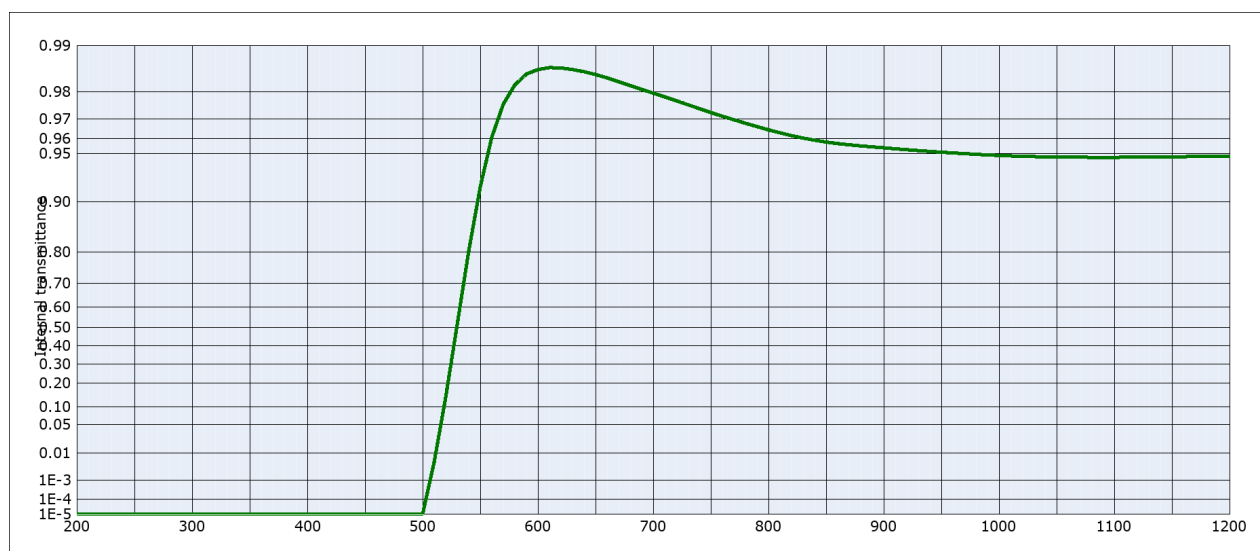


DATA SHEET

SCHOTT OG530

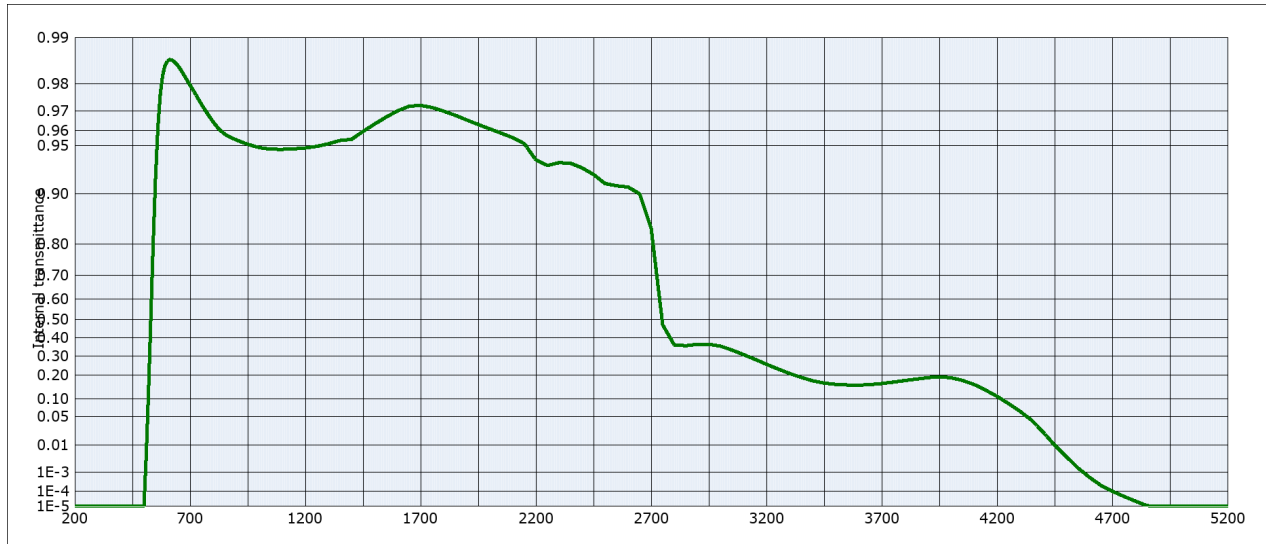
| | | | | |
|---|--|--|--|---|
| OG530 | | Density ρ [g/cm ³] 2.56 | | Notes Colloidally colored glass Longpass filter All data without tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed". |
| Reflection factor P_d 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 λ_c ($\tau_i = 0.5$) [nm] = 530 ± 6 λ_s ($\tau_{i,U} = 0.00001$) [nm] = 460 λ_p ($\tau_{i,L} = 0.93$) [nm] = 600 | | Transformation temperature T _g [°C] 506 | | |
| Refractive index n n_e (546.1 nm) = 1.510 n_d (587.6 nm) = 1.510 n_s (852.1 nm) = 1.510 n_t (1014.0 nm) = 1.500 | | Thermal expansion $\alpha_{-30/+70} [10^{-6}/K]$ 7.9 $\alpha_{20/300} [10^{-6}/K]$ 9.0 $\alpha_{20/200} [10^{-6}/K]$ | | |
| | | Temperature coefficient T _K [nm/°C] 0.11 | | |

| 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 | 0.534 | 0.545 | 0.550 | x | 0.524 | 0.536 | 0.542 | x | 0.476 | 0.496 | 0.505 | |
| y | 0.457 | 0.452 | 0.447 | y | 0.466 | 0.460 | 0.454 | y | 0.501 | 0.498 | 0.490 | |
| Y | 81 | 78 | 75 | Y | 80 | 76 | 74 | Y | 74 | 69 | 66 | |
| λ_d [nm] | 584 | 585 | 586 | λ_d [nm] | 583 | 584 | 585 | λ_d [nm] | 576 | 578 | 579 | |
| P_e | 0.94 | 0.98 | 0.98 | P_e | 0.94 | 0.98 | 0.99 | P_e | 0.94 | 0.99 | 0.99 | |



DATA SHEET

SCHOTT OG530



Internal transmittance τ_i at reference thickness $d = 3 \text{ mm}$
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 | $< 10^{-5}$ | 800 | 0.965 | 1100 | 0.947 | 2200 | 0.939 | 3700 | 0.162 |
| 210 | $< 10^{-5}$ | 510 | $5.2 \cdot 10^{-3}$ | 810 | 0.963 | 1110 | 0.947 | 2250 | 0.933 | 3750 | 0.168 |
| 220 | $< 10^{-5}$ | 520 | 0.136 | 820 | 0.962 | 1120 | 0.947 | 2300 | 0.936 | 3800 | 0.175 |
| 230 | $< 10^{-5}$ | 530 | 0.514 | 830 | 0.960 | 1130 | 0.948 | 2350 | 0.936 | 3850 | 0.182 |
| 240 | $< 10^{-5}$ | 540 | 0.802 | 840 | 0.959 | 1140 | 0.948 | 2400 | 0.931 | 3900 | 0.189 |
| 250 | $< 10^{-5}$ | 550 | 0.919 | 850 | 0.958 | 1150 | 0.948 | 2450 | 0.924 | 3950 | 0.193 |
| 260 | $< 10^{-5}$ | 560 | 0.961 | 860 | 0.957 | 1160 | 0.948 | 2500 | 0.914 | 4000 | 0.188 |
| 270 | $< 10^{-5}$ | 570 | 0.976 | 870 | 0.956 | 1170 | 0.948 | 2550 | 0.911 | 4050 | 0.176 |
| 280 | $< 10^{-5}$ | 580 | 0.982 | 880 | 0.955 | 1180 | 0.948 | 2600 | 0.909 | 4100 | 0.158 |
| 290 | $< 10^{-5}$ | 590 | 0.985 | 890 | 0.955 | 1190 | 0.948 | 2650 | 0.900 | 4150 | 0.134 |
| 300 | $< 10^{-5}$ | 600 | 0.986 | 900 | 0.954 | 1200 | 0.948 | 2700 | 0.838 | 4200 | 0.110 |
| 310 | $< 10^{-5}$ | 610 | 0.986 | 910 | 0.954 | 1250 | 0.950 | 2750 | 0.470 | 4250 | $8.5 \cdot 10^{-2}$ |
| 320 | $< 10^{-5}$ | 620 | 0.986 | 920 | 0.953 | 1300 | 0.951 | 2800 | 0.361 | 4300 | $6.3 \cdot 10^{-2}$ |
| 330 | $< 10^{-5}$ | 630 | 0.986 | 930 | 0.952 | 1350 | 0.954 | 2850 | 0.356 | 4350 | $4.3 \cdot 10^{-2}$ |
| 340 | $< 10^{-5}$ | 640 | 0.985 | 940 | 0.952 | 1400 | 0.955 | 2900 | 0.364 | 4400 | $2.3 \cdot 10^{-2}$ |
| 350 | $< 10^{-5}$ | 650 | 0.985 | 950 | 0.951 | 1450 | 0.959 | 2950 | 0.364 | 4450 | $1.0 \cdot 10^{-2}$ |
| 360 | $< 10^{-5}$ | 660 | 0.984 | 960 | 0.951 | 1500 | 0.964 | 3000 | 0.354 | 4500 | $4.3 \cdot 10^{-3}$ |
| 370 | $< 10^{-5}$ | 670 | 0.983 | 970 | 0.950 | 1550 | 0.967 | 3050 | 0.333 | 4550 | $1.6 \cdot 10^{-3}$ |
| 380 | $< 10^{-5}$ | 680 | 0.982 | 980 | 0.950 | 1600 | 0.970 | 3100 | 0.308 | 4600 | $5.9 \cdot 10^{-4}$ |
| 390 | $< 10^{-5}$ | 690 | 0.981 | 990 | 0.949 | 1650 | 0.972 | 3150 | 0.282 | 4650 | $2.3 \cdot 10^{-4}$ |
| 400 | $< 10^{-5}$ | 700 | 0.980 | 1000 | 0.949 | 1700 | 0.972 | 3200 | 0.256 | 4700 | $1.0 \cdot 10^{-4}$ |
| 410 | $< 10^{-5}$ | 710 | 0.978 | 1010 | 0.948 | 1750 | 0.972 | 3250 | 0.231 | 4750 | $4.9 \cdot 10^{-5}$ |
| 420 | $< 10^{-5}$ | 720 | 0.977 | 1020 | 0.948 | 1800 | 0.970 | 3300 | 0.209 | 4800 | $2.4 \cdot 10^{-5}$ |
| 430 | $< 10^{-5}$ | 730 | 0.976 | 1030 | 0.948 | 1850 | 0.968 | 3350 | 0.190 | 4850 | $1.1 \cdot 10^{-5}$ |
| 440 | $< 10^{-5}$ | 740 | 0.974 | 1040 | 0.948 | 1900 | 0.966 | 3400 | 0.174 | 4900 | $< 10^{-5}$ |
| 450 | $< 10^{-5}$ | 750 | 0.973 | 1050 | 0.948 | 1950 | 0.963 | 3450 | 0.164 | 4950 | $< 10^{-5}$ |
| 460 | $< 10^{-5}$ | 760 | 0.971 | 1060 | 0.947 | 2000 | 0.961 | 3500 | 0.158 | 5000 | $< 10^{-5}$ |
| 470 | $< 10^{-5}$ | 770 | 0.970 | 1070 | 0.947 | 2050 | 0.958 | 3550 | 0.156 | 5050 | $< 10^{-5}$ |
| 480 | $< 10^{-5}$ | 780 | 0.968 | 1080 | 0.947 | 2100 | 0.956 | 3600 | 0.155 | 5100 | $< 10^{-5}$ |
| 490 | $< 10^{-5}$ | 790 | 0.966 | 1090 | 0.947 | 2150 | 0.952 | 3650 | 0.157 | 5150 | $< 10^{-5}$ |