

|                    |    |         |   |      |         |         |
|--------------------|----|---------|---|------|---------|---------|
| 751431<br>K-GIR140 | nd | 1.75106 | d | 43.1 | nF-nC   | 0.01743 |
|                    | ne | 1.75521 | e | 42.8 | nF'-nC' | 0.01765 |

| 屈折率<br>Refractive Indices |        |         |
|---------------------------|--------|---------|
| n1548                     | 1548.1 | 1.72651 |
| n1309                     | 1308.5 | 1.72913 |
| nt                        | 1014.0 | 1.73354 |
| nA'                       | 768.2  | 1.74029 |
| nr                        | 706.5  | 1.74306 |
| nC                        | 656.3  | 1.74591 |
| nC'                       | 643.9  | 1.74672 |
| nD                        | 589.3  | 1.75091 |
| nd                        | 587.6  | 1.75106 |
| ne                        | 546.1  | 1.75521 |
| nF                        | 486.1  | 1.76334 |
| nF'                       | 480.0  | 1.76437 |
| ng                        | 435.8  | 1.77325 |
| nh                        | 404.7  | 1.78165 |
| ni                        | 365.0  | 1.79635 |

| 分散式の常数<br>Constants of Dispersion Formula |                             |
|---|-----------------------------|
| A0  | 2.9854628                   |
| A1  | $-6.5859032 \times 10^{-3}$ |
| A2  | $2.6407911 \times 10^{-2}$  |
| A3  | $8.4695423 \times 10^{-4}$  |
| A4  | $-3.2505558 \times 10^{-5}$ |
| A5  | $3.1878545 \times 10^{-6}$  |

| dn/dTの分散常数<br>Constants of Dispersion dn/dT abs. |                         |
|--|-------------------------|
| D0   | $5.13 \times 10^{-6}$   |
| D1   | $1.39 \times 10^{-8}$   |
| D2   | $-3.39 \times 10^{-10}$ |
| E0   | $9.92 \times 10^{-7}$   |
| E1   | $9.74 \times 10^{-10}$  |
| TK (μm)  | 0.216                   |

| 部分分散および部分分散比<br>Partial Dispersions and Relative Partial Dispersions |                 |         |         |
|--|-----------------|---------|---------|
| nC-nt  | nC-nA'          | nd-nC   | ne-nC   |
| 0.01237  | 0.00562         | 0.00515 | 0.00930 |
| C,t  | C,A'            | d,C     | e,C     |
| 0.710  | 0.322           | 0.295   | 0.534   |
| ng-nd  | ng-nF           | nh-ng   | ni-ng   |
| 0.02219  | 0.00991         | 0.00840 | 0.02310 |
| g,d  | g,F( )          | h,g     | i,g     |
| 1.273  | 0.569 (-0.0040) | 0.482   | 1.325   |
| nC'-nt   | ne-nC'          | nF'-ne  | ni-nF'  |
| 0.01318  | 0.00849         | 0.00916 | 0.03198 |
| 'C',t  | 'e,C'           | 'F',e   | 'i,F'   |
| 0.747  | 0.481           | 0.519   | 1.812   |

| 機械的性質<br>Mechanical Properties   |         | 熱的性質<br>Thermal Properties  |       |
|--|---------|---|-------|
| ヌーブ硬さ Hk<br>Knoop Hardness   | 476 (5) | 転移点 Tg ( )<br>Transformation Point  | 599   |
| ピッカース硬さ Hv<br>Vickers Hardness   | 508     | 屈伏点 At ( )<br>Yielding Point  | 638   |
| 磨耗度 Ha<br>Abrasion   | 200     | 線膨張係数 ( $\times 10^{-7} \text{ }^{-1}$ )<br>Thermal Expansion                   |       |
| ヤング率 E ( $\times 10^8 \text{ N}\cdot\text{m}^{-2}$ )<br>Young's Modulus    | 832     | (-30 ~ +70 )  | 59    |
|  |         | (+100 ~ +300 )  | 97    |
| 剛性率 G ( $\times 10^8 \text{ N}\cdot\text{m}^{-2}$ )<br>Modulus of Rigidity | 322     | 熱伝導率 ( $\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ )<br>Thermal Conductivity | 0.709 |
| ポアソン比<br>Poisson Ratio   | 0.294   | 比熱 Cp ( $\text{J}\cdot\text{kg}^{-1}\cdot\text{K}^{-1}$ )<br>Specific Heat      | 424   |
| 化学的性質<br>Chemical Properties   |         | その他<br>Other Properties   |       |
| 耐水性(粉末法) RW<br>Water Resistance  | 1       | 泡 B<br>Bubbles  |       |
| 耐酸性(粉末法) RA<br>Acid Resistance   | 4       | 着色度 C<br>Coloration   | 37/28 |
| 耐久性(表面法) DW<br>Chemical Durability   | 1       | 比重 S.g<br>Specific Gravity  | 5.24  |
| 備考 Remarks   |         | 生産頻度 PF<br>Production frequency   | C     |

| 内部透過率<br>Internal Transmittance |                   |                   |
|---------------------------------|-------------------|-------------------|
| (nm)                            | 3mm               | 10mm              |
| 270                             |                   |                   |
| 280                             | 0.28 <sub>0</sub> | 0.01 <sub>4</sub> |
| 290                             | 0.50 <sub>9</sub> | 0.10 <sub>5</sub> |
| 300                             | 0.65 <sub>2</sub> | 0.24 <sub>1</sub> |
| 310                             | 0.71 <sub>6</sub> | 0.32 <sub>9</sub> |
| 320                             | 0.86 <sub>0</sub> | 0.60 <sub>6</sub> |
| 330                             | 0.91 <sub>2</sub> | 0.73 <sub>6</sub> |
| 340                             | 0.94 <sub>5</sub> | 0.82 <sub>9</sub> |
| 350                             | 0.96 <sub>4</sub> | 0.88 <sub>8</sub> |
| 360                             | 0.97 <sub>5</sub> | 0.92 <sub>0</sub> |
| 370                             | 0.98 <sub>2</sub> | 0.94 <sub>2</sub> |
| 380                             | 0.99 <sub>0</sub> | 0.96 <sub>8</sub> |
| 390                             | 0.99 <sub>2</sub> | 0.97 <sub>5</sub> |
| 400                             | 0.99 <sub>4</sub> | 0.98 <sub>3</sub> |
| 420                             | 0.99 <sub>6</sub> | 0.98 <sub>9</sub> |
| 440                             | 0.99 <sub>8</sub> | 0.99 <sub>4</sub> |
| 460                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 480                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 500                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 550                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 600                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 650                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 700                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 800                             | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 1060                            | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 1500                            | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |
| 2000                            | 0.99 <sub>8</sub> | 0.99 <sub>8</sub> |

| 屈折率の温度係数<br>Temperature Coefficients of Refractive Index |  |     |     |  |     |     |
|--|--|-----|-----|--|-----|-----|
| ( )  | (dn/dT)rel. ( $\times 10^{-6} \text{ }^{-1}$ ) |     |     | (dn/dT)abs. ( $\times 10^{-6} \text{ }^{-1}$ ) |     |     |
|  | 1548.1   | d   | g   | 1548.1   | d   | g   |
| -40/-20  | 3.2  | 4.9 | 6.9 | 0.9  | 2.5 | 4.5 |
| 0/+20  | 4.7  | 6.5 | 8.8 | 3.0  | 4.7 | 7.0 |
| +40/+60  | 4.5  | 6.4 | 8.9 | 3.2  | 5.1 | 7.5 |