

**LF5**  
**581409.322**

|                 |               |                              |
|-----------------|---------------|------------------------------|
| $n_d = 1,58144$ | $v_d = 40,85$ | $n_F - n_C = 0,014233$       |
| $n_e = 1,58482$ | $v_e = 40,57$ | $n_{F'} - n_{C'} = 0,014413$ |

| Brechzahlen  |                |         |
|--------------|----------------|---------|
|              | $\lambda$ [nm] |         |
| $n_{2325,4}$ | 2325,4         | 1,54966 |
| $n_{1970,1}$ | 1970,1         | 1,55445 |
| $n_{1529,6}$ | 1529,6         | 1,55975 |
| $n_{1060,0}$ | 1060,0         | 1,56594 |
| $n_t$        | 1014,0         | 1,56672 |
| $n_s$        | 852,1          | 1,57014 |
| $n_r$        | 706,5          | 1,57489 |
| $n_C$        | 656,3          | 1,57723 |
| $n_{C'}$     | 643,8          | 1,57789 |
| $n_{632,8}$  | 632,8          | 1,57851 |
| $n_D$        | 589,3          | 1,58132 |
| $n_d$        | 587,6          | 1,58144 |
| $n_e$        | 546,1          | 1,58482 |
| $n_F$        | 486,1          | 1,59146 |
| $n_{F'}$     | 480,0          | 1,59231 |
| $n_g$        | 435,8          | 1,59964 |
| $n_h$        | 404,7          | 1,60668 |
| $n_i$        | 365,0          | 1,61926 |
| $n_{334,1}$  | 334,1          | 1,63380 |
| $n_{312,6}$  | 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                           |                 |                 |
| 2325                           | 0,847           | 0,660           |
| 1970                           | 0,946           | 0,870           |
| 1530                           | 0,997           | 0,992           |
| 1060                           | 0,999           | 0,998           |
| 700                            | 0,999           | 0,998           |
| 660                            | 0,999           | 0,998           |
| 620                            | 0,999           | 0,998           |
| 580                            | 0,999           | 0,997           |
| 546                            | 0,999           | 0,997           |
| 500                            | 0,998           | 0,996           |
| 460                            | 0,998           | 0,995           |
| 436                            | 0,998           | 0,994           |
| 420                            | 0,997           | 0,993           |
| 405                            | 0,997           | 0,992           |
| 400                            | 0,997           | 0,992           |
| 390                            | 0,994           | 0,984           |
| 380                            | 0,989           | 0,973           |
| 370                            | 0,984           | 0,961           |
| 365                            | 0,981           | 0,954           |
| 350                            | 0,950           | 0,880           |
| 334                            | 0,799           | 0,570           |
| 320                            | 0,320           | 0,040           |
| 310                            | 0,040           |                 |
| 300                            |                 |                 |
| 290                            |                 |                 |
| 280                            |                 |                 |
| 270                            |                 |                 |
| 260                            |                 |                 |
| 250                            |                 |                 |

| Relative Teildispersionen |        |
|---------------------------|--------|
| $P_{s,t}$                 | 0,2401 |
| $P_{C,s}$                 | 0,4981 |
| $P_{d,C}$                 | 0,2959 |
| $P_{e,d}$                 | 0,2373 |
| $P_{g,F}$                 | 0,5748 |
| $P_{i,h}$                 | 0,8836 |
| $P'_{s,t}$                | 0,2371 |
| $P'_{C',s}$               | 0,5378 |
| $P'_{d,C'}$               | 0,2462 |
| $P'_{e,d}$                | 0,2343 |
| $P'_{g,F'}$               | 0,5091 |
| $P'_{i,h}$                | 0,8726 |

| Abweichungen rel. Teil-<br>dispersionen $\Delta P$ von der<br>"Normalgeraden" |         |
|---|---------|
| $\Delta P_{C,t}$  | -0,0006 |
| $\Delta P_{C,s}$  | 0,0000  |
| $\Delta P_{F,e}$  | -0,0001 |
| $\Delta P_{g,F}$  | -0,0003 |
| $\Delta P_{i,g}$  | -0,0037 |

| Konstanten der<br>Dispersionsformel |               |
|-------------------------------------|---------------|
| $B_1$                               | 1,28035628    |
| $B_2$                               | 0,163505973   |
| $B_3$                               | 0,893930112   |
| $C_1$                               | 0,00929854416 |
| $C_2$                               | 0,0449135769  |
| $C_3$                               | 110,493685    |

| Sonstige Eigenschaften                               |       |
|--|-------|
| $\alpha_{-30/+70^\circ\text{C}} [10^{-6}/\text{K}]$  | 9,1   |
| $\alpha_{+20/+300^\circ\text{C}} [10^{-6}/\text{K}]$ | 10,6  |
| $T_g [^\circ\text{C}]$                               | 419   |
| $T_{10}^{13,0} [^\circ\text{C}]$                     | 411   |
| $T_{10}^{7,6} [^\circ\text{C}]$                      | 585   |
| $c_p [\text{J}/(\text{g}\cdot\text{K})]$             | 0,657 |
| $\lambda [\text{W}/(\text{m}\cdot\text{K})]$         | 0,866 |
| $\rho [\text{g}/\text{cm}^3]$                        | 3,22  |
| $E [10^3 \text{N}/\text{mm}^2]$                      | 59    |
| $\mu$  | 0,223 |
| $K [10^{-6} \text{mm}^2/\text{N}]$                   | 2,83  |
| $HK_{0,1/20}$  | 450   |
| HG   | 2     |
| CR   | 2     |
| FR   | 0     |
| SR   | 1     |
| AR   | 2,3   |
| PR   | 2     |

| Konstanten der Formel<br>für $dn/dT$ |                        |
|--------------------------------------|------------------------|
| $D_0$                                | $-2,27 \cdot 10^{-6}$  |
| $D_1$                                | $9,71 \cdot 10^{-9}$   |
| $D_2$                                | $-2,83 \cdot 10^{-11}$ |
| $E_0$                                | $8,36 \cdot 10^{-7}$   |
| $E_1$                                | $9,95 \cdot 10^{-10}$  |
| $\lambda_{TK} [\mu\text{m}]$         | 0,228                  |

| Farbcode                        |       |
|---------------------------------|-------|
| $\lambda_{80}/\lambda_5$        | 34/31 |
| (* = $\lambda_{70}/\lambda_5$ ) |       |

| Bemerkungen           |  |
|-----------------------|--|
| bleihaltig glass type |  |

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