

## RG695

| Optische Eigenschaften                    |                              |
|---|------------------------------|
| <b>Reflexionsfaktor</b>                   |                              |
| $P_d = 0,915$                             |                              |
| <b>Spektrale Garantiewerte (d = 3 mm)</b> |                              |
| $\lambda_c (\tau_i = 0,5)$                | = 695 nm $\pm$ 6 nm          |
| $\lambda_s (\tau_{i,U} = 1E-05)$          | = 610 nm                     |
| $\lambda_p (\tau_{i,L} = 0,96)$           | = 780 nm                     |
| <b>Brechungsindizes</b>                   |                              |
| $n_d (587,6 \text{ nm})$                  | = 1,53                       |
| $n_s (852 \text{ nm})$                    | = 1,53                       |
| $n_t (1014 \text{ nm})$                   | = 1,52                       |
| <b>Sellmeierkoeffizienten</b>             |                              |
| gültig von 440 nm bis 1550 nm             |                              |
| $B_1$                                     | = 0,6009                     |
| $B_2$                                     | = 0,7114                     |
| $B_3$                                     | = 25,2603                    |
| $C_1$                                     | = 1,682E-02 $\mu\text{m}^2$  |
| $C_2$                                     | = 4,0132E-03 $\mu\text{m}^2$ |
| $C_3$                                     | = 4853,501 $\mu\text{m}^2$   |
| <b>Innere Qualität</b>                    |                              |
| Blasenklasse                              | 3                            |

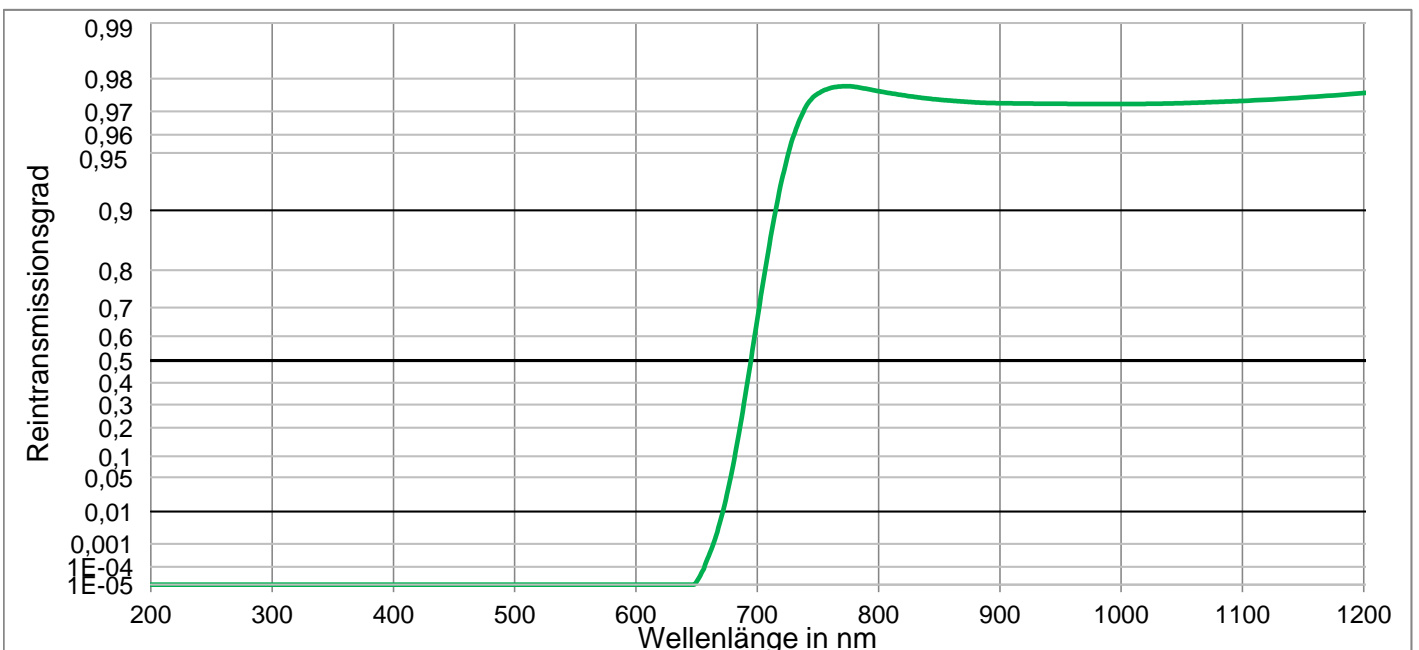
| Mechanische Eigenschaften    |  |
|------------------------------|--|
| <b>Referenzdicke</b>         |  |
| $d = 3,00 \text{ mm}$        |  |
| <b>Dichte</b>                |  |
| $\rho = 2,76 \text{ g/cm}^3$ |  |
| <b>Knoophärte</b>            |  |
| $HK_{[0.1/20]} = 459$        |  |

| Thermische Eigenschaften                                |             |
|---|-------------|
| <b>Transformationstemperatur</b>                        |             |
| $T_g = 532 \text{ }^\circ\text{C}$                      |             |
| <b>Wärmeausdehnung in <math>10^{-6}/\text{K}</math></b> |             |
| $\alpha (-30^\circ\text{C}/+70^\circ\text{C})$          | = 8,1       |
| $\alpha (20^\circ\text{C}/300^\circ\text{C})$           | = 9,4       |
| <b>Temperaturkoeffizient</b>                            |             |
| $Tk$  | = 0,18 nm/K |

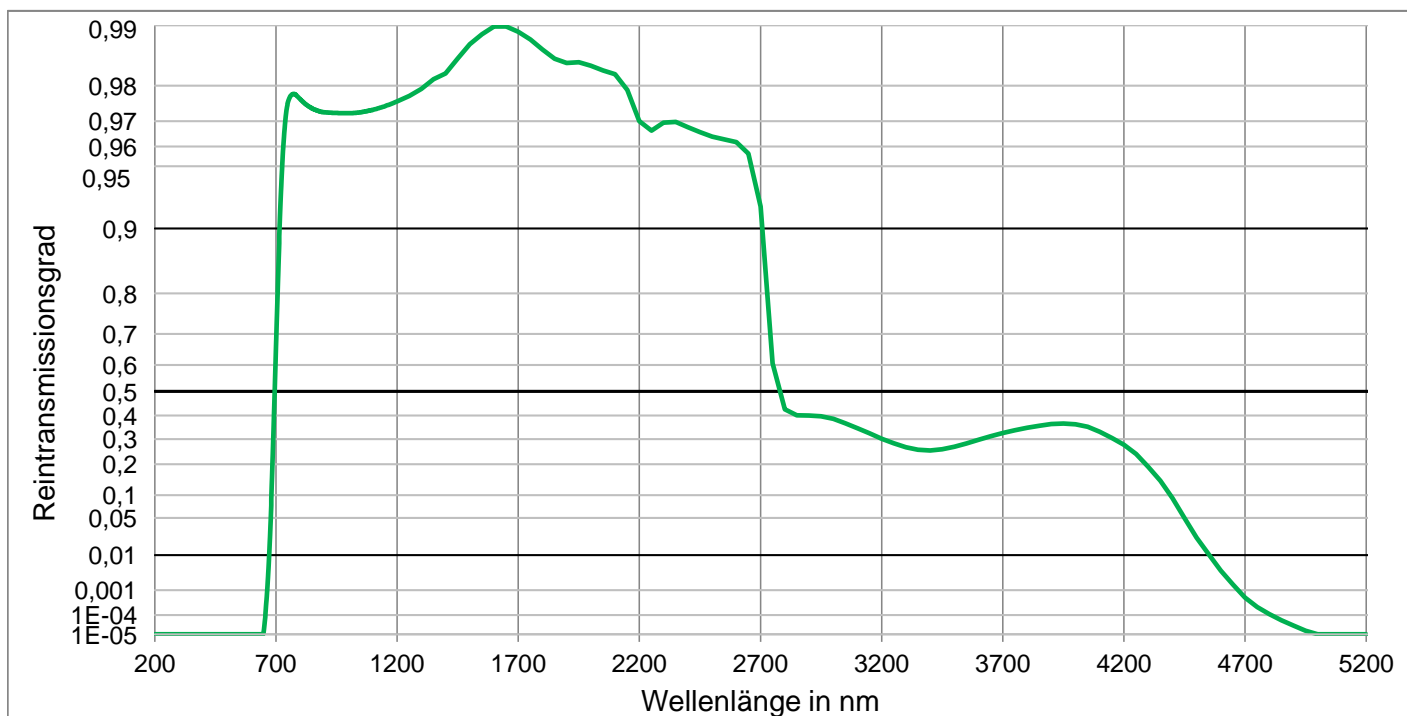
| Chemische Eigenschaften                                      |     |
|--|-----|
| <b>Chemische Haltbarkeit</b>                                 |     |
| FR Klasse  | = 0 |
| SR Klasse  | = 1 |
| AR Klasse  | = 1 |
| <b>Feuchtebeständigkeit</b>                                  |     |
| Resistentes Glas   |     |
| siehe Pocketkatalog "Optisches Filterglas 2020", Kapitel 5.5 |     |

| Farbmetrische Eigenschaften |             | 1 mm | 2 mm | 3 mm |
|-----------------------------|-------------|------|------|------|
| Illuminant D65              | x           |      |      |      |
|                             | y           |      |      |      |
|                             | Y           |      |      |      |
|                             | $\lambda_d$ |      |      |      |
|                             | $P_e$       |      |      |      |
| Illuminant A                | x           |      |      |      |
|                             | y           |      |      |      |
|                             | Y           |      |      |      |
|                             | $\lambda_d$ |      |      |      |
|                             | $P_e$       |      |      |      |

| Bemerkungen   |  |
|---|--|
| Anlaufglas  |  |
| Langpassfilter  |  |
| DIN 58131   |  |
| <b>Disclaimer</b>   |  |
| Alle Angaben ohne Toleranzen sind als Richtwerte zu betrachten. |  |



## RG695



**Reintransmissionsgrad  $t_i$  bei der Referenzdicke**  
 Die Reintransmissionsgrade, tabellarisch und graphisch, sind als Richtwerte zu verstehen.

| $\lambda$ /nm | $\tau_i$    | $\lambda$ /nm | $\tau_i$    | $\lambda$ /nm | $\tau_i$  | $\lambda$ /nm | $\tau_i$  | $\lambda$ /nm | $\tau_i$  | $\lambda$ /nm | $\tau_i$    |
|---------------|-------------|---------------|-------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-------------|
| 200           | < 1,0E-05   | 500           | < 1,000E-05 | 800           | 9,766E-01 | 1100          | 9,736E-01 | 2200          | 9,700E-01 | 3700          | 3,257E-01   |
| 210           | < 1,0E-05   | 510           | < 1,000E-05 | 810           | 9,760E-01 | 1110          | 9,738E-01 | 2250          | 9,666E-01 | 3750          | 3,377E-01   |
| 220           | < 1,0E-05   | 520           | < 1,000E-05 | 820           | 9,754E-01 | 1120          | 9,740E-01 | 2300          | 9,695E-01 | 3800          | 3,478E-01   |
| 230           | < 1,0E-05   | 530           | < 1,000E-05 | 830           | 9,749E-01 | 1130          | 9,743E-01 | 2350          | 9,698E-01 | 3850          | 3,564E-01   |
| 240           | < 1,0E-05   | 540           | < 1,000E-05 | 840           | 9,744E-01 | 1140          | 9,745E-01 | 2400          | 9,679E-01 | 3900          | 3,633E-01   |
| 250           | < 1,0E-05   | 550           | < 1,000E-05 | 850           | 9,740E-01 | 1150          | 9,747E-01 | 2450          | 9,660E-01 | 3950          | 3,659E-01   |
| 260           | < 1,0E-05   | 560           | < 1,000E-05 | 860           | 9,737E-01 | 1160          | 9,750E-01 | 2500          | 9,642E-01 | 4000          | 3,632E-01   |
| 270           | < 1,0E-05   | 570           | < 1,000E-05 | 870           | 9,734E-01 | 1170          | 9,752E-01 | 2550          | 9,631E-01 | 4050          | 3,523E-01   |
| 280           | < 1,0E-05   | 580           | < 1,000E-05 | 880           | 9,732E-01 | 1180          | 9,755E-01 | 2600          | 9,619E-01 | 4100          | 3,308E-01   |
| 290           | < 1,0E-05   | 590           | < 1,000E-05 | 890           | 9,730E-01 | 1190          | 9,758E-01 | 2650          | 9,567E-01 | 4150          | 3,050E-01   |
| 300           | < 1,0E-05   | 600           | < 1,000E-05 | 900           | 9,729E-01 | 1200          | 9,761E-01 | 2700          | 9,214E-01 | 4200          | 2,770E-01   |
| 310           | < 1,0E-05   | 610           | < 1,000E-05 | 910           | 9,728E-01 | 1250          | 9,775E-01 | 2750          | 6,057E-01 | 4250          | 2,394E-01   |
| 320           | < 1,000E-05 | 620           | < 1,000E-05 | 920           | 9,728E-01 | 1300          | 9,793E-01 | 2800          | 4,261E-01 | 4300          | 1,911E-01   |
| 330           | < 1,000E-05 | 630           | < 1,000E-05 | 930           | 9,727E-01 | 1350          | 9,814E-01 | 2850          | 4,014E-01 | 4350          | 1,424E-01   |
| 340           | < 1,000E-05 | 640           | < 1,000E-05 | 940           | 9,727E-01 | 1400          | 9,826E-01 | 2900          | 4,002E-01 | 4400          | 9,250E-02   |
| 350           | < 1,000E-05 | 650           | 1,534E-05   | 950           | 9,727E-01 | 1450          | 9,854E-01 | 2950          | 3,970E-01 | 4450          | 4,970E-02   |
| 360           | < 1,000E-05 | 660           | 3,350E-04   | 960           | 9,727E-01 | 1500          | 9,876E-01 | 3000          | 3,859E-01 | 4500          | 2,317E-02   |
| 370           | < 1,000E-05 | 670           | 6,330E-03   | 970           | 9,726E-01 | 1550          | 9,889E-01 | 3050          | 3,665E-01 | 4550          | 1,037E-02   |
| 380           | < 1,000E-05 | 680           | 7,498E-02   | 980           | 9,726E-01 | 1600          | 9,899E-01 | 3100          | 3,462E-01 | 4600          | 4,025E-03   |
| 390           | < 1,000E-05 | 690           | 3,367E-01   | 990           | 9,726E-01 | 1650          | 9,899E-01 | 3150          | 3,243E-01 | 4650          | 1,530E-03   |
| 400           | < 1,000E-05 | 700           | 6,612E-01   | 1000          | 9,726E-01 | 1700          | 9,892E-01 | 3200          | 3,018E-01 | 4700          | 5,346E-04   |
| 410           | < 1,000E-05 | 710           | 8,508E-01   | 1010          | 9,726E-01 | 1750          | 9,882E-01 | 3250          | 2,824E-01 | 4750          | 2,234E-04   |
| 420           | < 1,000E-05 | 720           | 9,295E-01   | 1020          | 9,727E-01 | 1800          | 9,868E-01 | 3300          | 2,667E-01 | 4800          | 1,104E-04   |
| 430           | < 1,000E-05 | 730           | 9,596E-01   | 1030          | 9,727E-01 | 1850          | 9,853E-01 | 3350          | 2,563E-01 | 4850          | 5,636E-05   |
| 440           | < 1,000E-05 | 740           | 9,716E-01   | 1040          | 9,728E-01 | 1900          | 9,846E-01 | 3400          | 2,535E-01 | 4900          | 3,062E-05   |
| 450           | < 1,000E-05 | 750           | 9,759E-01   | 1050          | 9,729E-01 | 1950          | 9,847E-01 | 3450          | 2,581E-01 | 4950          | 1,570E-05   |
| 460           | < 1,000E-05 | 760           | 9,775E-01   | 1060          | 9,730E-01 | 2000          | 9,841E-01 | 3500          | 2,681E-01 | 5000          | < 1,000E-05 |
| 470           | < 1,000E-05 | 770           | 9,780E-01   | 1070          | 9,732E-01 | 2050          | 9,832E-01 | 3550          | 2,819E-01 | 5050          | < 1,000E-05 |
| 480           | < 1,000E-05 | 780           | 9,779E-01   | 1080          | 9,733E-01 | 2100          | 9,825E-01 | 3600          | 2,973E-01 | 5100          | < 1,000E-05 |
| 490           | < 1,000E-05 | 790           | 9,773E-01   | 1090          | 9,735E-01 | 2150          | 9,790E-01 | 3650          | 3,121E-01 | 5150          | < 1,000E-05 |