

S-BSM16

Code(d) 620603  
Code(e) 623601

|           |                       |            |       |                   |           |
|-----------|-----------------------|------------|-------|-------------------|-----------|
| 屈折率 $n_d$ | 1.620 41<br>1.620 411 | アッベ数 $v_d$ | 60.29 | 分散 $n_F - n_C$    | 0.010 290 |
| 屈折率 $n_e$ | 1.622 865             | アッベ数 $v_e$ | 60.03 | 分散 $n_F - n_{C'}$ | 0.010 376 |

| 屈折率            |           |          |
|----------------|-----------|----------|
| $\lambda$ (μm) |           |          |
| $n_{2325}$     | 2.325 42  | 1.589 57 |
| $n_{1970}$     | 1.970 09  | 1.595 45 |
| $n_{1530}$     | 1.529 58  | 1.601 68 |
| $n_{1129}$     | 1.128 64  | 1.607 02 |
| $n_t$          | 1.013 98  | 1.608 74 |
| $n_s$          | 0.852 11  | 1.611 70 |
| $n_{A'}$       | 0.768 19  | 1.613 68 |
| $n_r$          | 0.706 52  | 1.615 49 |
| $n_C$          | 0.656 27  | 1.617 28 |
| $n_{C'}$       | 0.643 85  | 1.617 78 |
| $n_{He-Ne}$    | 0.632 8   | 1.618 24 |
| $n_D$          | 0.589 29  | 1.620 32 |
| $n_d$          | 0.587 56  | 1.620 41 |
| $n_e$          | 0.546 07  | 1.622 87 |
| $n_F$          | 0.486 13  | 1.627 57 |
| $n_{F'}$       | 0.479 99  | 1.628 15 |
| $n_{He-Cd}$    | 0.441 57  | 1.632 41 |
| $n_g$          | 0.435 835 | 1.633 15 |
| $n_h$          | 0.404 656 | 1.637 78 |
| $n_i$          | 0.365 015 | 1.645 67 |

| 分散定数  |                   |
|-------|-------------------|
| $A_1$ | 1.144 903 83E+00  |
| $A_2$ | 4.395 639 11E-01  |
| $A_3$ | 1.276 880 79E+00  |
| $B_1$ | 1.370 349 16E-02  |
| $B_2$ | -1.865 142 05E-03 |
| $B_3$ | 1.195 355 85E+02  |

| 化学的性質           |      |
|-----------------|------|
| 耐水性 (粉末法) RW(P) | 3    |
| 耐酸性 (粉末法) RA(P) | 5    |
| 耐候性 (表面法) W(S)  | 2~3  |
| 耐酸性 SR          | 53.2 |
| 耐洗剤性 PR         | 4.2  |

| 機械的性質            |         |
|------------------|---------|
| ヤング率 $E$ (GPa)   | 87.8    |
| 剛性率 $G$ (GPa)    | 34.8    |
| ポアソン比 $\sigma$   | 0.262   |
| ヌーブ硬さ Hk [Class] | 570   6 |
| 摩擦度 Aa           | 155     |

| 部分分散           |           |
|----------------|-----------|
| $n_C - n_t$    | 0.008 531 |
| $n_C - n_{A'}$ | 0.003 595 |
| $n_d - n_C$    | 0.003 135 |
| $n_e - n_C$    | 0.005 589 |
| $n_g - n_d$    | 0.012 739 |
| $n_g - n_F$    | 0.005 584 |
| $n_h - n_g$    | 0.004 632 |
| $n_i - n_g$    | 0.012 520 |
| $n_C - n_t$    | 0.009 030 |
| $n_e - n_{C'}$ | 0.005 090 |
| $n_{F'} - n_e$ | 0.005 286 |
| $n_i - n_{F'}$ | 0.017 519 |

| 部分分散比            |         |
|------------------|---------|
| $\theta_{C,t}$   | 0.829 1 |
| $\theta_{C,A'}$  | 0.349 4 |
| $\theta_{d,C}$   | 0.304 7 |
| $\theta_{e,C}$   | 0.543 1 |
| $\theta_{g,d}$   | 1.238 0 |
| $\theta_{g,F}$   | 0.542 7 |
| $\theta_{h,g}$   | 0.450 1 |
| $\theta_{i,g}$   | 1.216 7 |
| $\theta'_{C,t}$  | 0.870 3 |
| $\theta'_{e,C'}$ | 0.490 6 |
| $\theta'_{F,e}$  | 0.509 4 |
| $\theta'_{i,F'}$ | 1.688 4 |

| 異常分散性                 |          |
|-----------------------|----------|
| $\Delta\theta_{C,t}$  | -0.000 5 |
| $\Delta\theta_{C,A'}$ | 0.000 4  |
| $\Delta\theta_{g,d}$  | -0.001 5 |
| $\Delta\theta_{g,F}$  | -0.001 2 |
| $\Delta\theta_{i,g}$  | -0.003 5 |

| 着色度              |      |                  |     |
|------------------|------|------------------|-----|
| $\lambda_{80}$   | 350  | $\lambda_5$      | 305 |
| $\lambda_{70}$   |      |                  |     |
| 内部透過             |      |                  |     |
| $\lambda_{0.80}$ | 346  | $\lambda_{0.05}$ | 312 |
| CCI              |      |                  |     |
| B                | G    | R                |     |
| 0.00             | 0.28 | 0.23             |     |

| 内部透過率          |                  |
|----------------|------------------|
| $\lambda$ (nm) | $\tau_i$ (10 mm) |
| 280            |                  |
| 290            |                  |
| 300            |                  |
| 310            | 0.01             |
| 320            | 0.18             |
| 330            | 0.49             |
| 340            | 0.72             |
| 350            | 0.85             |
| 360            | 0.924            |
| 370            | 0.959            |
| 380            | 0.976            |
| 390            | 0.984            |
| 400            | 0.989            |
| 420            | 0.992            |
| 440            | 0.993            |
| 460            | 0.994            |
| 480            | 0.996            |
| 500            | 0.997            |
| 550            | 0.999            |
| 600            | 0.998            |
| 650            | 0.997            |
| 700            | 0.998            |
| 800            | 0.999            |
| 900            | 0.999            |
| 1 000          | 0.999            |
| 1 200          | 0.999            |
| 1 400          | 0.992            |
| 1 600          | 0.995            |
| 1 800          | 0.987            |
| 2 000          | 0.972            |
| 2 200          | 0.911            |
| 2 400          | 0.79             |

| 熱的性質   |       |
|--|-------|
| 歪点 StP (°C)  | 606   |
| 徐冷点 AP (°C)  | 634   |
| 転移点 Tg (°C)  | 657   |
| 屈伏点 At (°C)  | 699   |
| 軟化点 SP (°C)  | 738   |
| 線膨張係数 (-30 °C ~ 70 °C)   | 67    |
| $\alpha_l$ (10 <sup>-7</sup> K <sup>-1</sup> ) (100 °C ~ 300 °C) | 80    |
| 熱伝導率 $\lambda$ (W/(m·K))   | 0.835 |

| 線膨張係数      |  |
|------------|--|
| 温度範囲 (°C)  | $\alpha_l$ (10 <sup>-7</sup> K <sup>-1</sup> ) |
| -100 ~ -90 | 54   |
| -90 ~ -80  | 56   |
| -80 ~ -70  | 57   |
| -70 ~ -60  | 58   |
| -60 ~ -50  | 59   |
| -50 ~ -40  | 60   |
| -40 ~ -30  | 61   |
| -30 ~ -20  | 62   |
| -20 ~ -10  | 63   |
| -10 ~ 0    | 64   |
| 0 ~ 10     | 65   |
| 10 ~ 20    | 66   |
| 20 ~ 30    | 67   |
| 30 ~ 40    | 68   |
| 40 ~ 50    | 69   |
| 50 ~ 60    | 70   |
| 60 ~ 70    | 71   |
| 70 ~ 80    | 71   |
| 80 ~ 90    | 72   |
| 90 ~ 100   | 73   |
| 100 ~ 110  | 74   |
| 110 ~ 120  | 75   |
| 120 ~ 130  | 75   |
| 130 ~ 140  | 76   |
| 140 ~ 150  | 77   |
| 150 ~ 160  | 78   |
| 160 ~ 170  | 78   |
| 170 ~ 180  | 79   |
| 180 ~ 190  | 79   |
| 190 ~ 200  | 80   |
| 200 ~ 210  | 81   |
| 210 ~ 220  | 81   |
| 220 ~ 230  | 82   |
| 230 ~ 240  | 82   |
| 240 ~ 250  | 83   |
| 250 ~ 260  | 83   |
| 260 ~ 270  | 84   |
| 270 ~ 280  | 84   |
| 280 ~ 290  | 85   |
| 290 ~ 300  | 85   |

| 屈折率の温度係数  |   |     |     |     |     |     |     |     |     |     |     |     |
|-----------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 温度範囲 (°C) | $\Delta n_{rel} / \Delta T$ (10 <sup>-6</sup> K <sup>-1</sup> ) |     |     |     |     |     |     |     |     |     |     |     |
|           | 1550  | t   | r   | C   | C'  | d   | e   | F   | F'  | g   | h   | i   |
| -80 ~ -60 | 0.5   | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 1.2 | 1.4 | 1.4 | 1.6 | 2.0 | 2.4 |
| -60 ~ -40 | 0.4   | 0.6 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.2 | 1.3 | 1.6 | 1.9 | 2.3 |
| -40 ~ -20 | 0.4   | 0.6 | 0.8 | 0.9 | 0.9 | 1.0 | 1.1 | 1.3 | 1.3 | 1.6 | 1.9 | 2.4 |
| -20 ~ 0   | 0.5   | 0.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.4 | 1.5 | 1.7 | 2.0 | 2.6 |
| 0 ~ 20    | 0.7   | 0.8 | 1.0 | 1.0 | 1.1 | 1.2 | 1.3 | 1.5 | 1.5 | 1.9 | 2.2 | 2.7 |
| 20 ~ 40   | 0.8   | 0.9 | 1.1 | 1.2 | 1.2 | 1.3 | 1.4 | 1.7 | 1.7 | 2.0 | 2.4 | 2.9 |
| 40 ~ 60   | 0.9   | 1.0 | 1.2 | 1.3 | 1.3 | 1.5 | 1.7 | 1.9 | 2.0 | 2.2 | 2.5 | 3.1 |
| 60 ~ 80   | 1.1   | 1.2 | 1.4 | 1.5 | 1.5 | 1.6 | 1.8 | 2.0 | 2.1 | 2.4 | 2.6 | 3.3 |
| 80 ~ 100  | 1.2   | 1.3 | 1.6 | 1.7 | 1.7 | 1.8 | 1.9 | 2.2 | 2.2 | 2.5 | 2.8 | 3.4 |
| 100 ~ 120 | 1.3   | 1.5 | 1.7 | 1.8 | 1.8 | 1.9 | 2.1 | 2.3 | 2.4 | 2.7 | 3.0 | 3.6 |
| 120 ~ 140 | 1.4   | 1.5 | 1.8 | 1.9 | 1.9 | 2.0 | 2.2 | 2.5 | 2.5 | 2.8 | 3.1 | 3.7 |
| 140 ~ 160 | 1.5   | 1.6 | 1.9 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 2.6 | 2.9 | 3.3 | 3.9 |
| 160 ~ 180 | 1.5   | 1.7 | 2.0 | 2.1 | 2.1 | 2.3 | 2.4 | 2.7 | 2.7 | 3.0 | 3.4 | 4.0 |

| その他  |      |
|--|------|
| 光弾性定数 $\beta$ (nm/(cm·10 <sup>5</sup> Pa)) | 1.81 |
| 比重 $d$                                     | 3.59 |
| 備考   |      |