

SF3 740282.464

$n_d = 1.74000$

$v_d = 28.20$

$n_F - n_C = 0.026244$

$n_e = 1.74620$

$v_e = 27.98$

$n_{F'} - n_{C'} = 0.026667$

Refractive Indices

| | 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 | |

Constants of Dispersion Formula

| | |
|-------|--------------|
| B_1 | 1.572305420 |
| B_2 | 0.339661149 |
| B_3 | 1.035937120 |
| C_1 | 0.012038218 |
| C_2 | 0.0531603583 |
| C_3 | 120.00538100 |

Constants of Formula for 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 |
| λ_{TK} [μm] | 0.260 |

Temperature Coefficients of the Refractive Index

| [°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 | 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 |

Internal Transmittance τ_i

| λ [nm] | τ_i [10mm] | τ_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 | | |

Color Code

$\lambda_{80} / \lambda_{5}$ 40/35

Remarks

lead containing glass type

Relative Partial Dispersion P

| | |
|-----------|--------|
| $P_{s,t}$ | 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 |

Relative Partial Dispersion P'

| | |
|-------------|--------|
| $P'_{s,t}$ | 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 |

Deviation of Rel. Partial Disp.

ΔP from the normal line

| | |
|------------------|---------|
| $\Delta P_{C,t}$ | -0.0032 |
| $\Delta P_{C,s}$ | -0.0021 |
| $\Delta P_{F,e}$ | 0.0012 |
| $\Delta P_{g,F}$ | 0.0056 |
| $\Delta P_{i,g}$ | 0.0386 |

Chemical Properties

| | |
|----|-----|
| CR | 1 |
| FR | 2 |
| SR | 4.3 |
| AR | 2.3 |
| PR | 2.3 |

Other Properties

| | |
|---|-------|
| $\alpha_{-30/+70^\circ\text{C}}$ [$10^{-6}/K$] | 8.4 |
| $\alpha_{+20/+300^\circ\text{C}}$ [$10^{-6}/K$] | 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 |