

P-SK58A 589612.297

| | | |
|-----------------|---------------|------------------------------|
| $n_d = 1.58913$ | $v_d = 61.15$ | $n_F - n_C = 0.009634$ |
| $n_e = 1.59143$ | $v_e = 60.93$ | $n_{F'} - n_{C'} = 0.009707$ |

| Refractive Indices | | |
|--------------------|----------------|---------|
| | λ [nm] | |
| $n_{2325.4}$ | 2325.4 | 1.55820 |
| $n_{1970.1}$ | 1970.1 | 1.56439 |
| $n_{1529.6}$ | 1529.6 | 1.57086 |
| $n_{1060.0}$ | 1060.0 | 1.57728 |
| n_t | 1014.0 | 1.57799 |
| n_s | 852.1 | 1.58086 |
| n_r | 706.5 | 1.58449 |
| n_C | 656.3 | 1.58618 |
| $n_{C'}$ | 643.8 | 1.58665 |
| $n_{632.8}$ | 632.8 | 1.58709 |
| n_D | 589.3 | 1.58904 |
| n_d | 587.6 | 1.58913 |
| n_e | 546.1 | 1.59143 |
| n_F | 486.1 | 1.59581 |
| $n_{F'}$ | 480.0 | 1.59636 |
| n_g | 435.8 | 1.60100 |
| n_h | 404.7 | 1.60530 |
| n_i | 365.0 | 1.61260 |
| $n_{334.1}$ | 334.1 | 1.62045 |
| $n_{312.6}$ | 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 | 0.546 | 0.220 |
| 2325 | 0.746 | 0.480 |
| 1970 | 0.924 | 0.820 |
| 1530 | 0.984 | 0.961 |
| 1060 | 0.996 | 0.991 |
| 700 | 0.995 | 0.988 |
| 660 | 0.995 | 0.988 |
| 620 | 0.996 | 0.989 |
| 580 | 0.997 | 0.992 |
| 546 | 0.998 | 0.994 |
| 500 | 0.997 | 0.993 |
| 460 | 0.996 | 0.989 |
| 436 | 0.995 | 0.987 |
| 420 | 0.994 | 0.986 |
| 405 | 0.994 | 0.985 |
| 400 | 0.994 | 0.984 |
| 390 | 0.991 | 0.977 |
| 380 | 0.986 | 0.965 |
| 370 | 0.980 | 0.950 |
| 365 | 0.971 | 0.930 |
| 350 | 0.924 | 0.820 |
| 334 | 0.752 | 0.490 |
| 320 | 0.364 | 0.080 |
| 310 | 0.067 | |
| 300 | 0.002 | |
| 290 | | |
| 280 | | |
| 270 | | |
| 260 | | |
| 250 | | |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $P_{s,t}$ | 0.2982 |
| $P_{C,s}$ | 0.5519 |
| $P_{d,C}$ | 0.3062 |
| $P_{e,d}$ | 0.2386 |
| $P_{g,F}$ | 0.5386 |
| $P_{i,h}$ | 0.7578 |
| | |
| $P'_{s,t}$ | 0.2959 |
| $P'_{C',s}$ | 0.5963 |
| $P'_{d,C'}$ | 0.2554 |
| $P'_{e,d}$ | 0.2368 |
| $P'_{g,F'}$ | 0.4784 |
| $P'_{i,h}$ | 0.7521 |

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

| | |
|------------------|---------|
| $\Delta P_{C,t}$ | 0.0150 |
| $\Delta P_{C,s}$ | 0.0065 |
| $\Delta P_{F,e}$ | -0.0010 |
| $\Delta P_{g,F}$ | -0.0023 |
| $\Delta P_{i,g}$ | -0.0080 |

| Constants of Dispersion Formula | |
|---------------------------------|---------------|
| B_1 | 1.3167841 |
| B_2 | 0.171154756 |
| B_3 | 1.12501473 |
| C_1 | 0.00720717498 |
| C_2 | 0.0245659595 |
| C_3 | 102.739728 |

| Constants of Dispersion dn/dT | |
|---------------------------------|------------------------|
| D_0 | $3.16 \cdot 10^{-6}$ |
| D_1 | $1.23 \cdot 10^{-8}$ |
| D_2 | $-1.08 \cdot 10^{-11}$ |
| E_0 | $4.41 \cdot 10^{-7}$ |
| E_1 | $3.20 \cdot 10^{-10}$ |
| $\lambda_{TK} [\mu m]$ | 0.176 |

| Color Code | |
|--------------------------------|-------|
| λ_{80}/λ_5 | 35/31 |
| (*= λ_{70}/λ_5) | |

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

| Other Properties | |
|---|-------|
| $\alpha_{-30/+70^\circ C} [10^{-6}/K]$ | 6.8 |
| $\alpha_{+20/+300^\circ C} [10^{-6}/K]$ | 8.4 |
| $T_g [^\circ C]$ | 510 |
| $T_{10}^{13.0} [^\circ C]$ | 510 |
| $T_{10}^{7.6} [^\circ C]$ | 608 |
| $c_p [J/(g \cdot K)]$ | 0.770 |
| $\lambda [W/(m \cdot K)]$ | 1.020 |
| $AT [^\circ C]$ | 551 |
| $\rho [g/cm^3]$ | 2.97 |
| $E [10^3 N/mm^2]$ | 97 |
| μ | 0.245 |
| $K [10^{-6} mm^2/N]$ | 2.12 |
| $HK_{0.1/20}$ | 662 |
| HG | |
| Abrasion Aa | 102 |
| | |
| | |
| CR | 0 |
| FR | 0 |
| SR | 0 |
| AR | 0 |
| PR | 0 |
| SR-J | 4 |
| WR-J | 2 |

| 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 | 3.2 | 3.8 | 4.4 | 1.0 | 1.6 | 2.2 |
| +20/ +40 | 3.2 | 3.8 | 4.4 | 1.8 | 2.4 | 3.0 |
| +60/ +80 | 3.3 | 4.0 | 4.7 | 2.2 | 2.9 | 3.6 |