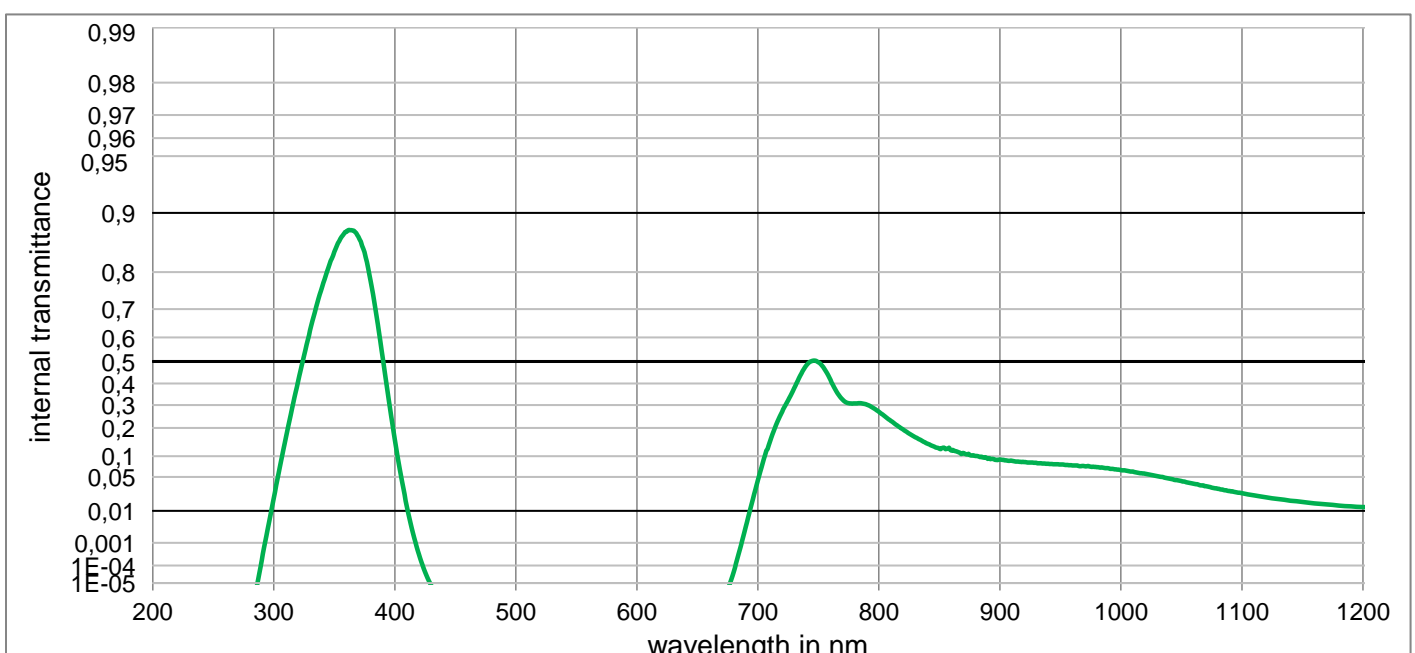
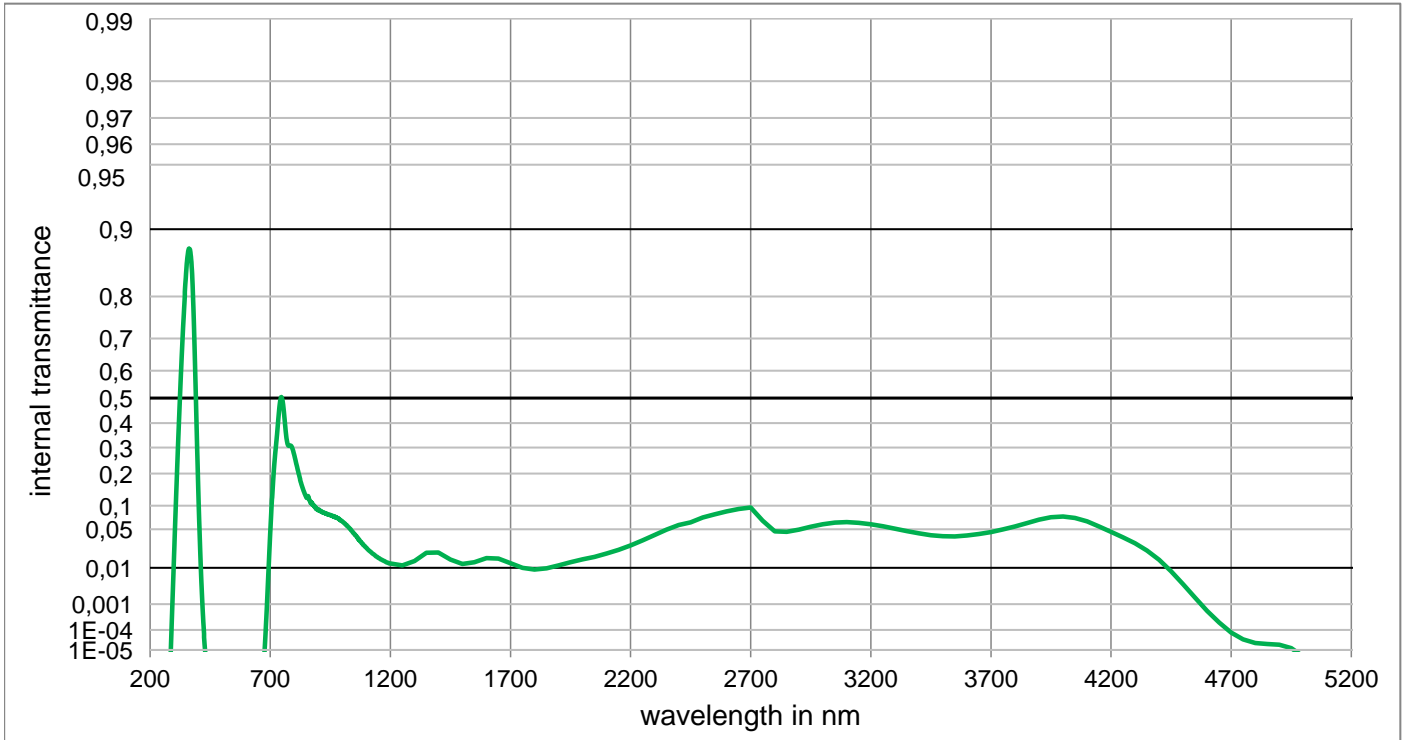


UG2A

Optical properties	Mechanical properties	Colorimetric properties
Reflection factor	Reference thickness	1 mm 2 mm 3 mm
$P_d = 0,918$	$d = 3,00 \text{ mm}$	Illuminant D65 x y Y λ_d P_e
Spectral values guaranteed	Density	
$\tau_i (303 \text{ nm}) \leq 0,07$	$\rho = 2,60 \text{ g/cm}^3$	
$\tau_i (365 \text{ nm}) \geq 0,81$	Knoop hardness	
$\tau_i (405 \text{ nm}) \leq 0,1$	HK[0.1/20]	
$\tau_i (694 \text{ nm}) \leq 0,04$	Thermal properties	Illuminant A x y Y λ_d P_e
$\tau_i (750 \text{ nm}) \leq 0,52$	Transformation temperature	
	$T_g = 484 \text{ }^\circ\text{C}$	
	Thermal expansion in $10^{-6}/\text{K}$	
	$\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})} = 8,7$	
	$\alpha_{(20^\circ\text{C}/300^\circ\text{C})} = 9,9$	
Refractive indices	Chemical properties	Notes
$n_F (486 \text{ nm}) = 1,529$	Chemical resistance	UV
$n_e (546 \text{ nm}) = 1,525$	FR class	Transmission changes are possible under the action of intense ultraviolet radiation.
$n_d (587,6 \text{ nm}) = 1,523$	SR class = 1.0	Ionically colored glass
	AR class = 1.3	Bandpass filter
Sellmeier coefficients	Resistance against humidity	
valid from 295 nm to 1600 nm	Sensitive glass	ISO 23364:2021
$B_1 = 0,8819$	see pocket catalogue "Optical Filter Glass 2024", chapter 5.5	
$B_2 = 0,4027$		Disclaimer
$B_3 = 1,2925$		All data without tolerances are to be understood to be reference values.
$C_1 = 4,435\text{E-}03 \text{ } \mu\text{m}^2$		
$C_2 = 2,0863\text{E-}02 \text{ } \mu\text{m}^2$		
$C_3 = 169,418 \text{ } \mu\text{m}^2$		
Internal quality		
Bubble class 2		



UG2A



Internal transmittance τ_i at reference thickness
 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	< 1,000E-05	500	< 1,000E-05	800	2,694E-01	1100	2,523E-02	2200	2,753E-02	3700	4,550E-02
210	< 1,000E-05	510	< 1,000E-05	810	2,291E-01	1110	2,269E-02	2250	3,365E-02	3750	4,960E-02
220	< 1,000E-05	520	< 1,000E-05	820	1,934E-01	1120	2,075E-02	2300	4,119E-02	3800	5,487E-02
230	< 1,000E-05	530	< 1,000E-05	830	1,638E-01	1130	1,906E-02	2350	4,948E-02	3850	6,125E-02
240	< 1,000E-05	540	< 1,000E-05	840	1,408E-01	1140	1,742E-02	2400	5,747E-02	3900	6,769E-02
250	< 1,000E-05	550	< 1,000E-05	850	1,232E-01	1150	1,630E-02	2450	6,255E-02	3950	7,273E-02
260	< 1,000E-05	560	< 1,000E-05	860	1,173E-01	1160	1,523E-02	2500	7,233E-02	4000	7,429E-02
270	< 1,000E-05	570	< 1,000E-05	870	1,091E-01	1170	1,438E-02	2550	7,920E-02	4050	7,123E-02
280	< 1,000E-05	580	< 1,000E-05	880	1,008E-01	1180	1,343E-02	2600	8,580E-02	4100	6,414E-02
290	1,820E-04	590	< 1,000E-05	890	9,226E-02	1190	1,285E-02	2650	9,190E-02	4150	5,492E-02
300	1,967E-02	600	< 1,000E-05	900	8,992E-02	1200	1,239E-02	2700	9,526E-02	4200	4,586E-02
310	1,622E-01	610	< 1,000E-05	910	8,713E-02	1250	1,130E-02	2750	6,593E-02	4250	3,757E-02
320	4,089E-01	620	< 1,000E-05	920	8,362E-02	1300	1,398E-02	2800	4,651E-02	4300	3,000E-02
330	6,267E-01	630	< 1,000E-05	930	8,186E-02	1350	2,031E-02	2850	4,580E-02	4350	2,243E-02
340	7,641E-01	640	< 1,000E-05	940	7,948E-02	1400	2,052E-02	2900	4,947E-02	4400	1,481E-02
350	8,415E-01	650	< 1,000E-05	950	7,743E-02	1450	1,494E-02	2950	5,439E-02	4450	8,338E-03
360	8,747E-01	660	< 1,000E-05	960	7,516E-02	1500	1,214E-02	3000	5,885E-02	4500	3,947E-03
370	8,670E-01	670	< 1,000E-05	970	7,294E-02	1550	1,314E-02	3050	6,181E-02	4550	1,607E-03
380	7,794E-01	680	4,743E-05	980	7,087E-02	1600	1,595E-02	3100	6,279E-02	4600	5,872E-04
390	5,154E-01	690	3,525E-03	990	6,786E-02	1650	1,574E-02	3150	6,159E-02	4650	2,055E-04
400	1,524E-01	700	4,381E-02	1000	6,441E-02	1700	1,264E-02	3200	5,873E-02	4700	7,701E-05
410	1,277E-02	710	1,482E-01	1010	6,074E-02	1750	1,000E-02	3250	5,510E-02	4750	3,602E-05
420	3,343E-04	720	2,701E-01	1020	5,634E-02	1800	9,086E-03	3300	5,112E-02	4800	2,360E-05
430	< 1,000E-05	730	3,772E-01	1030	5,164E-02	1850	9,759E-03	3350	4,711E-02	4850	2,090E-05
440	< 1,000E-05	740	4,822E-01	1040	4,693E-02	1900	1,129E-02	3400	4,352E-02	4900	1,931E-05
450	< 1,000E-05	750	4,969E-01	1050	4,254E-02	1950	1,318E-02	3450	4,076E-02	4950	1,251E-05
460	< 1,000E-05	760	4,160E-01	1060	3,842E-02	2000	1,507E-02	3500	3,919E-02	5000	< 1,000E-05
470	< 1,000E-05	770	3,251E-01	1070	3,455E-02	2050	1,693E-02	3550	3,909E-02	5050	< 1,000E-05
480	< 1,000E-05	780	3,076E-01	1080	3,079E-02	2100	1,983E-02	3600	4,021E-02	5100	< 1,000E-05
490	< 1,000E-05	790	3,020E-01	1090	2,776E-02	2150	2,320E-02	3650	4,237E-02	5150	< 1,000E-05