

## P-SK57Q1 586595.301

|                 |               |                              |
|-----------------|---------------|------------------------------|
| $n_d = 1.58600$ | $v_d = 59.50$ | $n_F - n_C = 0.009849$       |
| $n_e = 1.58835$ | $v_e = 59.26$ | $n_{F'} - n_{C'} = 0.009928$ |

| Refractive Indices |                |         |
|--------------------|----------------|---------|
|                    | $\lambda$ [nm] |         |
| $n_{2325.4}$       | 2325.4         | 1.55583 |
| $n_{1970.1}$       | 1970.1         | 1.56169 |
| $n_{1529.6}$       | 1529.6         | 1.56784 |
| $n_{1060.0}$       | 1060.0         | 1.57407 |
| $n_t$              | 1014.0         | 1.57476 |
| $n_s$              | 852.1          | 1.57762 |
| $n_r$              | 706.5          | 1.58127 |
| $n_C$              | 656.3          | 1.58299 |
| $n_{C'}$           | 643.8          | 1.58347 |
| $n_{632.8}$        | 632.8          | 1.58392 |
| $n_D$              | 589.3          | 1.58591 |
| $n_d$              | 587.6          | 1.58600 |
| $n_e$              | 546.1          | 1.58835 |
| $n_F$              | 486.1          | 1.59284 |
| $n_{F'}$           | 480.0          | 1.59340 |
| $n_g$              | 435.8          | 1.59817 |
| $n_h$              | 404.7          | 1.60260 |
| $n_i$              | 365.0          | 1.61013 |
| $n_{334.1}$        | 334.1          | 1.61826 |
| $n_{312.6}$        | 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                            | 0.693           | 0.400           |
| 2325                            | 0.831           | 0.630           |
| 1970                            | 0.954           | 0.890           |
| 1530                            | 0.991           | 0.978           |
| 1060                            | 0.999           | 0.997           |
| 700                             | 0.999           | 0.997           |
| 660                             | 0.999           | 0.997           |
| 620                             | 0.999           | 0.997           |
| 580                             | 0.999           | 0.997           |
| 546                             | 0.999           | 0.997           |
| 500                             | 0.998           | 0.995           |
| 460                             | 0.996           | 0.991           |
| 436                             | 0.996           | 0.989           |
| 420                             | 0.995           | 0.987           |
| 405                             | 0.994           | 0.985           |
| 400                             | 0.994           | 0.984           |
| 390                             | 0.992           | 0.980           |
| 380                             | 0.989           | 0.973           |
| 370                             | 0.984           | 0.960           |
| 365                             | 0.980           | 0.950           |
| 350                             | 0.946           | 0.870           |
| 334                             | 0.821           | 0.610           |
| 320                             | 0.480           | 0.160           |
| 310                             | 0.123           |                 |
| 300                             |                 |                 |
| 290                             |                 |                 |
| 280                             |                 |                 |
| 270                             |                 |                 |
| 260                             |                 |                 |
| 250                             |                 |                 |

| Relative Partial Dispersion |        |
|-----------------------------|--------|
| $P_{s,t}$                   | 0.2903 |
| $P_{C,s}$                   | 0.5454 |
| $P_{d,C}$                   | 0.3052 |
| $P_{e,d}$                   | 0.2385 |
| $P_{g,F}$                   | 0.5414 |
| $P_{i,h}$                   | 0.7652 |
|                             |        |
| $P'_{s,t}$                  | 0.2880 |
| $P'_{C',s}$                 | 0.5894 |
| $P'_{d,C'}$                 | 0.2545 |
| $P'_{e,d}$                  | 0.2366 |
| $P'_{g,F'}$                 | 0.4807 |
| $P'_{i,h}$                  | 0.7590 |

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

|                  |         |
|------------------|---------|
| $\Delta P_{C,t}$ | 0.0085  |
| $\Delta P_{C,s}$ | 0.0038  |
| $\Delta P_{F,e}$ | -0.0008 |
| $\Delta P_{g,F}$ | -0.0024 |
| $\Delta P_{i,g}$ | -0.0113 |

| Constants of Dispersion Formula |               |
|---------------------------------|---------------|
| $B_1$                           | 1.30536483    |
| $B_2$                           | 0.171434328   |
| $B_3$                           | 1.10117219    |
| $C_1$                           | 0.00736408831 |
| $C_2$                           | 0.0255786047  |
| $C_3$                           | 106.72606     |

| Constants of Dispersion $dn/dT$ |  |
|---------------------------------|--|
| $D_0$                           |  |
| $D_1$                           |  |
| $D_2$                           |  |
| $E_0$                           |  |
| $E_1$                           |  |
| $\lambda_{TK}$ [ $\mu m$ ]      |  |

| Color Code                      |       |
|---------------------------------|-------|
| $\lambda_{80}/\lambda_5$        | 34/31 |
| (* = $\lambda_{70}/\lambda_5$ ) |       |

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

| Other Properties                            |       |
|---|-------|
| $\alpha_{-30/+70^\circ C}$ [ $10^{-6}/K$ ]  | 7.2   |
| $\alpha_{+20/+300^\circ C}$ [ $10^{-6}/K$ ] | 8.9   |
| $T_g$ [ $^\circ C$ ]                        | 493   |
| $T_{10}^{13.0}$ [ $^\circ C$ ]              | 494   |
| $T_{10}^{7.6}$ [ $^\circ C$ ]               | 593   |
| $c_p$ [J/(g·K)]                             | 0.760 |
| $\lambda$ [W/(m·K)]                         | 1.010 |
| AT [ $^\circ C$ ]                           | 522   |
| $\rho$ [g/cm <sup>3</sup> ]                 | 3.01  |
| E [ $10^3$ N/mm <sup>2</sup> ]              | 93    |
| $\mu$                                       | 0.249 |
| K [ $10^{-6}$ mm <sup>2</sup> /N]           | 2.17  |
| HK <sub>0.1/20</sub>                        | 535   |
| HG  | 3     |
| Abrasion Aa                                 | 124   |
|   |       |
| CR  | 4     |
| FR  | 3     |
| SR  | 52.3  |
| AR  | 2     |
| PR  | 3     |
| SR-J  | 4     |
| 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                                     |   |   |   |   |   |   |
| +20/ +40                                     |   |   |   |   |   |   |
| +60/ +80                                     |   |   |   |   |   |   |