

BK7G18  
520636.252

| Brechzahlen  |                |         |
|--------------|----------------|---------|
|              | $\lambda$ [nm] |         |
| $n_{2325,4}$ | 2325,4         | 1,49203 |
| $n_{1970,1}$ | 1970,1         | 1,49777 |
| $n_{1529,6}$ | 1529,6         | 1,50373 |
| $n_{1060,0}$ | 1060,0         | 1,50953 |
| $n_t$        | 1014,0         | 1,51015 |
| $n_s$        | 852,1          | 1,51267 |
| $n_r$        | 706,5          | 1,51579 |
| $n_c$        | 656,3          | 1,51724 |
| $n_{c'}$     | 643,8          | 1,51764 |
| $n_{632,8}$  | 632,8          | 1,51802 |
| $n_D$        | 589,3          | 1,51968 |
| $n_d$        | 587,6          | 1,51975 |
| $n_e$        | 546,1          | 1,52170 |
| $n_F$        | 486,1          | 1,52541 |
| $n_{F'}$     | 480,0          | 1,52587 |
| $n_g$        | 435,8          | 1,52981 |
| $n_h$        | 404,7          | 1,53345 |
| $n_i$        | 365,0          | 1,53970 |
| $n_{334,1}$  | 334,1          |         |
| $n_{312,6}$  | 312,6          |         |
| $n_{296,7}$  | 296,7          |         |
| $n_{280,4}$  | 280,4          |         |
| $n_{248,3}$  | 248,3          |         |

| Konstanten der Dispersionsformel |               |
|----------------------------------|---------------|
| $B_1$                            | 1,265385420   |
| $B_2$                            | 0,014419107   |
| $B_3$                            | 1,003230280   |
| $C_1$                            | 0,00813104078 |
| $C_2$                            | 0,0543303226  |
| $C_3$                            | 102,8211660   |

| Konstanten der Formel für $dn/dT$ |           |
|-----------------------------------|-----------|
| $D_0$                             | 1,52E-06  |
| $D_1$                             | 1,37E-08  |
| $D_2$                             | -1,26E-11 |
| $E_0$                             | 4,36E-07  |
| $E_1$                             | 4,17E-10  |
| $\lambda_{TK}$ [μm]               | 0,194     |

| Temperaturkoeffizienten der Lichtbrechung |                                                 |     |     |                                                 |     |     |
|-------------------------------------------|-------------------------------------------------|-----|-----|-------------------------------------------------|-----|-----|
| [°C]                                      | $\Delta n_{rel}/\Delta T$ [10 <sup>-6</sup> /K] |     |     | $\Delta n_{abs}/\Delta T$ [10 <sup>-6</sup> /K] |     |     |
|                                           | 1060,0                                          | e   | g   | 1060,0                                          | e   | g   |
| -40/-20                                   | 2,2                                             | 2,7 | 3,3 | 0,2                                             | 0,7 | 1,2 |
| +20/+40                                   | 2,2                                             | 2,8 | 3,4 | 0,9                                             | 1,5 | 2,1 |
| +60/+80                                   | 2,4                                             | 3,0 | 3,7 | 1,4                                             | 2,0 | 2,6 |

|                 |               |                              |
|-----------------|---------------|------------------------------|
| $n_d = 1,51975$ | $v_d = 63,58$ | $n_F - n_C = 0,008174$       |
| $n_e = 1,52170$ | $v_e = 63,36$ | $n_{F'} - n_{C'} = 0,008233$ |

| Reintransmissionsgrad $\tau_i$ |                 |                 |
|--------------------------------|-----------------|-----------------|
| $\lambda$ [nm]                 | $\tau_i$ [10mm] | $\tau_i$ [25mm] |
| 2500                           | 0,630           | 0,320           |
| 2325                           | 0,780           | 0,540           |
| 1970                           | 0,930           | 0,840           |
| 1530                           | 0,992           | 0,979           |
| 1060                           | 0,999           | 0,998           |
| 700                            | 0,997           | 0,993           |
| 660                            | 0,995           | 0,988           |
| 620                            | 0,994           | 0,984           |
| 580                            | 0,992           | 0,979           |
| 546                            | 0,989           | 0,973           |
| 500                            | 0,982           | 0,957           |
| 460                            | 0,970           | 0,930           |
| 436                            | 0,950           | 0,870           |
| 420                            | 0,910           | 0,780           |
| 405                            | 0,820           | 0,600           |
| 400                            | 0,760           | 0,510           |
| 390                            | 0,600           | 0,280           |
| 380                            | 0,360           | 0,080           |
| 370                            | 0,080           |                 |
| 365                            | 0,020           |                 |
| 350                            |                 |                 |
| 334                            |                 |                 |
| 320                            |                 |                 |
| 310                            |                 |                 |
| 300                            |                 |                 |
| 290                            |                 |                 |
| 280                            |                 |                 |
| 270                            |                 |                 |
| 260                            |                 |                 |
| 250                            |                 |                 |

| Farbcode                     |       |
|------------------------------|-------|
| $\lambda_{80} / \lambda_{5}$ | 41/37 |

| Bemerkungen              |
|--------------------------|
| strahlenresistentes Glas |
|                          |
|                          |

| Relative Teildispersionen P |        |
|-----------------------------|--------|
| $P_{s,t}$                   | 0,3077 |
| $P_{C,s}$                   | 0,5591 |
| $P_{d,C}$                   | 0,3071 |
| $P_{e,d}$                   | 0,2385 |
| $P_{g,F}$                   | 0,5376 |
| $P_{i,h}$                   |        |

| Relative Teildispersionen P' |        |
|------------------------------|--------|
| $P'_{s,t}$                   | 0,3055 |
| $P'_{C',s}$                  | 0,6040 |
| $P'_{d,C'}$                  | 0,2561 |
| $P'_{e,d}$                   | 0,2368 |
| $P'_{g,F'}$                  | 0,4777 |
| $P'_{i,h}$                   |        |

| Abweichung rel. Teildisp.<br>$\Delta P$ von der "Normalgeraden" |         |
|-----------------------------------------------------------------|---------|
| $\Delta P_{C,t}$                                                | 0,0203  |
| $\Delta P_{C,s}$                                                | 0,0080  |
| $\Delta P_{F,e}$                                                | -0,0006 |
| $\Delta P_{g,F}$                                                | 0,0007  |
| $\Delta P_{i,g}$                                                |         |

| Chemische Eigenschaften |   |
|-------------------------|---|
| CR                      |   |
| FR                      | 0 |
| SR                      | 1 |
| AR                      | 2 |
| PR                      |   |

| Sonstige Eigenschaften                            |       |
|---------------------------------------------------|-------|
| $\alpha_{,30/+70^\circ C}$ [10 <sup>-6</sup> /K]  | 7,0   |
| $\alpha_{+20/+300^\circ C}$ [10 <sup>-6</sup> /K] | 8,2   |
| $T_g$ [°C]                                        | 585   |
| $T_{10}^{13}$ [°C]                                | 570   |
| $T_{10}^{7,6}$ [°C]                               | 722   |
| $c_p$ [J/(g·K)]                                   | 0,820 |
| $\lambda$ [W/(m·K)]                               | 1,190 |

|                                           |       |
|-------------------------------------------|-------|
| $\rho$ [g/cm <sup>3</sup> ]               | 2,52  |
| $E$ [10 <sup>3</sup> N/mm <sup>2</sup> ]  | 82    |
| $\mu$                                     | 0,205 |
| $K$ [10 <sup>-6</sup> mm <sup>2</sup> /N] | 2,77  |
| $HK_{0,1/20}$                             | 580   |