-01	1400	9,441E-01	2900	2,611E-01	4400	1,910E-02
350	< 1,000E-05	650	9,835E-01	950	9,398E-01	1450	9,506E-01	2950	2,714E-01	4450	8,150E-03
360	< 1,000E-05	660	9,823E-01	960	9,391E-01	1500	9,560E-01	3000	2,751E-01	4500	2,939E-03
370	< 1,000E-05	670	9,810E-01	970	9,386E-01	1550	9,601E-01	3050	2,686E-01	4550	1,008E-03
380	< 1,000E-05	680	9,795E-01	980	9,381E-01	1600	9,634E-01	3100	2,558E-01	4600	3,020E-04
390	< 1,000E-05	690	9,779E-01	990	9,376E-01	1650	9,653E-01	3150	2,409E-01	4650	9,616E-05
400	< 1,000E-05	700	9,763E-01	1000	9,371E-01	1700	9,657E-01	3200	2,257E-01	4700	3,420E-05
410	< 1,000E-05	710	9,746E-01	1010	9,367E-01	1750	9,650E-01	3250	2,105E-01	4750	1,528E-05
420	< 1,000E-05	720	9,729E-01	1020	9,364E-01	1800	9,636E-01	3300	1,931E-01	4800	< 1,000E-05
430	< 1,000E-05	730	9,712E-01	1030	9,361E-01	1850	9,616E-01	3350	1,754E-01	4850	< 1,000E-05
440	< 1,000E-05	740	9,695E-01	1040	9,359E-01	1900	9,595E-01	3400	1,601E-01	4900	< 1,000E-05
450	< 1,000E-05	750	9,677E-01	1050	9,357E-01	1950	9,574E-01	3450	1,487E-01	4950	< 1,000E-05
460	< 1,000E-05	760	9,659E-01	1060	9,356E-01	2000	9,552E-01	3500	1,438E-01	5000	< 1,000E-05
470	< 1,000E-05	770	9,641E-01	1070	9,354E-01	2050	9,530E-01	3550	1,410E-01	5050	< 1,000E-05
480	2,765E-03	780	9,623E-01	1080	9,353E-01	2100	9,498E-01	3600	1,393E-01	5100	< 1,000E-05
490	2,183E-01	790	9,604E-01	1090	9,352E-01	2150	9,449E-01	3650	1,396E-01	5150	< 1,000E-05