

## N-KZFS2 558540.254

$n_d = 1.55836$

$v_d = 54.01$

$n_F - n_C = 0.010338$

$n_e = 1.56082$

$v_e = 53.83$

$n_F - n_C = 0.010418$

### Refractive Indices

|              | $\lambda$ [nm] |         |
|--------------|----------------|---------|
| $n_{2325.4}$ | 2325.4         | 1.52239 |
| $n_{1970.1}$ | 1970.1         | 1.53011 |
| $n_{1529.6}$ | 1529.6         | 1.53798 |
| $n_{1060.0}$ | 1060.0         | 1.54546 |
| $n_t$        | 1014.0         | 1.54625 |
| $n_s$        | 852.1          | 1.54944 |
| $n_r$        | 706.5          | 1.55337 |
| $n_C$        | 656.3          | 1.55519 |
| $n_{C'}$     | 643.8          | 1.55570 |
| $n_{632.8}$  | 632.8          | 1.55617 |
| $n_D$        | 589.3          | 1.55827 |
| $n_d$        | 587.6          | 1.55836 |
| $n_e$        | 546.1          | 1.56082 |
| $n_F$        | 486.1          | 1.56553 |
| $n_{F'}$     | 480.0          | 1.56612 |
| $n_g$        | 435.8          | 1.57114 |
| $n_h$        | 404.7          | 1.57580 |
| $n_i$        | 365.0          | 1.58382 |
| $n_{334.1}$  | 334.1          | 1.59259 |
| $n_{312.6}$  | 312.6          |         |
| $n_{296.7}$  | 296.7          |         |
| $n_{280.4}$  | 280.4          |         |
| $n_{248.3}$  | 248.3          |         |

### Constants of Dispersion Formula

|       |              |
|-------|--------------|
| $B_1$ | 1.236975540  |
| $B_2$ | 0.153569376  |
| $B_3$ | 0.903976272  |
| $C_1$ | 0.007471705  |
| $C_2$ | 0.0308053556 |
| $C_3$ | 70.17310840  |

### Constants of Formula for $dn/dT$

|                                  |           |
|----------------------------------|-----------|
| $D_0$                            | 6.77E-06  |
| $D_1$                            | 1.31E-08  |
| $D_2$                            | -1.23E-11 |
| $E_0$                            | 3.84E-07  |
| $E_1$                            | 5.51E-10  |
| $\lambda_{TK}$ [ $\mu\text{m}$ ] | 0.196     |

### 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 | 4.6                                       | 5.2 | 5.7 | 2.5                                       | 3.0 | 3.5 |
| +20/+40 | 4.7                                       | 5.3 | 5.9 | 3.3                                       | 3.9 | 4.5 |
| +60/+80 | 4.8                                       | 5.5 | 6.2 | 3.8                                       | 4.5 | 5.1 |

### Internal Transmittance $\tau_i$

| $\lambda$ [nm] | $\tau_i$ [10mm] | $\tau_i$ [25mm] |
|----------------|-----------------|-----------------|
| 2500           | 0.28            | 0.04            |
| 2325           | 0.58            | 0.26            |
| 1970           | 0.91            | 0.80            |
| 1530           | 0.976           | 0.94            |
| 1060           | 0.996           | 0.991           |
| 700            | 0.998           | 0.996           |
| 660            | 0.998           | 0.994           |
| 620            | 0.998           | 0.994           |
| 580            | 0.998           | 0.994           |
| 546            | 0.998           | 0.994           |
| 500            | 0.997           | 0.992           |
| 460            | 0.995           | 0.987           |
| 436            | 0.992           | 0.981           |
| 420            | 0.990           | 0.975           |
| 405            | 0.987           | 0.967           |
| 400            | 0.985           | 0.963           |
| 390            | 0.980           | 0.950           |
| 380            | 0.971           | 0.93            |
| 370            | 0.963           | 0.91            |
| 365            | 0.954           | 0.89            |
| 350            | 0.91            | 0.80            |
| 334            | 0.81            | 0.59            |
| 320            | 0.57            | 0.24            |
| 310            | 0.25            | 0.03            |
| 300            | 0.01            |                 |
| 290            |                 |                 |
| 280            |                 |                 |
| 270            |                 |                 |
| 260            |                 |                 |
| 250            |                 |                 |

### Color Code

$\lambda_{80} / \lambda_5$  34/30

### Remarks

suitable for precision molding

step 0.5 available

### Relative Partial Dispersion P

| $P_{s,t}$                      | 0.3080 |
|--------------------------------|--------|
| $P_{C,s}$                      | 0.5568 |
| $P_{d,C}$                      | 0.3061 |
| $P_{e,d}$                      | 0.2383 |
| $P_{g,F}$                      | 0.5419 |
| $P_{i,h}$                      | 0.7758 |
| Relative Partial Dispersion P' |        |
| $P'_{s,t}$                     | 0.3056 |
| $P'_{C,s}$                     | 0.6011 |
| $P'_{d,C'}$                    | 0.2552 |
| $P'_{e,d}$                     | 0.2365 |
| $P'_{g,F'}$                    | 0.4814 |
| $P'_{i,h}$                     | 0.7699 |

### Deviation of Rel. Partial Disp.

#### $\Delta P$ from the normal line

|                  |         |
|------------------|---------|
| $\Delta P_{C,t}$ | 0.0636  |
| $\Delta P_{C,s}$ | 0.0280  |
| $\Delta P_{F,e}$ | -0.0044 |
| $\Delta P_{g,F}$ | -0.0111 |
| $\Delta P_{i,g}$ | -0.0440 |

### Chemical Properties

|      |      |
|------|------|
| CR   | 1    |
| FR   | 4    |
| SR   | 52.3 |
| AR   | 4.3  |
| PR   | 4.2  |
| SR-J | 6    |
| WR-J | 6    |

### Other Properties

|   |       |
|---|-------|
| $\alpha_{-30/+70^\circ\text{C}}$ [ $10^{-6}/K$ ]  | 4.4   |
| $\alpha_{+20/+300^\circ\text{C}}$ [ $10^{-6}/K$ ] | 5.4   |
| $T_g$ [°C]  | 482   |
| $T_{10}^{13}$ [°C]                                | 488   |
| $T_{10}^{7.6}$ [°C]                               | 590   |
| $c_p$ [J/(g·K)]                                   | 0.830 |
| $\lambda$ [W/(m·K)]                               | 0.810 |
| AT [°C]   | 533   |
| $\rho$ [g/cm <sup>3</sup> ]                       | 2.54  |
| E [10 <sup>3</sup> N/mm <sup>2</sup> ]            | 66    |
| $\mu$   | 0.266 |
| K [10 <sup>-6</sup> mm <sup>2</sup> /N]           | 3.98  |
| HK <sub>0.1/20</sub>                              | 490   |
| HG  | 3     |
| Abrasion Aa                                       | 70    |