

**SF6**  
**805254.518**

|                 |               |                          |
|-----------------|---------------|--------------------------|
| $n_d = 1.80518$ | $v_d = 25.43$ | $n_F - n_C = 0.031660$   |
| $n_e = 1.81265$ | $v_e = 25.24$ | $n_F' - n_C' = 0.032201$ |

| Refractive Indices |                |         |
|--------------------|----------------|---------|
|                    | $\lambda$ [nm] |         |
| $n_{2325.4}$       | 2325.4         | 1.75302 |
| $n_{1970.1}$       | 1970.1         | 1.75813 |
| $n_{1529.6}$       | 1529.6         | 1.76444 |
| $n_{1060.0}$       | 1060.0         | 1.77380 |
| $n_t$              | 1014.0         | 1.77517 |
| $n_s$              | 852.1          | 1.78157 |
| $n_f$              | 706.5          | 1.79117 |
| $n_C$              | 656.3          | 1.79609 |
| $n_{C'}$           | 643.8          | 1.79750 |
| $n_{632.8}$        | 632.8          | 1.79884 |
| $n_D$              | 589.3          | 1.80491 |
| $n_d$              | 587.6          | 1.80518 |
| $n_e$              | 546.1          | 1.81265 |
| $n_F$              | 486.1          | 1.82775 |
| $n_{F'}$           | 480.0          | 1.82970 |
| $n_g$              | 435.8          | 1.84707 |
| $n_h$              | 404.7          | 1.86436 |
| $n_i$              | 365.0          | 1.89703 |
| $n_{334.1}$        | 334.1          |         |
| $n_{312.6}$        | 312.6          |         |
| $n_{296.7}$        | 296.7          |         |
| $n_{280.4}$        | 280.4          |         |
| $n_{248.3}$        | 248.3          |         |

| Constants of Dispersion Formula |               |
|---------------------------------|---------------|
| $B_1$                           | 1.72448482    |
| $B_2$                           | 0.390104889   |
| $B_3$                           | 1.045728580   |
| $C_1$                           | 0.01348719470 |
| $C_2$                           | 0.0569318095  |
| $C_3$                           | 118.5571850   |

| Constants of Formula for $dn/dT$ |           |
|----------------------------------|-----------|
| $D_0$                            | 6.69E-06  |
| $D_1$                            | 1.78E-08  |
| $D_2$                            | -3.36E-11 |
| $E_0$                            | 1.77E-06  |
| $E_1$                            | 1.70E-09  |
| $\lambda_{TK}$ [ $\mu\text{m}$ ] | 0.269     |

| Temperature Coefficients of the Refractive Index |   |      |      |   |      |      |
|--|---|------|------|---|------|------|
| [°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  | 6.1                                       | 9.9  | 14.5 | 3.7                                       | 7.4  | 11.9 |
| +20/+40  | 6.8                                       | 11.1 | 16.2 | 5.3                                       | 9.5  | 14.6 |
| +60/+80  | 7.3                                       | 11.8 | 17.4 | 6.1                                       | 10.6 | 16.1 |

| Internal Transmittance $\tau_i$ |                 |                 |
|---------------------------------|-----------------|-----------------|
| $\lambda$ [nm]                  | $\tau_i$ [10mm] | $\tau_i$ [25mm] |
| 2500                            | 0.890           | 0.740           |
| 2325                            | 0.910           | 0.790           |
| 1970                            | 0.971           | 0.930           |
| 1530                            | 0.996           | 0.991           |
| 1060                            | 0.999           | 0.999           |
| 700                             | 0.999           | 0.997           |
| 660                             | 0.998           | 0.996           |
| 620                             | 0.998           | 0.995           |
| 580                             | 0.999           | 0.996           |
| 546                             | 0.998           | 0.996           |
| 500                             | 0.996           | 0.991           |
| 460                             | 0.991           | 0.978           |
| 436                             | 0.982           | 0.955           |
| 420                             | 0.967           | 0.920           |
| 405                             | 0.930           | 0.840           |
| 400                             | 0.920           | 0.800           |
| 390                             | 0.850           | 0.660           |
| 380                             | 0.720           | 0.440           |
| 370                             | 0.440           | 0.130           |
| 365                             | 0.250           | 0.030           |
| 350                             | 0.000           | 0.000           |
| 334                             |                 |                 |
| 320                             |                 |                 |
| 310                             |                 |                 |
| 300                             |                 |                 |
| 290                             |                 |                 |
| 280                             |                 |                 |
| 270                             |                 |                 |
| 260                             |                 |                 |
| 250                             |                 |                 |

| Color Code                 |       |
|----------------------------|-------|
| $\lambda_{80} / \lambda_5$ | 42/36 |

| Remarks                    |
|----------------------------|
| lead containing glass type |

| Relative Partial Dispersion |        |
|-----------------------------|--------|
| $P_{s,t}$                   | 0.2020 |
| $P_{C,s}$                   | 0.4588 |
| $P_{d,C}$                   | 0.2871 |
| $P_{e,d}$                   | 0.2359 |
| $P_{g,F}$                   | 0.6102 |
| $P_{i,h}$                   | 1.0316 |
| $P'_{s,t}$                  | 0.1986 |
| $P'_{C,s}$                  | 0.4950 |
| $P'_{d,C'}$                 | 0.2384 |
| $P'_{e,d}$                  | 0.2319 |
| $P'_{g,F'}$                 | 0.5393 |
| $P'_{i,h}$                  | 1.0143 |

| Deviation of Relative Partial Dispersion $\Delta P$ from the normal line |         |
|--|---------|
| $\Delta P_{C,t}$   | -0.0048 |
| $\Delta P_{C,s}$   | -0.0033 |
| $\Delta P_{F,e}$   | 0.0020  |
| $\Delta P_{g,F}$   | 0.0092  |
| $\Delta P_{i,g}$   | 0.0669  |

| Other Properties                                  |       |
|---|-------|
| $\alpha_{-30/+70^\circ\text{C}}$ [ $10^{-6}/K$ ]  | 8.1   |
| $\alpha_{+20/+300^\circ\text{C}}$ [ $10^{-6}/K$ ] | 9.0   |
| $T_g$ [°C]  | 423   |
| $T_{10}^{13}$ [°C]                                | 410   |
| $T_{10}^{7.6}$ [°C]                               | 538   |
| $c_p$ [J/(g·K)]                                   | 0.389 |
| $\lambda$ [W/(m·K)]                               | 0.673 |
| $\rho$ [g/cm <sup>3</sup> ]                       | 5.18  |
| $E$ [ $10^3$ N/mm <sup>2</sup> ]                  | 55    |
| $\mu$   | 0.244 |
| $K$ [ $10^{-6}$ mm <sup>2</sup> /N]               | 0.65  |
| $HK_{0.1/20}$                                     | 370   |
| HG  | 1     |
| CR  | 2     |
| FR  | 3     |
| SR  | 51.3  |
| AR  | 2.3   |
| PR  | 3.3   |