

GG475

Reflection factor	
P_d	0.918

Reference thickness	
d [mm]	3

Spectral values guaranteed	
$\lambda_c (\tau_i = 0.5)$ [nm]	= 475 ± 6
$\lambda_s (\tau_{i,U} = 0.00001)$ [nm]	= 410
$\lambda_p (\tau_{i,L} = 0.92)$ [nm]	= 550

Refractive Index n	
$n_e (546.1 \text{ nm})$	= 1.530
$n_d (587.6 \text{ nm})$	= 1.520
$n_s (852.1 \text{ nm})$	= 1.520
$n_i (1014.0 \text{ nm})$	= 1.510

Density	
$\rho [\text{g}/\text{cm}^3]$	2.56

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

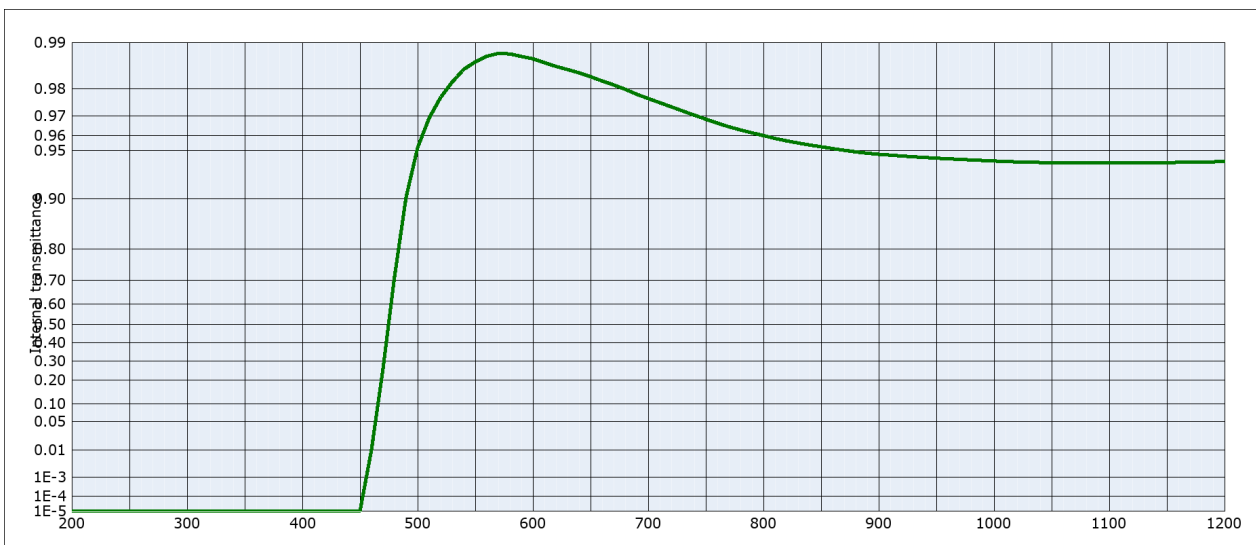
Transformation temperature	
$T_g [^\circ\text{C}]$	531

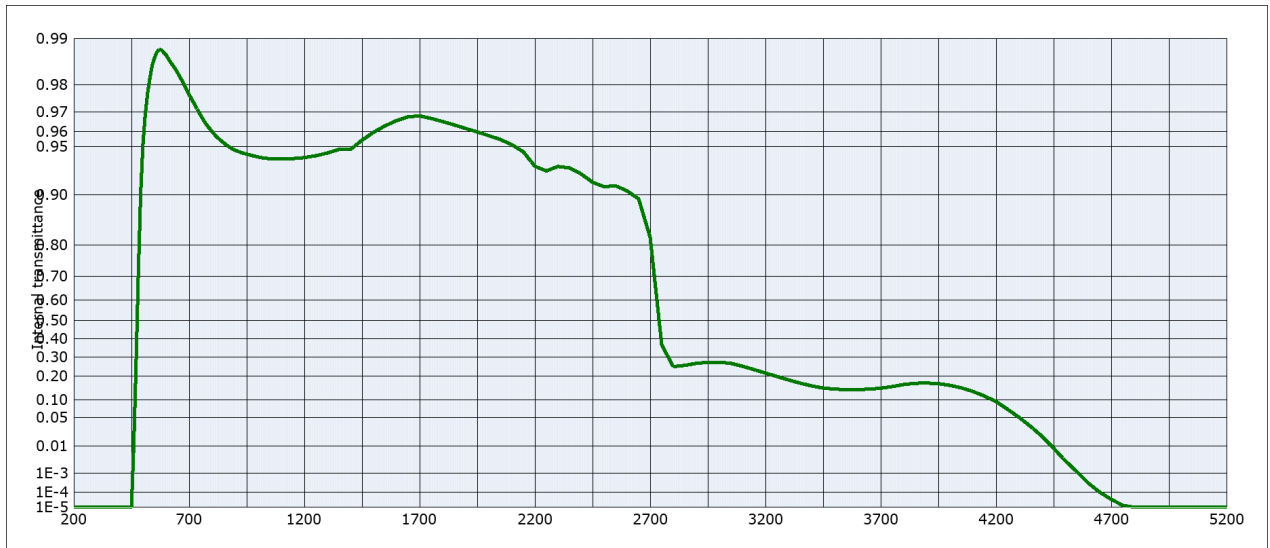
Thermal expansion	
$\alpha_{30/+70^\circ\text{C}} [10^{-6}/\text{K}]$	8.2
$\alpha_{20/300^\circ\text{C}} [10^{-6}/\text{K}]$	9.4
$\alpha_{20/200^\circ\text{C}} [10^{-6}/\text{K}]$	

Temperature coefficient	
$T_K [\text{nm}/^\circ\text{C}]$	0.09

Notes	
Colloidally colored glass	
Longpass filter	
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)				Illuminant Planck T = 3200 K				Illuminant D65 (T _C = 6504 K)			
d [mm]	1	2	3	d [mm]	1	2	3	d [mm]	1	2	3
x	0.483	0.489	0.492	x	0.465	0.473	0.476	x	0.381	0.394	0.401
y	0.453	0.460	0.463	y	0.458	0.466	0.470	y	0.463	0.485	0.494
Y	91	90	89	Y	91	90	89	Y	89	88	88
λ_d [nm]	580	580	580	λ_d [nm]	578	578	578	λ_d [nm]	568	569	569
P_e	0.56	0.65	0.69	P_e	0.57	0.66	0.70	P_e	0.57	0.66	0.71





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	0.952	800	0.960	1100	0.940	2200	0.934	3700	0.146
210	$< 10^{-5}$	510	0.969	810	0.958	1110	0.940	2250	0.929	3750	0.153
220	$< 10^{-5}$	520	0.977	820	0.957	1120	0.940	2300	0.933	3800	0.162
230	$< 10^{-5}$	530	0.982	830	0.955	1130	0.940	2350	0.932	3850	0.167
240	$< 10^{-5}$	540	0.985	840	0.954	1140	0.941	2400	0.926	3900	0.169
250	$< 10^{-5}$	550	0.987	850	0.953	1150	0.941	2450	0.916	3950	0.166
260	$< 10^{-5}$	560	0.988	860	0.952	1160	0.941	2500	0.911	4000	0.158
270	$< 10^{-5}$	570	0.988	870	0.950	1170	0.941	2550	0.912	4050	0.147
280	$< 10^{-5}$	580	0.988	880	0.949	1180	0.941	2600	0.905	4100	0.133
290	$< 10^{-5}$	590	0.988	890	0.948	1190	0.941	2650	0.894	4150	0.115
300	$< 10^{-5}$	600	0.987	900	0.947	1200	0.942	2700	0.819	4200	$9.5 \cdot 10^{-2}$
310	$< 10^{-5}$	610	0.986	910	0.947	1250	0.943	2750	0.367	4250	$7.1 \cdot 10^{-2}$
320	$< 10^{-5}$	620	0.986	920	0.946	1300	0.945	2800	0.249	4300	$5.1 \cdot 10^{-2}$
330	$< 10^{-5}$	630	0.985	930	0.945	1350	0.948	2850	0.255	4350	$3.3 \cdot 10^{-2}$
340	$< 10^{-5}$	640	0.984	940	0.945	1400	0.948	2900	0.266	4400	$1.9 \cdot 10^{-2}$
350	$< 10^{-5}$	650	0.983	950	0.944	1450	0.955	2950	0.271	4450	$8.8 \cdot 10^{-3}$
360	$< 10^{-5}$	660	0.982	960	0.944	1500	0.960	3000	0.272	4500	$3.3 \cdot 10^{-3}$
370	$< 10^{-5}$	670	0.981	970	0.943	1550	0.963	3050	0.266	4550	$1.2 \cdot 10^{-3}$
380	$< 10^{-5}$	680	0.980	980	0.943	1600	0.966	3100	0.251	4600	$3.4 \cdot 10^{-4}$
390	$< 10^{-5}$	690	0.978	990	0.942	1650	0.968	3150	0.233	4650	$1.0 \cdot 10^{-4}$
400	$< 10^{-5}$	700	0.977	1000	0.942	1700	0.968	3200	0.216	4700	$3.7 \cdot 10^{-5}$
410	$< 10^{-5}$	710	0.975	1010	0.942	1750	0.967	3250	0.199	4750	$1.4 \cdot 10^{-5}$
420	$< 10^{-5}$	720	0.974	1020	0.941	1800	0.965	3300	0.183	4800	$< 10^{-5}$
430	$< 10^{-5}$	730	0.972	1030	0.941	1850	0.964	3350	0.168	4850	$< 10^{-5}$
440	$< 10^{-5}$	740	0.970	1040	0.941	1900	0.962	3400	0.156	4900	$< 10^{-5}$
450	$< 10^{-5}$	750	0.969	1050	0.941	1950	0.960	3450	0.147	4950	$< 10^{-5}$
460	$1.0 \cdot 10^{-2}$	760	0.967	1060	0.940	2000	0.958	3500	0.142	5000	$< 10^{-5}$
470	0.261	770	0.965	1070	0.940	2050	0.955	3550	0.140	5050	$< 10^{-5}$
480	0.713	780	0.963	1080	0.940	2100	0.952	3600	0.140	5100	$< 10^{-5}$
490	0.902	790	0.962	1090	0.940	2150	0.946	3650	0.142	5150	$< 10^{-5}$