

## BK7G18 520636.252

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

| 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          |         |

| Reintransmissionsgrad $\tau_i$ |                 |                 |
|--------------------------------|-----------------|-----------------|
| $\lambda$ [nm]                 | $\tau_i$ (10mm) | $\tau_i$ (25mm) |
| 2500                           | 0,634           | 0,320           |
| 2325                           | 0,782           | 0,540           |
| 1970                           | 0,933           | 0,841           |
| 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           | 0,927           |
| 436                            | 0,947           | 0,873           |
| 420                            | 0,905           | 0,780           |
| 405                            | 0,815           | 0,600           |
| 400                            | 0,764           | 0,510           |
| 390                            | 0,601           | 0,280           |
| 380                            | 0,360           | 0,080           |
| 370                            | 0,080           |                 |
| 365                            | 0,020           |                 |
| 350                            |                 |                 |
| 334                            |                 |                 |
| 320                            |                 |                 |
| 310                            |                 |                 |
| 300                            |                 |                 |
| 290                            |                 |                 |
| 280                            |                 |                 |
| 270                            |                 |                 |
| 260                            |                 |                 |
| 250                            |                 |                 |

| Relative Teildispersionen |        |
|---------------------------|--------|
| $P_{s,t}$                 | 0,3077 |
| $P_{C,s}$                 | 0,5591 |
| $P_{d,C}$                 | 0,3071 |
| $P_{e,d}$                 | 0,2385 |
| $P_{g,F}$                 | 0,5376 |
| $P_{i,h}$                 | 0,7640 |
| $P'_{s,t}$                | 0,3055 |
| $P'_{C',s}$               | 0,6040 |
| $P'_{d,C'}$               | 0,2561 |
| $P'_{e,d}$                | 0,2368 |
| $P'_{g,F'}$               | 0,4777 |
| $P'_{i,h}$                | 0,7585 |

| Abweichungen rel. Teil-<br>dispersionen $\Delta P$ von der<br>"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  |
| $\Delta P_{i,g}$  | 0,0189  |

| Konstanten der<br>Dispersionsformel |               |
|-------------------------------------|---------------|
| $B_1$                               | 1,26538542    |
| $B_2$                               | 0,0144191073  |
| $B_3$                               | 1,00323028    |
| $C_1$                               | 0,00813104078 |
| $C_2$                               | 0,0543303226  |
| $C_3$                               | 102,821166    |

| Sonstige Eigenschaften                  |       |
|---|-------|
| $\alpha_{-30/+70^\circ C} [10^{-6}/K]$  | 7,0   |
| $\alpha_{+20/+300^\circ C} [10^{-6}/K]$ | 8,2   |
| $T_g [^\circ C]$                        | 585   |
| $T_{10}^{13,0} [^\circ C]$              | 570   |
| $T_{10}^{7,6} [^\circ C]$               | 722   |
| $c_p [J/(g \cdot K)]$                   | 0,820 |
| $\lambda [W/(m \cdot K)]$               | 1,190 |
| $\rho [g/cm^3]$                         | 2,52  |
| $E [10^3 N/mm^2]$                       | 82    |
| $\mu$                                   | 0,205 |
| $K [10^{-6} mm^2/N]$                    | 2,77  |
| $HK_{0,1/20}$                           | 580   |
| <b>HG</b>                               |       |
| <b>CR</b>                               |       |
| <b>FR</b>                               | 0     |
| <b>SR</b>                               | 1     |
| <b>AR</b>                               | 2     |
| <b>PR</b>                               | 0     |

| Konstanten der Formel<br>für $dn/dT$ |                        |
|--------------------------------------|------------------------|
| $D_0$                                | $1,52 \cdot 10^{-6}$   |
| $D_1$                                | $1,37 \cdot 10^{-8}$   |
| $D_2$                                | $-1,26 \cdot 10^{-11}$ |
| $E_0$                                | $4,36 \cdot 10^{-7}$   |
| $E_1$                                | $4,17 \cdot 10^{-10}$  |
| $\lambda_{TK} [\mu m]$               | 0,194                  |

| Farbcode                        |       |
|---------------------------------|-------|
| $\lambda_{80}/\lambda_5$        | 41/37 |
| (* = $\lambda_{70}/\lambda_5$ ) |       |

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

| Temperaturkoeffizienten der Lichtbrechung |                                       |     |     |                                       |     |     |
|---|---------------------------------------|-----|-----|---------------------------------------|-----|-----|
| [ $^\circ C$ ]                            | $\Delta n_{rel}/\Delta T [10^{-6}/K]$ |     |     | $\Delta n_{abs}/\Delta T [10^{-6}/K]$ |     |     |
|   | 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 |