

Data Sheet



KG5

Reflection factor	
P _d	0.921

Reference thickness	
d [mm]	2

Spectral values guaranteed		
τ _i (365nm)	≥	0.8
τ _i (500nm)	≥	0.86
τ _i (600nm)	≥	0.8
τ _i (700nm)	≤	0.43
τ _i (800nm)	≤	0.09
τ _i (900nm)	≤	0.008
τ _i (1060nm)	≤	0.0001
τ _i (2200nm)	≤	0.001

Refractive Index n	
n _i (365.0 nm) =	1.530
n _d (587.6 nm) =	1.510

Density	
ρ [g/cm ³]	2.53

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	3.0
AR class	4.0

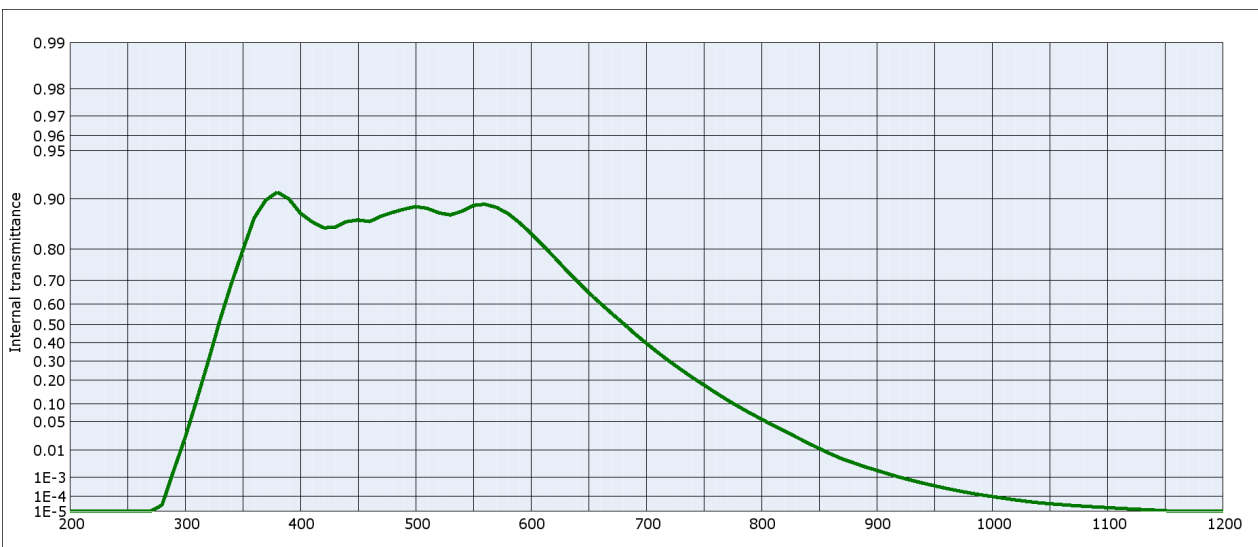
Transformation temperature	
T _g [°C]	565

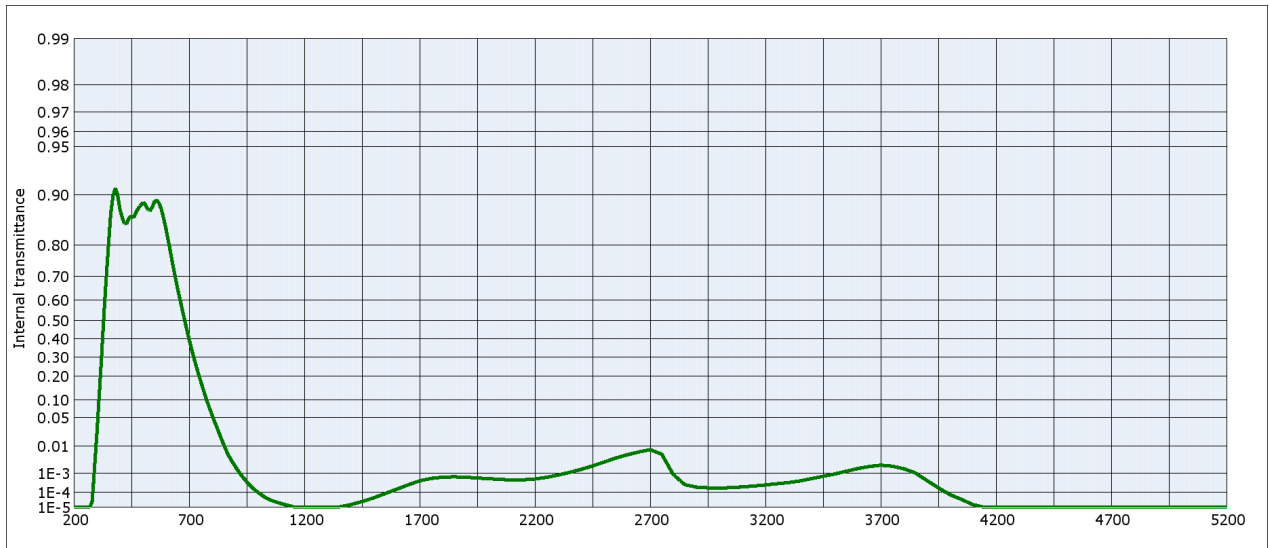
Thermal expansion	
α _{30/+70°C} [10 ⁻⁶ /K]	5.4
α _{20/300°C} [10 ⁻⁶ /K]	6.2
α _{20/200°C} [10 ⁻⁶ /K]	

Temperature coefficient	
T _K [nm/°C]	

Notes
Ionically colored glass
Shortpass filter
Heat protection filter
Long-term changes in the polished surface are possible under some circumstances.
Transmission changes are possible under the action of intense ultraviolet radiation.
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	0.440	0.434	0.427	x	0.416	0.410	0.404	x	0.308	0.304	0.300	
y	0.411	0.415	0.418	y	0.402	0.406	0.409	y	0.331	0.332	0.334	
Y	85	78	72	Y	85	78	72	Y	85	79	74	
λ _d [nm]	504	505	505	λ _d [nm]	503	503	503	λ _d [nm]	496	496	496	
P _e	0.02	0.03	0.05	P _e	0.02	0.03	0.05	P _e	0.02	0.03	0.04	





Internal transmittance τ_i at reference thickness $d = 2$ 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	0.888	800	$5.6 \cdot 10^{-2}$	1100	$1.9 \cdot 10^{-5}$	2200	$5.4 \cdot 10^{-4}$	3700	$2.2 \cdot 10^{-3}$
210	$< 10^{-5}$	510	0.885	810	$4.2 \cdot 10^{-2}$	1110	$1.7 \cdot 10^{-5}$	2250	$6.5 \cdot 10^{-4}$	3750	$2.0 \cdot 10^{-3}$
220	$< 10^{-5}$	520	0.878	820	$3.2 \cdot 10^{-2}$	1120	$1.5 \cdot 10^{-5}$	2300	$8.3 \cdot 10^{-4}$	3800	$1.6 \cdot 10^{-3}$
230	$< 10^{-5}$	530	0.874	830	$2.3 \cdot 10^{-2}$	1130	$1.4 \cdot 10^{-5}$	2350	$1.1 \cdot 10^{-3}$	3850	$1.0 \cdot 10^{-3}$
240	$< 10^{-5}$	540	0.881	840	$1.6 \cdot 10^{-2}$	1140	$1.2 \cdot 10^{-5}$	2400	$1.5 \cdot 10^{-3}$	3900	$4.6 \cdot 10^{-4}$
250	$< 10^{-5}$	550	0.890	850	$1.1 \cdot 10^{-2}$	1150	$1.1 \cdot 10^{-5}$	2450	$2.1 \cdot 10^{-3}$	3950	$1.9 \cdot 10^{-4}$
260	$< 10^{-5}$	560	0.892	860	$7.7 \cdot 10^{-3}$	1160	$1.0 \cdot 10^{-5}$	2500	$2.9 \cdot 10^{-3}$	4000	$7.4 \cdot 10^{-5}$
270	$< 10^{-5}$	570	0.887	870	$5.3 \cdot 10^{-3}$	1170	$< 10^{-5}$	2550	$4.1 \cdot 10^{-3}$	4050	$3.6 \cdot 10^{-5}$
280	$2.8 \cdot 10^{-5}$	580	0.877	880	$3.8 \cdot 10^{-3}$	1180	$< 10^{-5}$	2600	$5.3 \cdot 10^{-3}$	4100	$1.6 \cdot 10^{-5}$
290	$1.9 \cdot 10^{-3}$	590	0.860	890	$2.7 \cdot 10^{-3}$	1190	$< 10^{-5}$	2650	$6.6 \cdot 10^{-3}$	4150	$< 10^{-5}$
300	$2.2 \cdot 10^{-2}$	600	0.838	900	$2.0 \cdot 10^{-3}$	1200	$< 10^{-5}$	2700	$7.9 \cdot 10^{-3}$	4200	$< 10^{-5}$
310	0.114	610	0.810	910	$1.4 \cdot 10^{-3}$	1250	$< 10^{-5}$	2750	$5.6 \cdot 10^{-3}$	4250	$< 10^{-5}$
320	0.295	620	0.777	920	$1.0 \cdot 10^{-3}$	1300	$< 10^{-5}$	2800	$8.9 \cdot 10^{-4}$	4300	$< 10^{-5}$
330	0.516	630	0.738	930	$7.3 \cdot 10^{-4}$	1350	$1.0 \cdot 10^{-5}$	2850	$2.8 \cdot 10^{-4}$	4350	$< 10^{-5}$
340	0.684	640	0.696	940	$5.3 \cdot 10^{-4}$	1400	$1.5 \cdot 10^{-5}$	2900	$2.0 \cdot 10^{-4}$	4400	$< 10^{-5}$
350	0.795	650	0.650	950	$3.9 \cdot 10^{-4}$	1450	$2.6 \cdot 10^{-5}$	2950	$1.9 \cdot 10^{-4}$	4450	$< 10^{-5}$
360	0.869	660	0.604	960	$2.9 \cdot 10^{-4}$	1500	$4.5 \cdot 10^{-5}$	3000	$1.8 \cdot 10^{-4}$	4500	$< 10^{-5}$
370	0.898	670	0.555	970	$2.2 \cdot 10^{-4}$	1550	$8.5 \cdot 10^{-5}$	3050	$1.9 \cdot 10^{-4}$	4550	$< 10^{-5}$
380	0.909	680	0.505	980	$1.6 \cdot 10^{-4}$	1600	$1.5 \cdot 10^{-4}$	3100	$2.1 \cdot 10^{-4}$	4600	$< 10^{-5}$
390	0.900	690	0.450	990	$1.3 \cdot 10^{-4}$	1650	$2.7 \cdot 10^{-4}$	3150	$2.3 \cdot 10^{-4}$	4650	$< 10^{-5}$
400	0.877	700	0.398	1000	$9.9 \cdot 10^{-5}$	1700	$4.4 \cdot 10^{-4}$	3200	$2.7 \cdot 10^{-4}$	4700	$< 10^{-5}$
410	0.862	710	0.347	1010	$7.8 \cdot 10^{-5}$	1750	$5.8 \cdot 10^{-4}$	3250	$3.1 \cdot 10^{-4}$	4750	$< 10^{-5}$
420	0.850	720	0.299	1020	$6.2 \cdot 10^{-5}$	1800	$6.6 \cdot 10^{-4}$	3300	$3.6 \cdot 10^{-4}$	4800	$< 10^{-5}$
430	0.851	730	0.255	1030	$4.9 \cdot 10^{-5}$	1850	$6.9 \cdot 10^{-4}$	3350	$4.3 \cdot 10^{-4}$	4850	$< 10^{-5}$
440	0.862	740	0.214	1040	$4.1 \cdot 10^{-5}$	1900	$6.5 \cdot 10^{-4}$	3400	$5.6 \cdot 10^{-4}$	4900	$< 10^{-5}$
450	0.865	750	0.178	1050	$3.5 \cdot 10^{-5}$	1950	$6.0 \cdot 10^{-4}$	3450	$7.3 \cdot 10^{-4}$	4950	$< 10^{-5}$
460	0.862	760	0.145	1060	$3.0 \cdot 10^{-5}$	2000	$5.6 \cdot 10^{-4}$	3500	$9.3 \cdot 10^{-4}$	5000	$< 10^{-5}$
470	0.872	770	0.116	1070	$2.6 \cdot 10^{-5}$	2050	$5.1 \cdot 10^{-4}$	3550	$1.2 \cdot 10^{-3}$	5050	$< 10^{-5}$
480	0.879	780	$9.2 \cdot 10^{-2}$	1080	$2.3 \cdot 10^{-5}$	2100	$4.9 \cdot 10^{-4}$	3600	$1.6 \cdot 10^{-3}$	5100	$< 10^{-5}$
490	0.884	790	$7.2 \cdot 10^{-2}$	1090	$2.1 \cdot 10^{-5}$	2150	$4.9 \cdot 10^{-4}$	3650	$1.9 \cdot 10^{-3}$	5150	$< 10^{-5}$