# Data Sheet

**SCHOTT**

## N-SK2
## 607567.355

| | | |
|---|---|---|
| $n_d$ = 1.60738 | $\nu_d$ = 56.65 | $n_F - n_C$ = 0.010722 |
| $n_e$ = 1.60994 | $\nu_e$ = 56.37 | $n_{F'} - n_{C'}$ = 0.010821 |

### Refractive Indices

| | λ [nm] | |
|---|---|---|
| $n_{2325.4}$ | 2325.4 | 1.57881 |
| $n_{1970.1}$ | 1970.1 | 1.58378 |
| $n_{1529.6}$ | 1529.6 | 1.58914 |
| $n_{1060.0}$ | 1060.0 | 1.59490 |
| $n_t$ | 1014.0 | 1.59558 |
| $n_s$ | 852.1 | 1.59847 |
| $n_r$ | 706.5 | 1.60230 |
| $n_C$ | 656.3 | 1.60414 |
| $n_{C'}$ | 643.8 | 1.60465 |
| $n_{632.8}$ | 632.8 | 1.60513 |
| $n_D$ | 589.3 | 1.60729 |
| $n_d$ | 587.6 | 1.60738 |
| $n_e$ | 546.1 | 1.60994 |
| $n_F$ | 486.1 | 1.61486 |
| $n_{F'}$ | 480.0 | 1.61547 |
| $n_g$ | 435.8 | 1.62073 |
| $n_h$ | 404.7 | 1.62562 |
| $n_i$ | 365.0 | 1.63398 |
| $n_{334.1}$ | 334.1 | 1.64304 |
| $n_{312.6}$ | 312.6 | |
| $n_{296.7}$ | 296.7 | |
| $n_{280.4}$ | 280.4 | |
| $n_{248.3}$ | 248.3 | |

### Constants of Dispersion Formula

| | |
|---|---|
| $B_1$ | 1.28189012 |
| $B_2$ | 0.257738258 |
| $B_3$ | 0.96818604 |
| $C_1$ | 0.0072719164 |
| $C_2$ | 0.0242823527 |
| $C_3$ | 110.377773 |

### Constants of Dispersion dn/dT

| | |
|---|---|
| $D_0$ | $3.80 \cdot 10^{-6}$ |
| $D_1$ | $1.41 \cdot 10^{-8}$ |
| $D_2$ | $2.28 \cdot 10^{-11}$ |
| $E_0$ | $6.44 \cdot 10^{-7}$ |
| $E_1$ | $8.03 \cdot 10^{-11}$ |
| $\lambda_{TK}$ [µm] | 0.108 |

### Internal Transmittance $\tau_i$

| λ [nm] | $\tau_i$ (10mm) | $\tau_i$ (25mm) |
|---|---|---|
| 2500 | 0.815 | 0.600 |
| 2325 | 0.896 | 0.760 |
| 1970 | 0.971 | 0.930 |
| 1530 | 0.995 | 0.988 |
| 1060 | 0.998 | 0.995 |
| 700 | 0.998 | 0.995 |
| 660 | 0.998 | 0.994 |
| 620 | 0.998 | 0.994 |
| 580 | 0.998 | 0.995 |
| 546 | 0.998 | 0.995 |
| 500 | 0.996 | 0.990 |
| 460 | 0.993 | 0.983 |
| 436 | 0.993 | 0.982 |
| 420 | 0.994 | 0.984 |
| 405 | 0.994 | 0.985 |
| 400 | 0.994 | 0.984 |
| 390 | 0.992 | 0.979 |
| 380 | 0.988 | 0.970 |
| 370 | 0.976 | 0.940 |
| 365 | 0.967 | 0.920 |
| 350 | 0.905 | 0.780 |
| 334 | 0.752 | 0.490 |
| 320 | 0.504 | 0.180 |
| 310 | 0.276 | 0.040 |
| 300 | 0.102 | |
| 290 | 0.020 | |
| 280 | | |
| 270 | | |
| 260 | | |
| 250 | | |
| | | |
| | | |

### Color Code

| | |
|---|---|
| $\lambda_{80}/\lambda_5$ | 35/30 |
| (*= $\lambda_{70}/\lambda_5$) | |

### Remarks

### Relative Partial Dispersion

| | |
|---|---|
| $P_{s,t}$ | 0.2690 |
| $P_{C,s}$ | 0.5285 |
| $P_{d,C}$ | 0.3027 |
| $P_{e,d}$ | 0.2384 |
| $P_{g,F}$ | 0.5477 |
| $P_{i,h}$ | 0.7802 |
| | |
| $P'_{s,t}$ | 0.2666 |
| $P'_{C',s}$ | 0.5713 |
| $P'_{d,C'}$ | 0.2523 |
| $P'_{e,d}$ | 0.2362 |
| $P'_{g,F'}$ | 0.4860 |
| $P'_{i,h}$ | 0.7730 |

### Deviation of Relative Partial Dispersions ΔP from the "Normal Line"

| | |
|---|---|
| $\Delta P_{C,t}$ | -0.0162 |
| $\Delta P_{C,s}$ | -0.0064 |
| $\Delta P_{F,e}$ | 0.0003 |
| $\Delta P_{g,F}$ | -0.0008 |
| $\Delta P_{i,g}$ | -0.0130 |

### Other Properties

| | |
|---|---|
| $\alpha_{-30/+70°C}$ [$10^{-6}$/K] | 6.0 |
| $\alpha_{+20/+300°C}$ [$10^{-6}$/K] | 7.1 |
| $T_g$ [°C] | 659 |
| $T_{10}^{13.0}$ [°C] | 659 |
| $T_{10}^{7.6}$ [°C] | 823 |
| $c_p$ [J/(g·K)] | 0.595 |
| λ [W/(m·K)] | 0.776 |
| | |
| ρ [g/cm$^3$] | 3.55 |
| E [$10^3$ N/mm$^2$] | 78 |
| µ | 0.263 |
| K [$10^{-6}$ mm$^2$/N] | 2.31 |
| HK$_{0.1/20}$ | 550 |
| HG | 2 |
| | |
| B | 0 |
| | |
| CR | 2 |
| FR | 0 |
| SR | 2.2 |
| AR | 1 |
| PR | 2.3 |

### Temperature Coefficients of Refractive Index

| | $\Delta n_{rel}/\Delta T$ [$10^{-6}$/K] | | | $\Delta n_{abs}/\Delta T$ [$10^{-6}$/K] | | |
|---|---|---|---|---|---|---|
| [°C] | 1060.0 | e | g | 1060.0 | e | g |
| -40/ -20 | 3.7 | 4.6 | 5.3 | 1.5 | 2.4 | 3.1 |
| +20/ +40 | 3.6 | 4.5 | 5.3 | 2.3 | 3.1 | 3.9 |
| +60/ +80 | 4.0 | 4.9 | 5.7 | 2.9 | 3.8 | 4.5 |