

P-LASF51 810409.458

| | | |
|-----------------|---------------|------------------------------|
| $n_d = 1.81000$ | $v_d = 40.93$ | $n_F - n_C = 0.019792$ |
| $n_e = 1.81470$ | $v_e = 40.68$ | $n_{F'} - n_{C'} = 0.020025$ |

| Refractive Indices | | |
|--------------------|----------------|---------|
| | λ [nm] | |
| $n_{2325.4}$ | 2325.4 | 1.76437 |
| $n_{1970.1}$ | 1970.1 | 1.77145 |
| $n_{1529.6}$ | 1529.6 | 1.77923 |
| $n_{1060.0}$ | 1060.0 | 1.78815 |
| n_t | 1014.0 | 1.78927 |
| n_s | 852.1 | 1.79413 |
| n_r | 706.5 | 1.80082 |
| n_C | 656.3 | 1.80411 |
| $n_{C'}$ | 643.8 | 1.80504 |
| $n_{632.8}$ | 632.8 | 1.80591 |
| n_D | 589.3 | 1.80983 |
| n_d | 587.6 | 1.81000 |
| n_e | 546.1 | 1.81470 |
| n_F | 486.1 | 1.82390 |
| $n_{F'}$ | 480.0 | 1.82506 |
| n_g | 435.8 | 1.83512 |
| n_h | 404.7 | 1.84467 |
| n_i | 365.0 | 1.86148 |
| $n_{334.1}$ | 334.1 | 1.88043 |
| $n_{312.6}$ | 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 | 0.525 | 0.200 |
| 2325 | 0.776 | 0.530 |
| 1970 | 0.950 | 0.880 |
| 1530 | 0.992 | 0.981 |
| 1060 | 0.999 | 0.998 |
| 700 | 0.998 | 0.995 |
| 660 | 0.997 | 0.993 |
| 620 | 0.997 | 0.992 |
| 580 | 0.997 | 0.992 |
| 546 | 0.997 | 0.992 |
| 500 | 0.995 | 0.987 |
| 460 | 0.990 | 0.975 |
| 436 | 0.985 | 0.963 |
| 420 | 0.980 | 0.950 |
| 405 | 0.971 | 0.930 |
| 400 | 0.967 | 0.920 |
| 390 | 0.954 | 0.890 |
| 380 | 0.928 | 0.830 |
| 370 | 0.877 | 0.720 |
| 365 | 0.842 | 0.650 |
| 350 | 0.657 | 0.350 |
| 334 | 0.250 | 0.030 |
| 320 | 0.012 | |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |
| 270 | | |
| 260 | | |
| 250 | | |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $P_{s,t}$ | 0.2453 |
| $P_{C,s}$ | 0.5045 |
| $P_{d,C}$ | 0.2976 |
| $P_{e,d}$ | 0.2376 |
| $P_{g,F}$ | 0.5670 |
| $P_{i,h}$ | 0.8491 |
| | |
| $P'_{s,t}$ | 0.2425 |
| $P'_{C',s}$ | 0.5450 |
| $P'_{d,C'}$ | 0.2477 |
| $P'_{e,d}$ | 0.2348 |
| $P'_{g,F'}$ | 0.5024 |
| $P'_{i,h}$ | 0.8392 |

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

| | |
|------------------|---------|
| $\Delta P_{C,t}$ | 0.0107 |
| $\Delta P_{C,s}$ | 0.0062 |
| $\Delta P_{F,e}$ | -0.0021 |
| $\Delta P_{g,F}$ | -0.0080 |
| $\Delta P_{i,g}$ | -0.0494 |

| Constants of Dispersion Formula | |
|---------------------------------|---------------|
| B_1 | 1.84568806 |
| B_2 | 0.3390016 |
| B_3 | 1.32418921 |
| C_1 | 0.00988495571 |
| C_2 | 0.0378097402 |
| C_3 | 97.841543 |

| Constants of Dispersion dn/dT | |
|---------------------------------|------------------------|
| D_0 | $7.79 \cdot 10^{-6}$ |
| D_1 | $1.10 \cdot 10^{-8}$ |
| D_2 | $-2.03 \cdot 10^{-11}$ |
| E_0 | $7.86 \cdot 10^{-7}$ |
| E_1 | $8.78 \cdot 10^{-10}$ |
| $\lambda_{TK} [\mu m]$ | 0.215 |

| Color Code | |
|--------------------------------|-------|
| λ_{80}/λ_5 | 39/33 |
| (*= λ_{70}/λ_5) | |

| Remarks | |
|--------------------------------|--|
| suitable for precision molding | |

| Other Properties | |
|---|-------|
| $\alpha_{-30/+70^\circ C} [10^{-6}/K]$ | 6.0 |
| $\alpha_{+20/+300^\circ C} [10^{-6}/K]$ | 7.4 |
| $T_g [^\circ C]$ | 526 |
| $T_{10}^{13.0} [^\circ C]$ | 534 |
| $T_{10}^{7.6} [^\circ C]$ | 629 |
| $c_p [J/(g \cdot K)]$ | 0.560 |
| $\lambda [W/(m \cdot K)]$ | 0.870 |
| $AT [^\circ C]$ | 570 |
| $\rho [g/cm^3]$ | 4.58 |
| $E [10^3 N/mm^2]$ | 119 |
| μ | 0.299 |
| $K [10^{-6} mm^2/N]$ | 2.32 |
| $HK_{0.1/20}$ | 722 |
| HG | |
| $Abrasion Aa$ | 66 |
| | |
| | |
| | |
| CR | 1 |
| FR | 1 |
| SR | 51.3 |
| AR | 1 |
| PR | 2.2 |
| $SR-J$ | 3 |
| $WR-J$ | 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 | 6.8 | 8.3 | 9.9 | 4.4 | 5.9 | 7.3 |
| +20/ +40 | 6.9 | 8.7 | 10.4 | 5.4 | 7.1 | 8.8 |
| +60/ +80 | 7.1 | 8.9 | 10.8 | 5.9 | 7.7 | 9.6 |