

N-LASF9 850322.441

| | | |
|-----------------|---------------|------------------------------|
| $n_d = 1.85025$ | $v_d = 32.17$ | $n_F - n_C = 0.026430$ |
| $n_e = 1.85650$ | $v_e = 31.93$ | $n_{F'} - n_{C'} = 0.026827$ |

| Refractive Indices | | |
|--------------------|----------------|---------|
| | λ [nm] | |
| $n_{2325.4}$ | 2325.4 | 1.80058 |
| $n_{1970.1}$ | 1970.1 | 1.80659 |
| $n_{1529.6}$ | 1529.6 | 1.81364 |
| $n_{1060.0}$ | 1060.0 | 1.82293 |
| n_t | 1014.0 | 1.82420 |
| n_s | 852.1 | 1.82997 |
| n_r | 706.5 | 1.83834 |
| n_C | 656.3 | 1.84255 |
| $n_{C'}$ | 643.8 | 1.84376 |
| $n_{632.8}$ | 632.8 | 1.84489 |
| n_D | 589.3 | 1.85002 |
| n_d | 587.6 | 1.85025 |
| n_e | 546.1 | 1.85650 |
| n_F | 486.1 | 1.86898 |
| $n_{F'}$ | 480.0 | 1.87058 |
| n_g | 435.8 | 1.88467 |
| n_h | 404.7 | 1.89845 |
| n_i | 365.0 | |
| $n_{334.1}$ | 334.1 | |
| $n_{312.6}$ | 312.6 | |
| $n_{296.7}$ | 296.7 | |
| $n_{280.4}$ | 280.4 | |
| $n_{248.3}$ | 248.3 | |

| Internal Transmittance τ_i | | |
|---------------------------------|-----------------|-----------------|
| λ [nm] | τ_i (10mm) | τ_i (25mm) |
| 2500 | 0.814 | 0.598 |
| 2325 | 0.873 | 0.712 |
| 1970 | 0.967 | 0.919 |
| 1530 | 0.994 | 0.986 |
| 1060 | 0.998 | 0.994 |
| 700 | 0.994 | 0.986 |
| 660 | 0.992 | 0.981 |
| 620 | 0.992 | 0.979 |
| 580 | 0.991 | 0.978 |
| 546 | 0.989 | 0.972 |
| 500 | 0.978 | 0.945 |
| 460 | 0.958 | 0.898 |
| 436 | 0.933 | 0.840 |
| 420 | 0.901 | 0.770 |
| 405 | 0.831 | 0.630 |
| 400 | 0.799 | 0.570 |
| 390 | 0.693 | 0.400 |
| 380 | 0.525 | 0.200 |
| 370 | 0.270 | 0.040 |
| 365 | 0.137 | |
| 350 | | |
| 334 | | |
| 320 | | |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |
| 270 | | |
| 260 | | |
| 250 | | |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $P_{s,t}$ | 0.2181 |
| $P_{C,s}$ | 0.4762 |
| $P_{d,C}$ | 0.2912 |
| $P_{e,d}$ | 0.2366 |
| $P_{g,F}$ | 0.5934 |
| $P_{i,h}$ | |
| $P'_{s,t}$ | 0.2149 |
| $P'_{C',s}$ | 0.5140 |
| $P'_{d,C'}$ | 0.2420 |
| $P'_{e,d}$ | 0.2330 |
| $P'_{g,F'}$ | 0.5250 |
| $P'_{i,h}$ | |

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

| | |
|------------------|---------|
| $\Delta P_{C,t}$ | -0.0032 |
| $\Delta P_{C,s}$ | -0.0016 |
| $\Delta P_{F,e}$ | 0.0008 |
| $\Delta P_{g,F}$ | 0.0037 |
| $\Delta P_{i,g}$ | |

| Constants of Dispersion Formula | |
|---------------------------------|--------------|
| B_1 | 2.00029547 |
| B_2 | 0.298926886 |
| B_3 | 1.80691843 |
| C_1 | 0.0121426017 |
| C_2 | 0.0538736236 |
| C_3 | 156.530829 |

| Constants of Dispersion dn/dT | |
|---------------------------------|------------------------|
| D_0 | $1.05 \cdot 10^{-6}$ |
| D_1 | $1.02 \cdot 10^{-8}$ |
| D_2 | $-2.38 \cdot 10^{-11}$ |
| E_0 | $9.19 \cdot 10^{-7}$ |
| E_1 | $1.18 \cdot 10^{-9}$ |
| $\lambda_{TK} [\mu m]$ | 0.257 |

| Color Code | |
|--------------------------------|--------|
| λ_{80}/λ_5 | 41/36* |
| (*= λ_{70}/λ_5) | |

| Remarks |
|---------|
| |

| Other Properties | |
|---|-------|
| $\alpha_{-30/+70^\circ C} [10^{-6}/K]$ | 7.4 |
| $\alpha_{+20/+300^\circ C} [10^{-6}/K]$ | 8.4 |
| $T_g [^\circ C]$ | 683 |
| $T_{10}^{13.0} [^\circ C]$ | 700 |
| $T_{10}^{7.6} [^\circ C]$ | 817 |
| $c_p [J/(g \cdot K)]$ | 0.530 |
| $\lambda [W/(m \cdot K)]$ | 0.790 |
| $\rho [g/cm^3]$ | 4.41 |
| $E [10^3 N/mm^2]$ | 109 |
| μ | 0.288 |
| $K [10^{-6} mm^2/N]$ | 1.72 |
| $HK_{0.1/20}$ | 515 |
| HG | 4 |
| Abrasion Aa | 120 |
| CR | 1 |
| FR | 0 |
| SR | 2 |
| AR | 1 |
| PR | 1 |

| Temperature Coefficients of Refractive Index | | | | | | |
|--|---------------------------------------|-----|-----|---------------------------------------|-----|-----|
| [$^\circ C$] | $\Delta n_{rel}/\Delta T [10^{-6}/K]$ | | | $\Delta n_{abs}/\Delta T [10^{-6}/K]$ | | |
| | 1060.0 | e | g | 1060.0 | e | g |
| -40/ -20 | 2.8 | 4.7 | 6.9 | 0.4 | 2.2 | 4.3 |
| +20/ +40 | 2.9 | 5.1 | 7.7 | 1.4 | 3.5 | 6.0 |
| +60/ +80 | 3.1 | 5.5 | 8.2 | 1.8 | 4.2 | 6.9 |