

RG695

Density	
ρ [g/cm ³]	2.76

Notes
Colloidally colored glass
Longpass filter

Reflection factor	
P_d	0.914

Bubble content	
Bubble class	3

Reference thickness	
d [mm]	3

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

Spectral values guaranteed	
λ_c ($\tau_i = 0.5$) [nm]	= 695 ± 6
λ_s ($\tau_{i,U} = 0.00001$) [nm]	= 610
λ_p ($\tau_{i,L} = 0.96$) [nm]	= 780

Transformation temperature	
Tg [°C]	532

Thermal expansion	
$\alpha_{30/+70^\circ\text{C}}$ [10 ⁻⁶ /K]	8.1
$\alpha_{20/300^\circ\text{C}}$ [10 ⁻⁶ /K]	9.4
$\alpha_{20/200^\circ\text{C}}$ [10 ⁻⁶ /K]	

Refractive Index n	
n_d (587.6 nm)	= 1.540
n_s (852.1 nm)	= 1.530
n_i (1014.0 nm)	= 1.520

Temperature coefficient	
T_K [nm/°C]	0.18

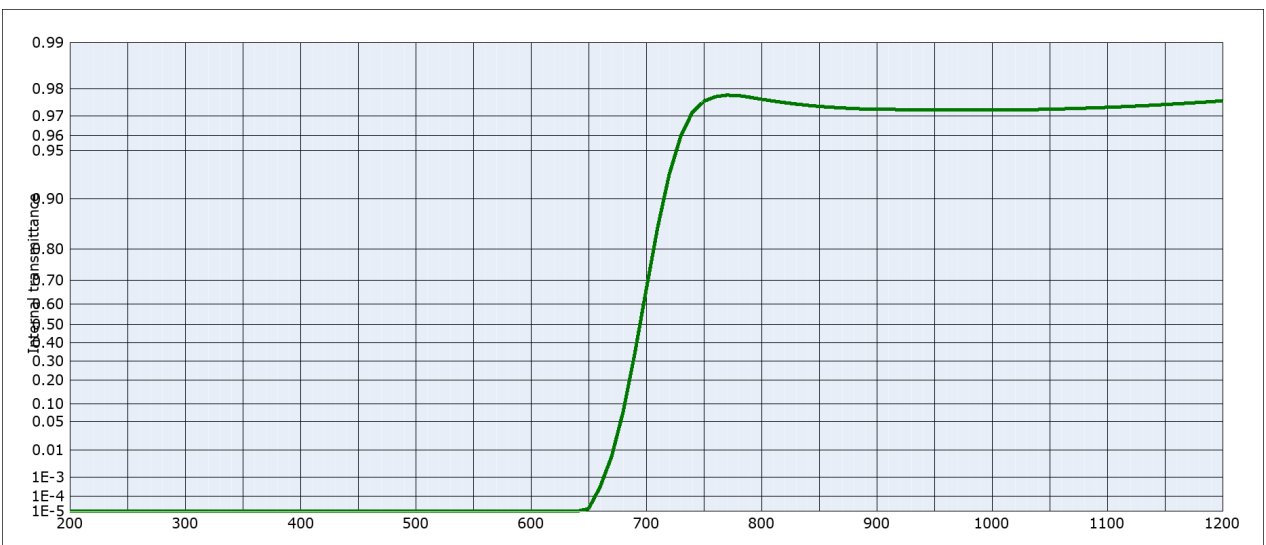
All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

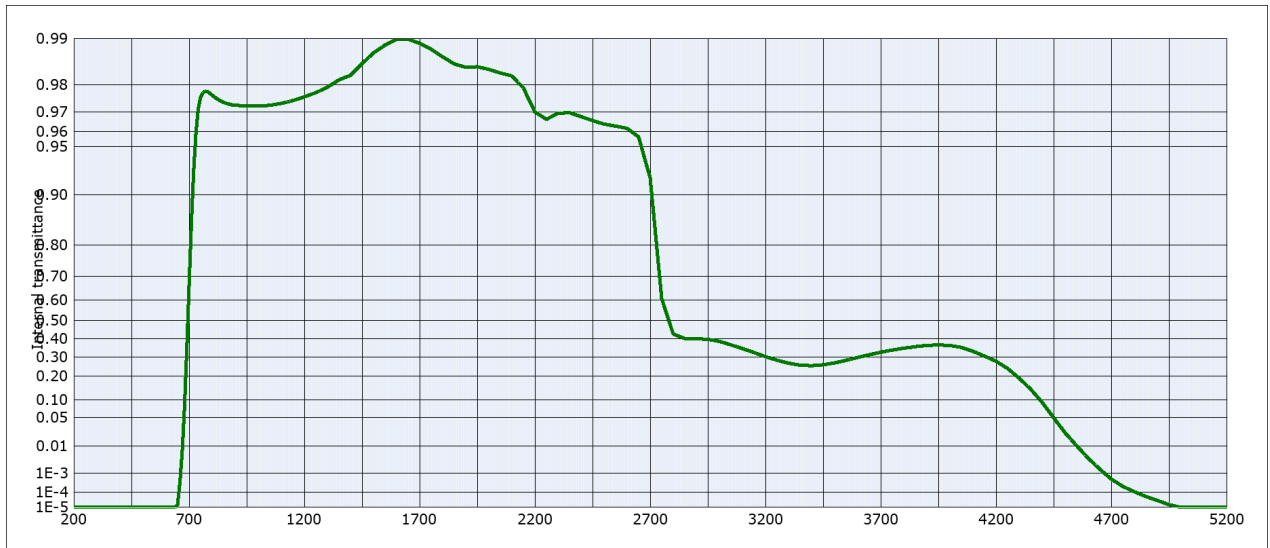
Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
	1	2	3
d [mm]			
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	Planck T = 3200 K		
	1	2	3
d [mm]			
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	D65 (T _C = 6504 K)		
	1	2	3
d [mm]			
x			
y			
Y			
λ_d [nm]			
P_e			





Internal transmittance τ_i at reference thickness $d = 3 \text{ mm}$
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	$< 10^{-5}$	500	$< 10^{-5}$	800	0.977	1100	0.974	2200	0.970	3700	0.326
210	$< 10^{-5}$	510	$< 10^{-5}$	810	0.976	1110	0.974	2250	0.967	3750	0.338
220	$< 10^{-5}$	520	$< 10^{-5}$	820	0.975	1120	0.974	2300	0.969	3800	0.348
230	$< 10^{-5}$	530	$< 10^{-5}$	830	0.975	1130	0.974	2350	0.970	3850	0.356
240	$< 10^{-5}$	540	$< 10^{-5}$	840	0.974	1140	0.974	2400	0.968	3900	0.363
250	$< 10^{-5}$	550	$< 10^{-5}$	850	0.974	1150	0.975	2450	0.966	3950	0.366
260	$< 10^{-5}$	560	$< 10^{-5}$	860	0.974	1160	0.975	2500	0.964	4000	0.363
270	$< 10^{-5}$	570	$< 10^{-5}$	870	0.973	1170	0.975	2550	0.963	4050	0.352
280	$< 10^{-5}$	580	$< 10^{-5}$	880	0.973	1180	0.976	2600	0.962	4100	0.331
290	$< 10^{-5}$	590	$< 10^{-5}$	890	0.973	1190	0.976	2650	0.957	4150	0.305
300	$< 10^{-5}$	600	$< 10^{-5}$	900	0.973	1200	0.976	2700	0.921	4200	0.277
310	$< 10^{-5}$	610	$< 10^{-5}$	910	0.973	1250	0.978	2750	0.606	4250	0.239
320	$< 10^{-5}$	620	$< 10^{-5}$	920	0.973	1300	0.979	2800	0.426	4300	0.191
330	$< 10^{-5}$	630	$< 10^{-5}$	930	0.973	1350	0.981	2850	0.401	4350	0.142
340	$< 10^{-5}$	640	$< 10^{-5}$	940	0.973	1400	0.983	2900	0.400	4400	$9.2 \cdot 10^{-2}$
350	$< 10^{-5}$	650	$1.5 \cdot 10^{-5}$	950	0.973	1450	0.985	2950	0.397	4450	$5.0 \cdot 10^{-2}$
360	$< 10^{-5}$	660	$3.4 \cdot 10^{-4}$	960	0.973	1500	0.988	3000	0.386	4500	$2.3 \cdot 10^{-2}$
370	$< 10^{-5}$	670	$6.3 \cdot 10^{-3}$	970	0.973	1550	0.989	3050	0.367	4550	$1.0 \cdot 10^{-2}$
380	$< 10^{-5}$	680	$7.5 \cdot 10^{-2}$	980	0.973	1600	0.990	3100	0.346	4600	$4.0 \cdot 10^{-3}$
390	$< 10^{-5}$	690	0.337	990	0.973	1650	0.990	3150	0.324	4650	$1.5 \cdot 10^{-3}$
400	$< 10^{-5}$	700	0.661	1000	0.973	1700	0.989	3200	0.302	4700	$5.3 \cdot 10^{-4}$
410	$< 10^{-5}$	710	0.851	1010	0.973	1750	0.988	3250	0.282	4750	$2.2 \cdot 10^{-4}$
420	$< 10^{-5}$	720	0.929	1020	0.973	1800	0.987	3300	0.267	4800	$1.1 \cdot 10^{-4}$
430	$< 10^{-5}$	730	0.960	1030	0.973	1850	0.985	3350	0.256	4850	$5.6 \cdot 10^{-5}$
440	$< 10^{-5}$	740	0.972	1040	0.973	1900	0.985	3400	0.253	4900	$3.1 \cdot 10^{-5}$
450	$< 10^{-5}$	750	0.976	1050	0.973	1950	0.985	3450	0.258	4950	$1.6 \cdot 10^{-5}$
460	$< 10^{-5}$	760	0.978	1060	0.973	2000	0.984	3500	0.268	5000	$< 10^{-5}$
470	$< 10^{-5}$	770	0.978	1070	0.973	2050	0.983	3550	0.282	5050	$< 10^{-5}$
480	$< 10^{-5}$	780	0.978	1080	0.973	2100	0.982	3600	0.297	5100	$< 10^{-5}$
490	$< 10^{-5}$	790	0.977	1090	0.973	2150	0.979	3650	0.312	5150	$< 10^{-5}$