

**Data Sheet**



**OG515**

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

Notes
Colloidally colored glass
Longpass filter

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

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		
$\lambda_c$ ( $\tau_i = 0.5$ ) [nm]	=	515 ± 6
$\lambda_s$ ( $\tau_{i,U} = 10^{-5}$ ) [nm]	=	440
$\lambda_p$ ( $\tau_{i,L} = 0.93$ ) [nm]	=	580

Transformation temperature	
Tg [°C]	509

Thermal expansion	
$\alpha_{30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	7.9
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	9.0
$\alpha_{20/200^\circ\text{C}}$ [10 <sup>-6</sup> /K]	

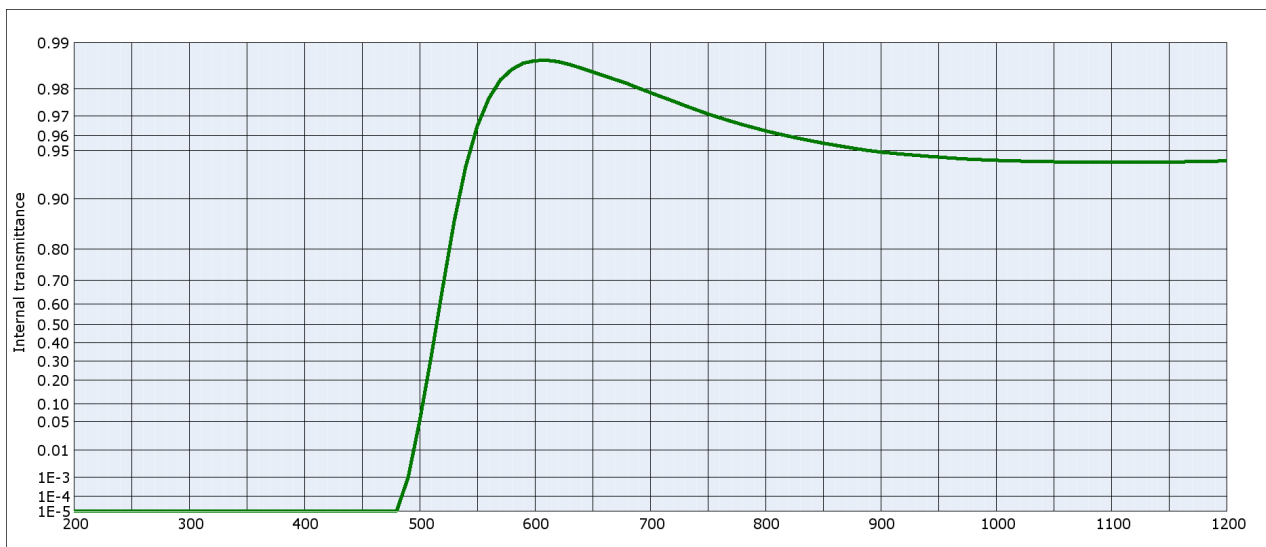
Refractive Index n	
n <sub>e</sub> (546.1 nm) = 1.510	
n <sub>d</sub> (587.6 nm) = 1.510	
n <sub>s</sub> (852.1 nm) = 1.510	
n <sub>i</sub> (1014.0 nm) = 1.500	

Temperature coefficient	
T <sub>K</sub> [nm/°C]	0.11

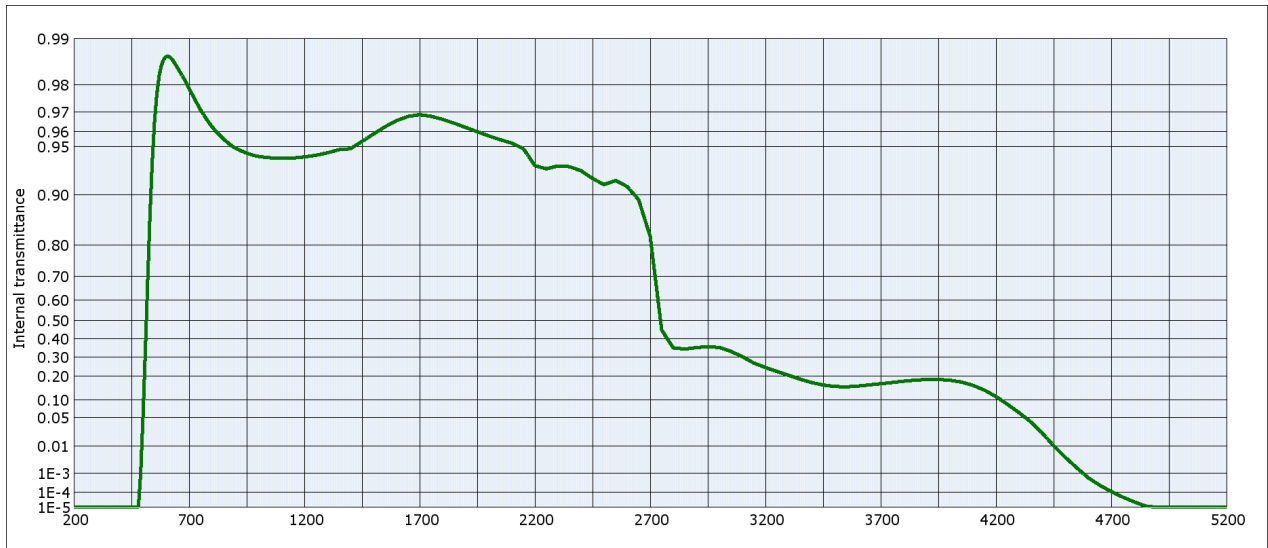
All data without tolerances are to be understood to be reference values.  
 Guaranteed values are only those values listed in the section "Spectral values guaranteed".

**Colorimetric evaluation**

Illuminant	A (Planck T = 2856 K)			Illuminant	Planck T = 3200 K			Illuminant	D65 (T <sub>C</sub> = 6504 K)		
	d [mm]	1	2		3	d [mm]	1		2	3	d [mm]
x	0.516	0.525	0.530	x	0.505	0.515	0.520	x	0.448	0.465	0.473
y	0.468	0.466	0.463	y	0.477	0.475	0.472	y	0.516	0.519	0.515
Y	87	84	82	Y	86	83	81	Y	81	78	75
$\lambda_d$ [nm]	582	583	583	$\lambda_d$ [nm]	580	581	582	$\lambda_d$ [nm]	573	574	575
P <sub>e</sub>	0.90	0.94	0.96	P <sub>e</sub>	0.90	0.95	0.96	P <sub>e</sub>	0.90	0.96	0.97



**OG515**



**Internal transmittance  $\tau_i$  at reference thickness  $d = 3$  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	$5.1 \cdot 10^{-2}$	800	0.963	1100	0.941	2200	0.934	3700	0.165
210	$< 10^{-5}$	510	0.322	810	0.961	1110	0.941	2250	0.931	3750	0.171
220	$< 10^{-5}$	520	0.669	820	0.960	1120	0.941	2300	0.934	3800	0.177
230	$< 10^{-5}$	530	0.863	830	0.958	1130	0.941	2350	0.933	3850	0.182
240	$< 10^{-5}$	540	0.937	840	0.957	1140	0.941	2400	0.929	3900	0.185
250	$< 10^{-5}$	550	0.965	850	0.955	1150	0.941	2450	0.921	3950	0.185
260	$< 10^{-5}$	560	0.977	860	0.954	1160	0.941	2500	0.914	4000	0.181
270	$< 10^{-5}$	570	0.982	870	0.953	1170	0.941	2550	0.918	4050	0.173
280	$< 10^{-5}$	580	0.985	880	0.951	1180	0.942	2600	0.911	4100	0.158
290	$< 10^{-5}$	590	0.986	890	0.950	1190	0.942	2650	0.893	4150	0.138
300	$< 10^{-5}$	600	0.987	900	0.949	1200	0.942	2700	0.822	4200	0.113
310	$< 10^{-5}$	610	0.987	910	0.948	1250	0.943	2750	0.447	4250	$8.6 \cdot 10^{-2}$
320	$< 10^{-5}$	620	0.987	920	0.947	1300	0.945	2800	0.350	4300	$6.2 \cdot 10^{-2}$
330	$< 10^{-5}$	630	0.986	930	0.947	1350	0.948	2850	0.343	4350	$4.1 \cdot 10^{-2}$
340	$< 10^{-5}$	640	0.985	940	0.946	1400	0.949	2900	0.351	4400	$2.3 \cdot 10^{-2}$
350	$< 10^{-5}$	650	0.984	950	0.945	1450	0.954	2950	0.357	4450	$1.0 \cdot 10^{-2}$
360	$< 10^{-5}$	660	0.984	960	0.945	1500	0.959	3000	0.352	4500	$4.4 \cdot 10^{-3}$
370	$< 10^{-5}$	670	0.983	970	0.944	1550	0.963	3050	0.331	4550	$1.7 \cdot 10^{-3}$
380	$< 10^{-5}$	680	0.982	980	0.943	1600	0.966	3100	0.301	4600	$6.2 \cdot 10^{-4}$
390	$< 10^{-5}$	690	0.980	990	0.943	1650	0.968	3150	0.267	4650	$2.6 \cdot 10^{-4}$
400	$< 10^{-5}$	700	0.979	1000	0.943	1700	0.969	3200	0.244	4700	$1.1 \cdot 10^{-4}$
410	$< 10^{-5}$	710	0.977	1010	0.942	1750	0.968	3250	0.224	4750	$5.1 \cdot 10^{-5}$
420	$< 10^{-5}$	720	0.976	1020	0.942	1800	0.967	3300	0.205	4800	$2.4 \cdot 10^{-5}$
430	$< 10^{-5}$	730	0.974	1030	0.942	1850	0.965	3350	0.186	4850	$1.2 \cdot 10^{-5}$
440	$< 10^{-5}$	740	0.973	1040	0.942	1900	0.962	3400	0.171	4900	$< 10^{-5}$
450	$< 10^{-5}$	750	0.971	1050	0.941	1950	0.960	3450	0.160	4950	$< 10^{-5}$
460	$< 10^{-5}$	760	0.969	1060	0.941	2000	0.957	3500	0.153	5000	$< 10^{-5}$
470	$< 10^{-5}$	770	0.968	1070	0.941	2050	0.955	3550	0.152	5050	$< 10^{-5}$
480	$< 10^{-5}$	780	0.966	1080	0.941	2100	0.953	3600	0.155	5100	$< 10^{-5}$
490	$9.7 \cdot 10^{-4}$	790	0.964	1090	0.941	2150	0.949	3650	0.160	5150	$< 10^{-5}$