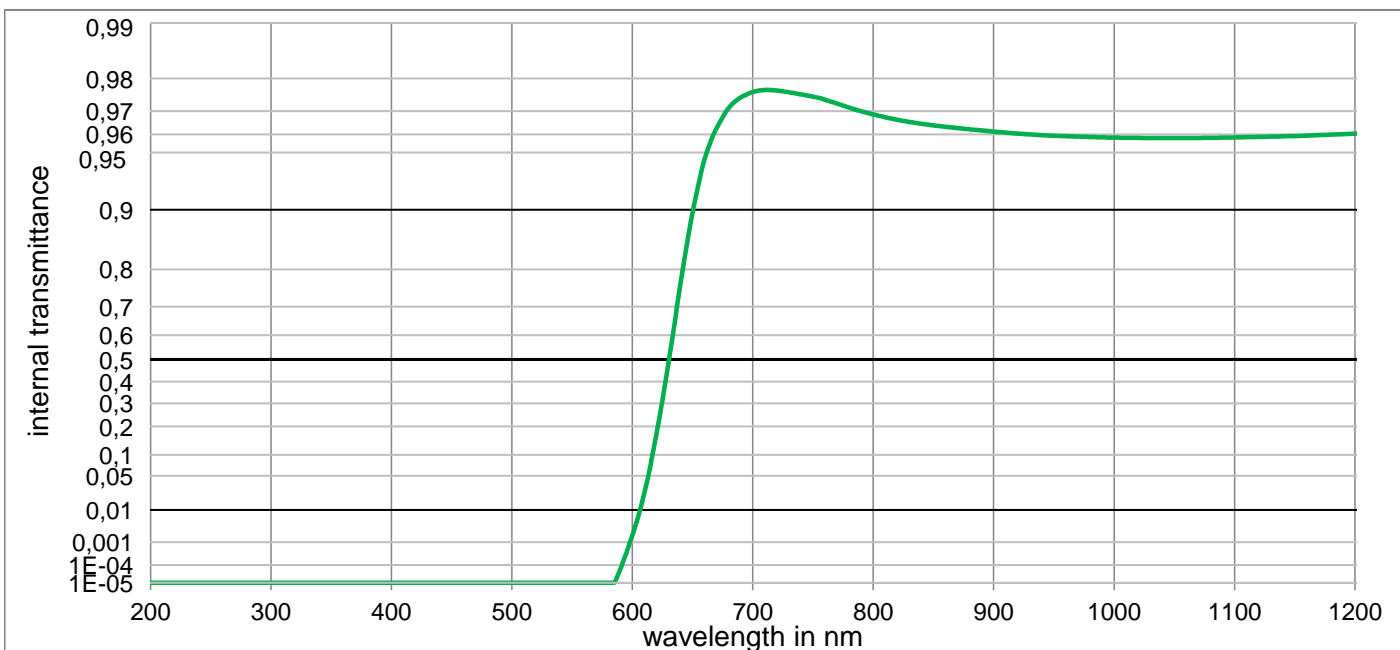


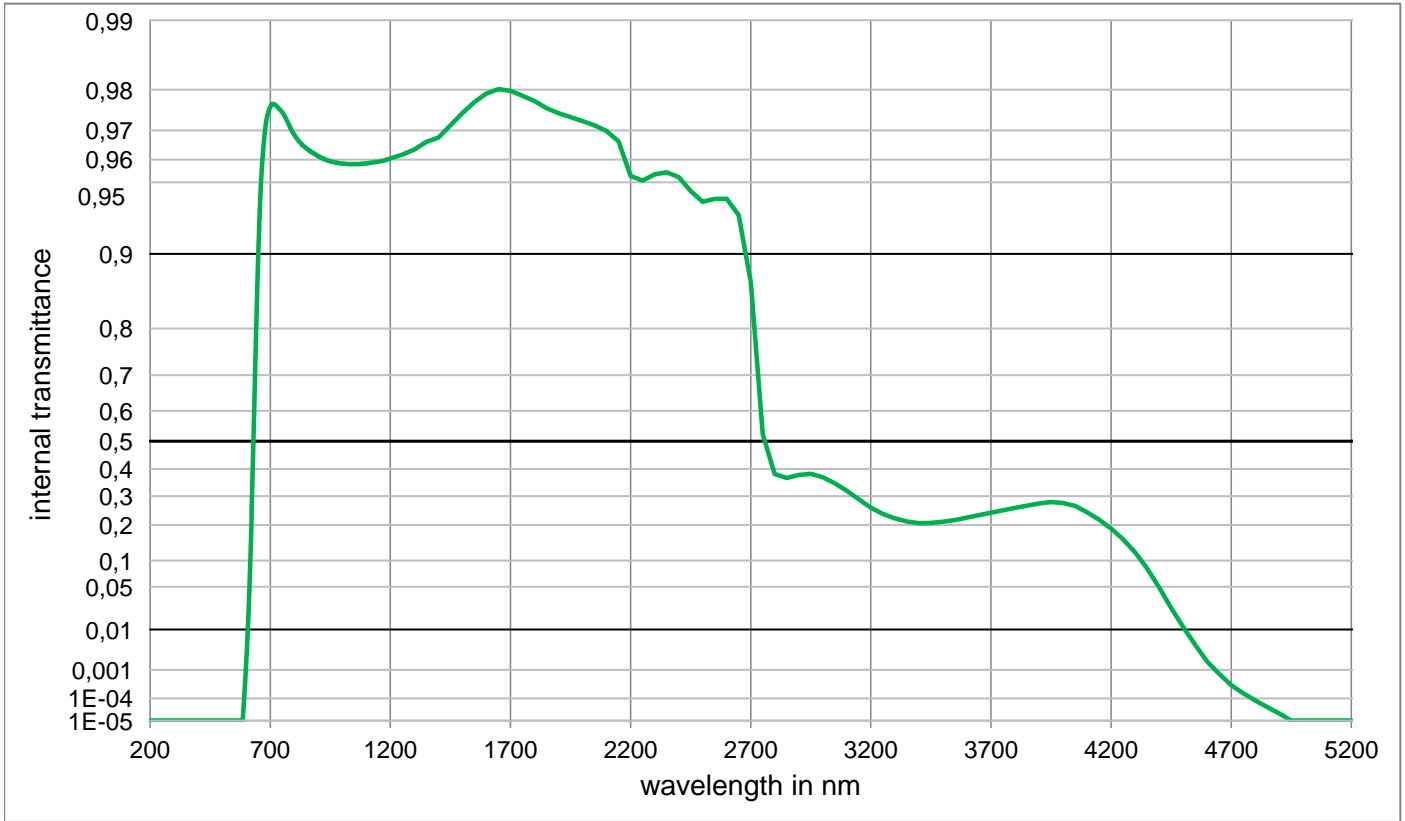
Data Sheet

RG630

| | | |
|---|---|--|
| Optical properties | Mechanical properties | Colorimetric properties |
| Reflection factor | Reference thickness | |
| $P_d = 0,918$ | $d = 3,00 \text{ mm}$ | 1 mm 2 mm 3 mm |
| Spectral values guaranteed (d = 3 mm) | Density | Illuminant D65 |
| $\lambda_{i,0,5} = 630 \text{ nm} \pm 6 \text{ nm}$ | $\rho = 2,65 \text{ g/cm}^3$ | x 0,624 0,708 0,716 |
| $\lambda_s (\tau_{i,U} = 1E-05) = 540 \text{ nm}$ | Knoop hardness | y 0,305 0,289 0,284 |
| $\lambda_p (\tau_{i,L} = 0,94) = 710 \text{ nm}$ | $HK_{[0.1/20]} = 456$ | Y 9,3 5,1 4,0 |
| | | λ_d 625 nm 633 nm 637 nm |
| | | P_e 0,802 0,992 1,000 |
| | Thermal properties | Illuminant A |
| | Transformation temperature | x 0,678 0,712 0,718 |
| | $T_g = 527 \text{ }^\circ\text{C}$ | y 0,307 0,287 0,282 |
| | Thermal expansion in $10^{-6}/K$ | Y 14,8 9,4 7,6 |
| Refractive indices | $\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})} = 8,0$ | λ_d 627 nm 634 nm 639 nm |
| $n_d (587,6 \text{ nm}) = 1,52$ | $\alpha_{(20^\circ\text{C}/300^\circ\text{C})} = 9,2$ | P_e 0,899 0,996 0,999 |
| $n_s (852 \text{ nm}) = 1,52$ | Temperature coefficient | |
| $n_t (1014 \text{ nm}) = 1,51$ | $Tk = 0,14 \text{ nm/K}$ | |
| | | |
| Sellmeier coefficients | Chemical properties | Notes |
| on request | Chemical resistance | |
| | FR class = 0 | Stricking glass |
| | SR class = 1 | Longpass filter |
| | AR class = 1 | |
| | Resistance against humidity | |
| | Resistant glass | |
| Internal quality | see pocket catalogue "Optical Filter Glass 2024", chapter 5.5 | ISO 23364:2021 |
| Bubble class 3 | | Disclaimer |
| | | All data without tolerances are to be understood to be reference values. |



RG630



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 | < 1,0E-05 | 500 | < 1,000E-05 | 800 | 9,688E-01 | 1100 | 9,585E-01 | 2200 | 9,530E-01 | 3700 | 2,410E-01 |
| 210 | < 1,0E-05 | 510 | < 1,000E-05 | 810 | 9,676E-01 | 1110 | 9,586E-01 | 2250 | 9,509E-01 | 3750 | 2,495E-01 |
| 220 | < 1,0E-05 | 520 | < 1,000E-05 | 820 | 9,666E-01 | 1120 | 9,587E-01 | 2300 | 9,537E-01 | 3800 | 2,579E-01 |
| 230 | < 1,0E-05 | 530 | < 1,000E-05 | 830 | 9,657E-01 | 1130 | 9,589E-01 | 2350 | 9,546E-01 | 3850 | 2,660E-01 |
| 240 | < 1,0E-05 | 540 | < 1,000E-05 | 840 | 9,649E-01 | 1140 | 9,590E-01 | 2400 | 9,525E-01 | 3900 | 2,735E-01 |
| 250 | < 1,0E-05 | 550 | < 1,000E-05 | 850 | 9,642E-01 | 1150 | 9,592E-01 | 2450 | 9,456E-01 | 3950 | 2,783E-01 |
| 260 | < 1,0E-05 | 560 | < 1,000E-05 | 860 | 9,636E-01 | 1160 | 9,594E-01 | 2500 | 9,395E-01 | 4000 | 2,755E-01 |
| 270 | < 1,0E-05 | 570 | < 1,000E-05 | 870 | 9,630E-01 | 1170 | 9,596E-01 | 2550 | 9,412E-01 | 4050 | 2,645E-01 |
| 280 | < 1,0E-05 | 580 | < 1,000E-05 | 880 | 9,625E-01 | 1180 | 9,598E-01 | 2600 | 9,412E-01 | 4100 | 2,425E-01 |
| 290 | < 1,0E-05 | 590 | 6,236E-05 | 890 | 9,619E-01 | 1190 | 9,601E-01 | 2650 | 9,312E-01 | 4150 | 2,177E-01 |
| 300 | < 1,0E-05 | 600 | 1,716E-03 | 900 | 9,614E-01 | 1200 | 9,604E-01 | 2700 | 8,695E-01 | 4200 | 1,884E-01 |
| 310 | < 1,0E-05 | 610 | 2,467E-02 | 910 | 9,608E-01 | 1250 | 9,619E-01 | 2750 | 5,243E-01 | 4250 | 1,559E-01 |
| 320 | < 1,000E-05 | 620 | 1,692E-01 | 920 | 9,604E-01 | 1300 | 9,638E-01 | 2800 | 3,813E-01 | 4300 | 1,198E-01 |
| 330 | < 1,000E-05 | 630 | 4,871E-01 | 930 | 9,600E-01 | 1350 | 9,664E-01 | 2850 | 3,670E-01 | 4350 | 8,250E-02 |
| 340 | < 1,000E-05 | 640 | 7,652E-01 | 940 | 9,596E-01 | 1400 | 9,678E-01 | 2900 | 3,776E-01 | 4400 | 4,948E-02 |
| 350 | < 1,000E-05 | 650 | 8,970E-01 | 950 | 9,593E-01 | 1450 | 9,715E-01 | 2950 | 3,817E-01 | 4450 | 2,448E-02 |
| 360 | < 1,000E-05 | 660 | 9,457E-01 | 960 | 9,591E-01 | 1500 | 9,748E-01 | 3000 | 3,698E-01 | 4500 | 1,133E-02 |
| 370 | < 1,000E-05 | 670 | 9,631E-01 | 970 | 9,589E-01 | 1550 | 9,774E-01 | 3050 | 3,471E-01 | 4550 | 4,684E-03 |
| 380 | < 1,000E-05 | 680 | 9,711E-01 | 980 | 9,587E-01 | 1600 | 9,792E-01 | 3100 | 3,189E-01 | 4600 | 1,739E-03 |
| 390 | < 1,000E-05 | 690 | 9,747E-01 | 990 | 9,585E-01 | 1650 | 9,801E-01 | 3150 | 2,884E-01 | 4650 | 7,540E-04 |
| 400 | < 1,000E-05 | 700 | 9,763E-01 | 1000 | 9,584E-01 | 1700 | 9,798E-01 | 3200 | 2,589E-01 | 4700 | 3,162E-04 |
| 410 | < 1,000E-05 | 710 | 9,769E-01 | 1010 | 9,583E-01 | 1750 | 9,788E-01 | 3250 | 2,366E-01 | 4750 | 1,596E-04 |
| 420 | < 1,000E-05 | 720 | 9,768E-01 | 1020 | 9,582E-01 | 1800 | 9,776E-01 | 3300 | 2,219E-01 | 4800 | 8,375E-05 |
| 430 | < 1,000E-05 | 730 | 9,763E-01 | 1030 | 9,582E-01 | 1850 | 9,760E-01 | 3350 | 2,117E-01 | 4850 | 4,355E-05 |
| 440 | < 1,000E-05 | 740 | 9,756E-01 | 1040 | 9,582E-01 | 1900 | 9,747E-01 | 3400 | 2,061E-01 | 4900 | 2,203E-05 |
| 450 | < 1,000E-05 | 750 | 9,749E-01 | 1050 | 9,581E-01 | 1950 | 9,737E-01 | 3450 | 2,064E-01 | 4950 | < 1,000E-05 |
| 460 | < 1,000E-05 | 760 | 9,740E-01 | 1060 | 9,582E-01 | 2000 | 9,727E-01 | 3500 | 2,103E-01 | 5000 | < 1,000E-05 |
| 470 | < 1,000E-05 | 770 | 9,727E-01 | 1070 | 9,582E-01 | 2050 | 9,715E-01 | 3550 | 2,160E-01 | 5050 | < 1,000E-05 |
| 480 | < 1,000E-05 | 780 | 9,713E-01 | 1080 | 9,583E-01 | 2100 | 9,698E-01 | 3600 | 2,240E-01 | 5100 | < 1,000E-05 |
| 490 | < 1,000E-05 | 790 | 9,700E-01 | 1090 | 9,584E-01 | 2150 | 9,666E-01 | 3650 | 2,323E-01 | 5150 | < 1,000E-05 |