# Datenblatt

SCHOTT

## SF3
## 740282.464

| | | |
|---|---|---|
| $n_d$ = 1,74000 | $\nu_d$ = 28,20 | $n_F - n_C$ = 0,026244 |
| $n_e$ = 1,74620 | $\nu_e$ = 27,98 | $n_{F'} - n_{C'}$ = 0,026667 |

| Brechzahlen | | |
|---|---|---|
| | λ [nm] | |
| $n_{2325.4}$ | 2325.4 | 1,69410 |
| $n_{1970.1}$ | 1970.1 | 1,69910 |
| $n_{1529.6}$ | 1529.6 | 1,70511 |
| $n_{1060.0}$ | 1060.0 | 1,71350 |
| $n_t$ | 1014.0 | 1,71469 |
| $n_s$ | 852.1 | 1,72017 |
| $n_r$ | 706.5 | 1,72829 |
| $n_C$ | 656.3 | 1,73242 |
| $n_{C'}$ | 643.8 | 1,73360 |
| $n_{632.8}$ | 632.8 | 1,73471 |
| $n_D$ | 589.3 | 1,73977 |
| $n_d$ | 587.6 | 1,74000 |
| $n_e$ | 546.1 | 1,74620 |
| $n_F$ | 486.1 | 1,75866 |
| $n_{F'}$ | 480.0 | 1,76027 |
| $n_g$ | 435.8 | 1,77446 |
| $n_h$ | 404.7 | 1,78846 |
| $n_i$ | 365.0 | 1,81452 |
| $n_{334.1}$ | 334.1 | |
| $n_{312.6}$ | 312.6 | |
| $n_{296.7}$ | 296.7 | |
| $n_{280.4}$ | 280.4 | |
| $n_{248.3}$ | 248.3 | |

| Konstanten der Dispersionsform | |
|---|---|
| $B_1$ | 1,57230542 |
| $B_2$ | 0,34 |
| $B_3$ | 1,04 |
| $C_1$ | 0,01 |
| $C_2$ | 0,05 |
| $C_3$ | 120,01 |

| Konstanten der Formel für dn/dT | |
|---|---|
| $D_0$ | 3,72E-06 |
| $D_1$ | 1,74E-08 |
| $D_2$ | -3,21E-11 |
| $E_0$ | 1,49E-06 |
| $E_1$ | 1,41E-09 |
| $\lambda_{TK}$ [µm] | 0,260 |

| Reintransmissionsgrad $\tau_i$ | | |
|---|---|---|
| λ [nm] | $\tau_i$ [10mm] | $\tau_i$ [25mm] |
| **2500** | | |
| **2325** | 0,900 | 0,760 |
| **1970** | 0,963 | 0,910 |
| **1530** | 0,994 | 0,986 |
| **1060** | 0,998 | 0,995 |
| **700** | 0,999 | 0,998 |
| **660** | 0,999 | 0,997 |
| **620** | 0,999 | 0,997 |
| **580** | 0,998 | 0,995 |
| **546** | 0,997 | 0,993 |
| **500** | 0,996 | 0,990 |
| **460** | 0,991 | 0,977 |
| **436** | 0,984 | 0,960 |
| **420** | 0,971 | 0,930 |
| **405** | 0,950 | 0,880 |
| **400** | 0,940 | 0,860 |
| **390** | 0,910 | 0,780 |
| **380** | 0,840 | 0,650 |
| **370** | 0,730 | 0,460 |
| **365** | 0,650 | 0,340 |
| **350** | | |
| **334** | | |
| **320** | | |
| **310** | | |
| **300** | | |
| **290** | | |
| **280** | | |
| **270** | | |
| **260** | | |
| **250** | | |
| | | |

| Farbcode | |
|---|---|
| λ80 / λ5 | 40/35 |

| Bemerkungen |
|---|
| |

| Relative Teildispersionen | |
|---|---|
| $P_{s,t}$ | 0,2090 |
| $P_{C,s}$ | 0,4665 |
| $P_{d,C}$ | 0,2890 |
| $P_{e,d}$ | 0,2362 |
| $P_{g,F}$ | 0,6020 |
| $P_{i,h}$ | 0,9929 |
| | |
| $P'_{s,t}$ | 0,2057 |
| $P'_{C',s}$ | 0,5034 |
| $P'_{d,C'}$ | 0,2401 |
| $P'_{e,d}$ | 0,2325 |
| $P'_{g,F'}$ | 0,5323 |
| $P'_{i,h}$ | 0,9772 |

| Abweichung relativer Teildispersionen ΔP von der "Normalgeraden" | |
|---|---|
| $\Delta P_{C,t}$ | -0,0032 |
| $\Delta P_{C,s}$ | -0,0021 |
| $\Delta P_{F,e}$ | 0,0012 |
| $\Delta P_{g,F}$ | 0,0056 |
| $\Delta Pi_{,g}$ | 0,0386 |

| Sonstige Eigenschaften | |
|---|---|
| $\alpha_{-30/+70°C}$ [$10^{-6}$/K] | 8,4 |
| $\alpha_{+20/+300°C}$ [$10^{-6}$/K] | 9,5 |
| $T_g$ [°C] | 415 |
| $T_{10^{13}}$ [°C] | 404 |
| $T_{10^{7.6}}$ [°C] | 548 |
| $c_p$ [J/(g•K)] | 0,423 |
| λ [W/(m•K)] | 0,706 |
| | |
| ρ [g/cm$^3$] | 4,64 |
| E [$10^3$ N/mm$^2$] | 56 |
| µ | 0,236 |
| K [$10^{-6}$ mm$^2$/N] | 1,53 |
| $HK_{0.1/20}$ | 380 |
| | |
| | |
| | |
| | |
| CR | 1 |
| FR | 2 |
| SR | 4,3 |
| AR | 2,3 |
| PR | 2,3 |
| | |
| | |

| Temperaturkoeffizienten der Lichtbrechung | | | | | | |
|---|---|---|---|---|---|---|
| | $\Delta n_{rel}/\Delta T$ [$10^{-6}$/K] | | | $\Delta n_{abs}/\Delta T$ [$10^{-6}$/K] | | |
| **[°C]** | **1060.0** | **e** | **g** | **1060.0** | **e** | **g** |
| **-40/-20** | 4,0 | 6,8 | 10,2 | 1,7 | 4,5 | 7,7 |
| **+20/+40** | 4,6 | 7,8 | 11,5 | 3,1 | 6,2 | 10,0 |
| **+60/+80** | 5,0 | 8,4 | 12,4 | 3,8 | 7,2 | 11,2 |