

Data Sheet



KG1

Reflection factor	
P _d	0.918

Reference thickness	
d [mm]	2

Spectral values guaranteed		
τ _i (365nm)	≥	0.89
τ _i (500nm)	≥	0.92
τ _i (600nm)	≥	0.88
τ _i (700nm)	≤	0.68
τ _i (800nm)	≤	0.33
τ _i (900nm)	≤	0.1
τ _i (1060nm)	≤	0.02
τ _i (2200nm)	≤	0.06

Refractive index n	
n _i (365.0 nm) =	1.530
n _d (587.6 nm) =	1.520

Density	
ρ [g/cm ³]	2.52

Bubble content	
Bubble class	3

Chemical Resistance	
FR class	0
SR class	2.0
AR class	3.0

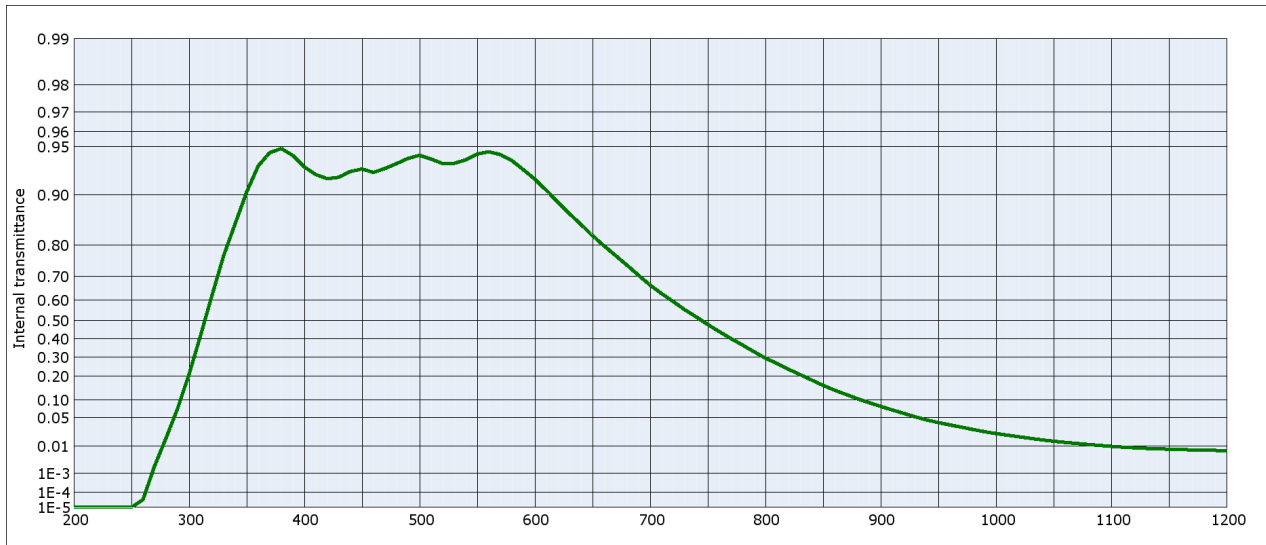
Transformation temperature	
T _g [°C]	599

Thermal expansion	
α _{30/+70°C} [10 ⁻⁶ /K]	5.3
α _{20/300°C} [10 ⁻⁶ /K]	6.1
α _{20/200°C} [10 ⁻⁶ /K]	

Temperature coefficient	
T _K [nm/°C]	

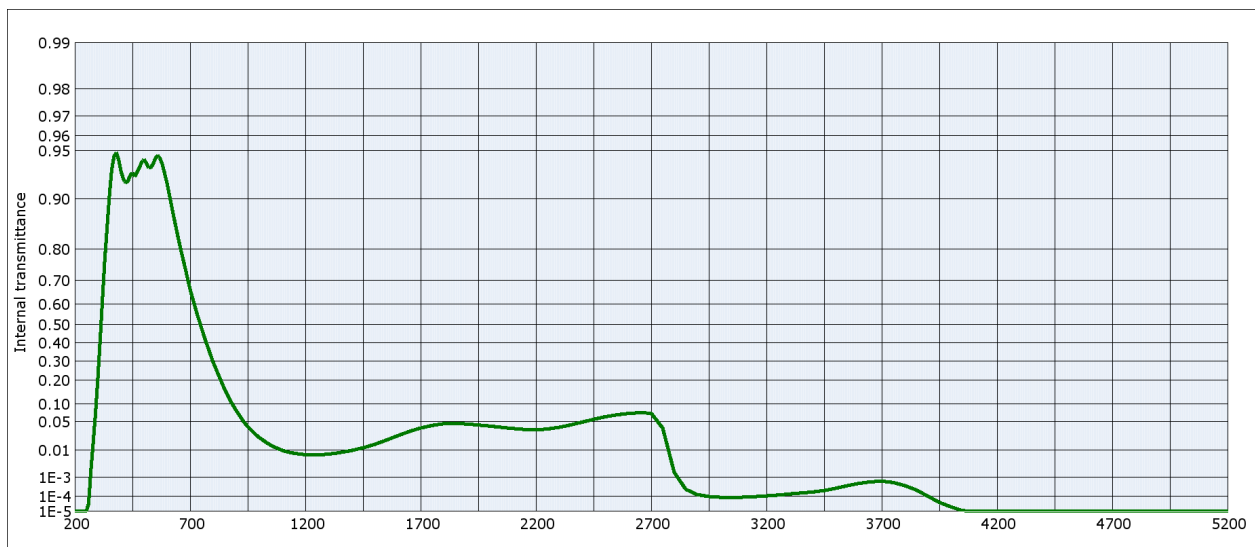
Notes
Ionically colored glass
Shortpass filter
Heat protection filter
Long-term changes in the polished surface are possible under some circumstances.
Transmission changes are possible under the action of intense ultraviolet radiation.
All data without tolerances are to be understood to be reference 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	0.444	0.441	0.438	x	0.420	0.417	0.415	x	0.311	0.309	0.307	
y	0.409	0.411	0.413	y	0.401	0.402	0.404	y	0.330	0.331	0.332	
Y	88	85	82	Y	88	85	82	Y	89	86	83	
λ _d [nm]	505	505	505	λ _d [nm]	503	504	504	λ _d [nm]	497	497	498	
P _e	0.01	0.01	0.02	P _e	0.01	0.01	0.02	P _e	0.01	0.01	0.02	



KG1

SCHOTT



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	0.943	800	0.294	1100	$9.9 \cdot 10^{-3}$	2200	$3.4 \cdot 10^{-2}$	3700	$6.6 \cdot 10^{-4}$
210	$< 10^{-5}$	510	0.940	810	0.265	1110	$9.4 \cdot 10^{-3}$	2250	$3.5 \cdot 10^{-2}$	3750	$5.7 \cdot 10^{-4}$
220	$< 10^{-5}$	520	0.936	820	0.235	1120	$9.0 \cdot 10^{-3}$	2300	$3.8 \cdot 10^{-2}$	3800	$4.0 \cdot 10^{-4}$
230	$< 10^{-5}$	530	0.936	830	0.208	1130	$8.6 \cdot 10^{-3}$	2350	$4.3 \cdot 10^{-2}$	3850	$2.4 \cdot 10^{-4}$
240	$< 10^{-5}$	540	0.940	840	0.182	1140	$8.4 \cdot 10^{-3}$	2400	$4.9 \cdot 10^{-2}$	3900	$1.0 \cdot 10^{-4}$
250	$< 10^{-5}$	550	0.944	850	0.158	1150	$8.2 \cdot 10^{-3}$	2450	$5.5 \cdot 10^{-2}$	3950	$4.2 \cdot 10^{-5}$
260	$3.5 \cdot 10^{-5}$	560	0.946	860	0.138	1160	$8.0 \cdot 10^{-3}$	2500	$6.2 \cdot 10^{-2}$	4000	$2.1 \cdot 10^{-5}$
270	$2.0 \cdot 10^{-3}$	570	0.944	870	0.121	1170	$7.7 \cdot 10^{-3}$	2550	$6.7 \cdot 10^{-2}$	4050	$1.1 \cdot 10^{-5}$
280	$1.7 \cdot 10^{-2}$	580	0.939	880	0.105	1180	$7.6 \cdot 10^{-3}$	2600	$7.1 \cdot 10^{-2}$	4100	$< 10^{-5}$
290	$7.3 \cdot 10^{-2}$	590	0.930	890	$9.1 \cdot 10^{-2}$	1190	$7.5 \cdot 10^{-3}$	2650	$7.3 \cdot 10^{-2}$	4150	$< 10^{-5}$
300	0.210	600	0.920	900	$8.0 \cdot 10^{-2}$	1200	$7.3 \cdot 10^{-3}$	2700	$7.1 \cdot 10^{-2}$	4200	$< 10^{-5}$
310	0.419	610	0.906	910	$6.9 \cdot 10^{-2}$	1250	$7.2 \cdot 10^{-3}$	2750	$3.7 \cdot 10^{-2}$	4250	$< 10^{-5}$
320	0.622	620	0.889	920	$6.0 \cdot 10^{-2}$	1300	$7.6 \cdot 10^{-3}$	2800	$1.6 \cdot 10^{-3}$	4300	$< 10^{-5}$
330	0.769	630	0.869	930	$5.2 \cdot 10^{-2}$	1350	$8.5 \cdot 10^{-3}$	2850	$2.5 \cdot 10^{-4}$	4350	$< 10^{-5}$
340	0.850	640	0.848	940	$4.5 \cdot 10^{-2}$	1400	$9.8 \cdot 10^{-3}$	2900	$1.3 \cdot 10^{-4}$	4400	$< 10^{-5}$
350	0.904	650	0.823	950	$4.0 \cdot 10^{-2}$	1450	$1.2 \cdot 10^{-2}$	2950	$9.9 \cdot 10^{-5}$	4450	$< 10^{-5}$
360	0.934	660	0.797	960	$3.5 \cdot 10^{-2}$	1500	$1.5 \cdot 10^{-2}$	3000	$8.9 \cdot 10^{-5}$	4500	$< 10^{-5}$
370	0.946	670	0.769	970	$3.2 \cdot 10^{-2}$	1550	$1.9 \cdot 10^{-2}$	3050	$8.6 \cdot 10^{-5}$	4550	$< 10^{-5}$
380	0.949	680	0.738	980	$2.8 \cdot 10^{-2}$	1600	$2.5 \cdot 10^{-2}$	3100	$9.0 \cdot 10^{-5}$	4600	$< 10^{-5}$
390	0.943	690	0.702	990	$2.5 \cdot 10^{-2}$	1650	$3.1 \cdot 10^{-2}$	3150	$9.7 \cdot 10^{-5}$	4650	$< 10^{-5}$
400	0.933	700	0.664	1000	$2.2 \cdot 10^{-2}$	1700	$3.7 \cdot 10^{-2}$	3200	$1.1 \cdot 10^{-4}$	4700	$< 10^{-5}$
410	0.925	710	0.628	1010	$2.0 \cdot 10^{-2}$	1750	$4.2 \cdot 10^{-2}$	3250	$1.2 \cdot 10^{-4}$	4750	$< 10^{-5}$
420	0.921	720	0.592	1020	$1.8 \cdot 10^{-2}$	1800	$4.6 \cdot 10^{-2}$	3300	$1.4 \cdot 10^{-4}$	4800	$< 10^{-5}$
430	0.922	730	0.553	1030	$1.7 \cdot 10^{-2}$	1850	$4.6 \cdot 10^{-2}$	3350	$1.6 \cdot 10^{-4}$	4850	$< 10^{-5}$
440	0.928	740	0.517	1040	$1.5 \cdot 10^{-2}$	1900	$4.5 \cdot 10^{-2}$	3400	$1.8 \cdot 10^{-4}$	4900	$< 10^{-5}$
450	0.931	750	0.477	1050	$1.4 \cdot 10^{-2}$	1950	$4.3 \cdot 10^{-2}$	3450	$2.2 \cdot 10^{-4}$	4950	$< 10^{-5}$
460	0.927	760	0.439	1060	$1.3 \cdot 10^{-2}$	2000	$4.1 \cdot 10^{-2}$	3500	$2.9 \cdot 10^{-4}$	5000	$< 10^{-5}$
470	0.931	770	0.401	1070	$1.2 \cdot 10^{-2}$	2050	$3.8 \cdot 10^{-2}$	3550	$3.9 \cdot 10^{-4}$	5050	$< 10^{-5}$
480	0.936	780	0.366	1080	$1.1 \cdot 10^{-2}$	2100	$3.6 \cdot 10^{-2}$	3600	$5.1 \cdot 10^{-4}$	5100	$< 10^{-5}$
490	0.941	790	0.329	1090	$1.1 \cdot 10^{-2}$	2150	$3.4 \cdot 10^{-2}$	3650	$6.1 \cdot 10^{-4}$	5150	$< 10^{-5}$