

## N-LASF41 835431.485

|                 |               |                              |
|-----------------|---------------|------------------------------|
| $n_d = 1.83501$ | $v_d = 43.13$ | $n_F - n_C = 0.019361$       |
| $n_e = 1.83961$ | $v_e = 42.88$ | $n_{F'} - n_{C'} = 0.019578$ |

| Refractive Indices |                |         |
|--------------------|----------------|---------|
|                    | $\lambda$ [nm] |         |
| $n_{2325.4}$       | 2325.4         | 1.78859 |
| $n_{1970.1}$       | 1970.1         | 1.79608 |
| $n_{1529.6}$       | 1529.6         | 1.80423 |
| $n_{1060.0}$       | 1060.0         | 1.81338 |
| $n_t$              | 1014.0         | 1.81450 |
| $n_s$              | 852.1          | 1.81936 |
| $n_r$              | 706.5          | 1.82599 |
| $n_C$              | 656.3          | 1.82923 |
| $n_{C'}$           | 643.8          | 1.83014 |
| $n_{632.8}$        | 632.8          | 1.83100 |
| $n_D$              | 589.3          | 1.83484 |
| $n_d$              | 587.6          | 1.83501 |
| $n_e$              | 546.1          | 1.83961 |
| $n_F$              | 486.1          | 1.84859 |
| $n_{F'}$           | 480.0          | 1.84972 |
| $n_g$              | 435.8          | 1.85949 |
| $n_h$              | 404.7          | 1.86872 |
| $n_i$              | 365.0          | 1.88486 |
| $n_{334.1}$        | 334.1          |         |
| $n_{312.6}$        | 312.6          |         |
| $n_{296.7}$        | 296.7          |         |
| $n_{280.4}$        | 280.4          |         |
| $n_{248.3}$        | 248.3          |         |

| Internal Transmittance $\tau_i$ |                 |                 |
|---------------------------------|-----------------|-----------------|
| $\lambda$ [nm]                  | $\tau_i$ (10mm) | $\tau_i$ (25mm) |
| 2500                            | 0.480           | 0.160           |
| 2325                            | 0.764           | 0.510           |
| 1970                            | 0.950           | 0.880           |
| 1530                            | 0.993           | 0.983           |
| 1060                            | 0.998           | 0.995           |
| 700                             | 0.998           | 0.995           |
| 660                             | 0.998           | 0.994           |
| 620                             | 0.997           | 0.993           |
| 580                             | 0.998           | 0.994           |
| 546                             | 0.997           | 0.993           |
| 500                             | 0.994           | 0.984           |
| 460                             | 0.985           | 0.962           |
| 436                             | 0.976           | 0.940           |
| 420                             | 0.967           | 0.920           |
| 405                             | 0.954           | 0.890           |
| 400                             | 0.948           | 0.876           |
| 390                             | 0.928           | 0.830           |
| 380                             | 0.891           | 0.750           |
| 370                             | 0.831           | 0.630           |
| 365                             | 0.787           | 0.550           |
| 350                             | 0.592           | 0.270           |
| 334                             | 0.292           | 0.040           |
| 320                             | 0.040           |                 |
| 310                             |                 |                 |
| 300                             |                 |                 |
| 290                             |                 |                 |
| 280                             |                 |                 |
| 270                             |                 |                 |
| 260                             |                 |                 |
| 250                             |                 |                 |

| Relative Partial Dispersion |        |
|-----------------------------|--------|
| $P_{s,t}$                   | 0.2508 |
| $P_{C,s}$                   | 0.5098 |
| $P_{d,C}$                   | 0.2986 |
| $P_{e,d}$                   | 0.2378 |
| $P_{g,F}$                   | 0.5629 |
| $P_{i,h}$                   | 0.8338 |
|                             |        |
| $P'_{s,t}$                  | 0.2480 |
| $P'_{C',s}$                 | 0.5507 |
| $P'_{d,C'}$                 | 0.2487 |
| $P'_{e,d}$                  | 0.2351 |
| $P'_{g,F'}$                 | 0.4989 |
| $P'_{i,h}$                  | 0.8245 |

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

|                  |         |
|------------------|---------|
| $\Delta P_{C,t}$ | 0.0110  |
| $\Delta P_{C,s}$ | 0.0063  |
| $\Delta P_{F,e}$ | -0.0021 |
| $\Delta P_{g,F}$ | -0.0083 |
| $\Delta P_{i,g}$ | -0.0520 |

| Constants of Dispersion Formula |               |
|---------------------------------|---------------|
| $B_1$                           | 1.86348331    |
| $B_2$                           | 0.413307255   |
| $B_3$                           | 1.35784815    |
| $C_1$                           | 0.00910368219 |
| $C_2$                           | 0.0339247268  |
| $C_3$                           | 93.3580595    |

| Constants of Dispersion $dn/dT$ |                        |
|---------------------------------|------------------------|
| $D_0$                           | $3.03 \cdot 10^{-6}$   |
| $D_1$                           | $1.04 \cdot 10^{-8}$   |
| $D_2$                           | $-1.30 \cdot 10^{-11}$ |
| $E_0$                           | $6.62 \cdot 10^{-7}$   |
| $E_1$                           | $7.82 \cdot 10^{-10}$  |
| $\lambda_{TK} [\mu m]$          | 0.209                  |

| Color Code                     |        |
|--------------------------------|--------|
| $\lambda_{80}/\lambda_5$       | 37/32* |
| (*= $\lambda_{70}/\lambda_5$ ) |        |

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

| Other Properties                        |       |
|---|-------|
| $\alpha_{-30/+70^\circ C} [10^{-6}/K]$  | 6.2   |
| $\alpha_{+20/+300^\circ C} [10^{-6}/K]$ | 7.3   |
| $T_g [^\circ C]$                        | 651   |
| $T_{10}^{13.0} [^\circ C]$              | 658   |
| $T_{10}^{7.6} [^\circ C]$               | 739   |
| $c_p [J/(g \cdot K)]$                   | 0.490 |
| $\lambda [W/(m \cdot K)]$               | 0.790 |
|   |       |
| $\rho [g/cm^3]$                         | 4.85  |
| $E [10^3 N/mm^2]$                       | 124   |
| $\mu$                                   | 0.294 |
| $K [10^{-6} mm^2/N]$                    | 1.57  |
| $HK_{0.1/20}$                           | 760   |
| <b>HG</b>                               | 2     |
|   |       |
|   |       |
|   |       |
|   |       |
|   |       |
| <b>CR</b>                               | 1     |
| <b>FR</b>                               | 1     |
| <b>SR</b>                               | 4     |
| <b>AR</b>                               | 1     |
| <b>PR</b>                               | 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                                     | 4.0                                   | 5.2 | 6.4 | 1.5                                   | 2.7 | 3.9 |
| +20/ +40                                     | 4.0                                   | 5.4 | 6.8 | 2.4                                   | 3.8 | 5.2 |
| +60/ +80                                     | 4.2                                   | 5.7 | 7.2 | 2.9                                   | 4.5 | 6.0 |