

## BG25

Reflection factor	
P <sub>d</sub>	0.921

Reference thickness	
d [mm]	1

Spectral values guaranteed		
$\tau_i$ (334nm)	≤	0.8
$\tau_i$ (405nm)	≥	0.93
$\tau_i$ (488nm)	≤	0.39
$\tau_i$ (725nm)	≤	0.36

Refractive Index n	
n <sub>n</sub> (404.7 nm) =	1.530
n <sub>d</sub> (587.6 nm) =	1.510
Sellmeier coefficients on request	

Density	
$\rho$ [g/cm <sup>3</sup> ]	2.56

Bubble content	
Bubble class	1

Chemical Resistance	
FR class	0
SR class	1.0
AR class	1.0

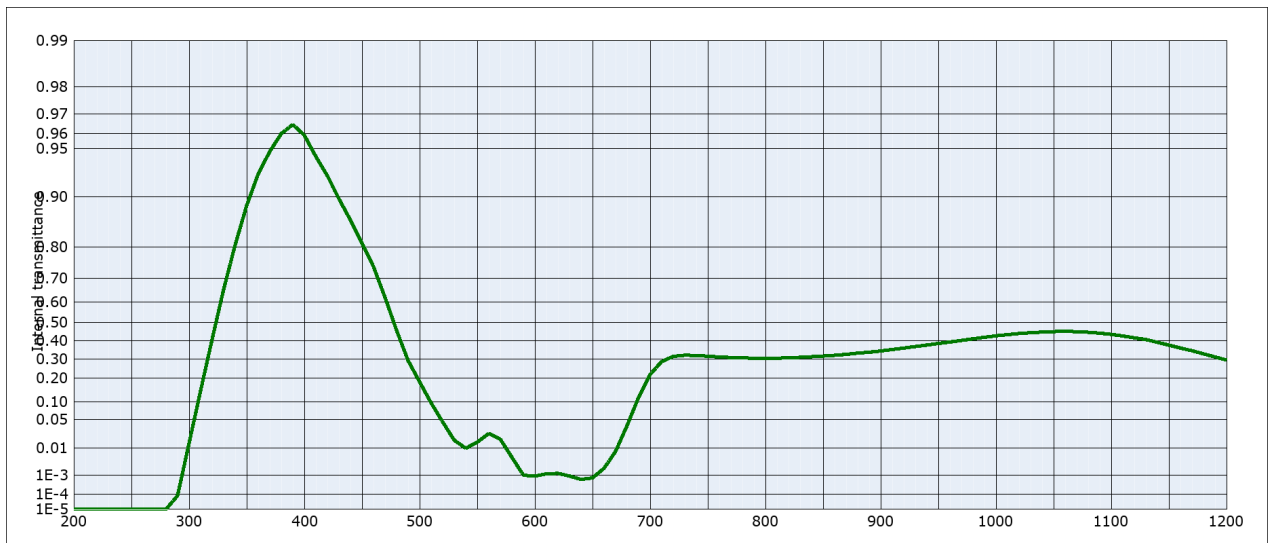
Transformation temperature	
T <sub>g</sub> [°C]	487

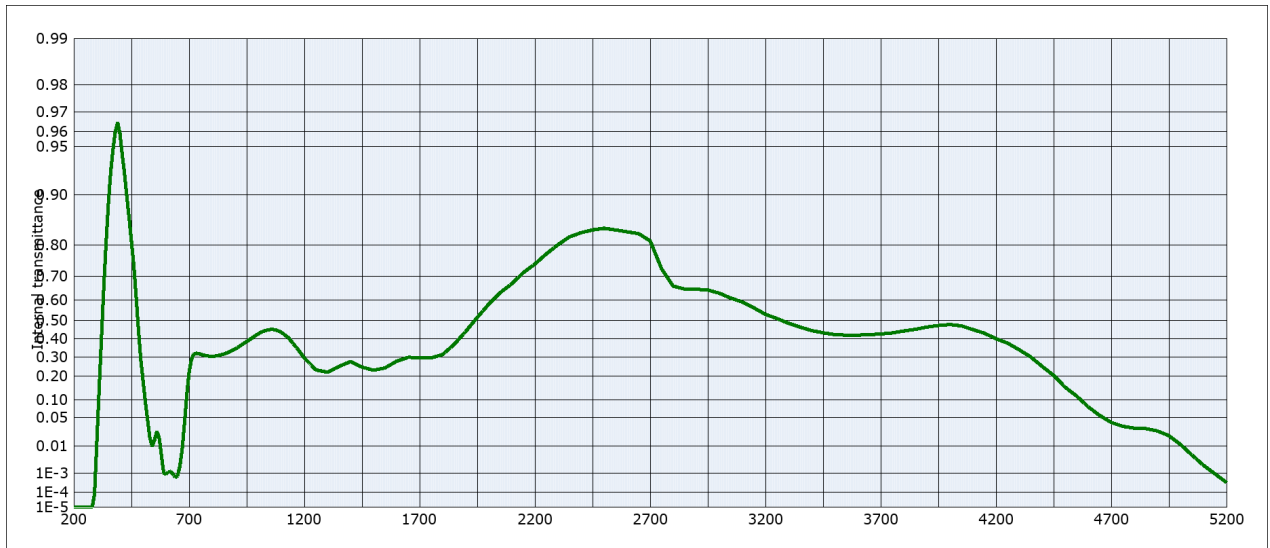
Thermal expansion	
$\alpha_{30/70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	8.7
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	10.1
$\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K]	

Temperature coefficient	
T <sub>K</sub> [nm/°C]	

Notes
Ionically colored glass
Bandpass filter
☀️ Transmission changes are possible under the action of intense ultraviolet radiation.
<b>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".</b>

Colorimetric evaluation											
Illuminant	A (Planck T = 2856 K)			Illuminant	Planck T = 3200 K			Illuminant	D65 (T <sub>C</sub> = 6504 K)		
d [mm]	1	2	3	d [mm]	1	2	3	d [mm]	1	2	3
x	0.155	0.151	0.155	x	0.153	0.152	0.155	x	0.150	0.153	0.157
y	0.093	0.035	0.024	y	0.083	0.033	0.023	y	0.055	0.027	0.021
Y	3	1	0	Y	3	1	0	Y	5	2	1
λ <sub>d</sub> [nm]	470	459	454	λ <sub>d</sub> [nm]	469	458	453	λ <sub>d</sub> [nm]	463	455	451
P <sub>e</sub>	0.90	0.98	0.99	P <sub>e</sub>	0.91	0.98	0.99	P <sub>e</sub>	0.93	0.98	0.99





**Internal transmittance  $\tau_i$  at reference thickness  $d = 1$  mm**  
**The internal transmittance values, tabulated and graphically represented, are reference values only**

$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$	$\lambda$ [nm]	$\tau_i$
200	$< 10^{-5}$	500	0.183	800	0.304	1100	0.435	2200	0.742	3700	0.426
210	$< 10^{-5}$	510	$9.7 \cdot 10^{-2}$	810	0.304	1110	0.426	2250	0.774	3750	0.432
220	$< 10^{-5}$	520	$4.5 \cdot 10^{-2}$	820	0.306	1120	0.416	2300	0.800	3800	0.442
230	$< 10^{-5}$	530	$1.7 \cdot 10^{-2}$	830	0.309	1130	0.407	2350	0.820	3850	0.452
240	$< 10^{-5}$	540	$1.0 \cdot 10^{-2}$	840	0.312	1140	0.392	2400	0.830	3900	0.464
250	$< 10^{-5}$	550	$1.5 \cdot 10^{-2}$	850	0.316	1150	0.376	2450	0.836	3950	0.472
260	$< 10^{-5}$	560	$2.5 \cdot 10^{-2}$	860	0.320	1160	0.360	2500	0.840	4000	0.477
270	$< 10^{-5}$	570	$1.8 \cdot 10^{-2}$	870	0.325	1170	0.345	2550	0.836	4050	0.470
280	$< 10^{-5}$	580	$5.2 \cdot 10^{-3}$	880	0.332	1180	0.328	2600	0.832	4100	0.450
290	$8.5 \cdot 10^{-5}$	590	$1.0 \cdot 10^{-3}$	890	0.337	1190	0.311	2650	0.828	4150	0.431
300	$1.4 \cdot 10^{-2}$	600	$9.1 \cdot 10^{-4}$	900	0.344	1200	0.294	2700	0.810	4200	0.400
310	0.144	610	$1.2 \cdot 10^{-3}$	910	0.352	1250	0.232	2750	0.725	4250	0.376
320	0.408	620	$1.2 \cdot 10^{-3}$	920	0.360	1300	0.220	2800	0.660	4300	0.340
330	0.655	630	$9.3 \cdot 10^{-4}$	930	0.368	1350	0.250	2850	0.648	4350	0.301
340	0.805	640	$6.4 \cdot 10^{-4}$	940	0.376	1400	0.275	2900	0.647	4400	0.250
350	0.887	650	$7.6 \cdot 10^{-4}$	950	0.385	1450	0.246	2950	0.644	4450	0.205
360	0.928	660	$2.0 \cdot 10^{-3}$	960	0.393	1500	0.230	3000	0.630	4500	0.150
370	0.948	670	$8.0 \cdot 10^{-3}$	970	0.402	1550	0.242	3050	0.608	4550	0.115
380	0.960	680	$3.8 \cdot 10^{-2}$	980	0.411	1600	0.277	3100	0.590	4600	$7.8 \cdot 10^{-2}$
390	0.965	690	0.118	990	0.419	1650	0.298	3150	0.562	4650	$5.5 \cdot 10^{-2}$
400	0.959	700	0.219	1000	0.427	1700	0.296	3200	0.530	4700	$4.0 \cdot 10^{-2}$
410	0.944	710	0.286	1010	0.434	1750	0.295	3250	0.509	4750	$3.3 \cdot 10^{-2}$
420	0.926	720	0.314	1020	0.440	1800	0.313	3300	0.484	4800	$3.0 \cdot 10^{-2}$
430	0.897	730	0.320	1030	0.444	1850	0.369	3350	0.464	4850	$2.9 \cdot 10^{-2}$
440	0.861	740	0.319	1040	0.448	1900	0.440	3400	0.445	4900	$2.6 \cdot 10^{-2}$
450	0.809	750	0.315	1050	0.450	1950	0.515	3450	0.433	4950	$2.0 \cdot 10^{-2}$
460	0.740	760	0.311	1060	0.451	2000	0.580	3500	0.423	5000	$1.1 \cdot 10^{-2}$
470	0.620	770	0.308	1070	0.450	2050	0.633	3550	0.420	5050	$5.2 \cdot 10^{-3}$
480	0.457	780	0.306	1080	0.447	2100	0.670	3600	0.420	5100	$2.2 \cdot 10^{-3}$
490	0.291	790	0.304	1090	0.442	2150	0.712	3650	0.423	5150	$9.4 \cdot 10^{-4}$