

E-FD5

673-322

$n_d = 1.67270$ $\nu_d = 32.17$ $n_F - n_C = 0.020910$
 $n_e = 1.67764$ $\nu_e = 31.92$ $n_{F'} - n_{C'} = 0.021227$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.65191 |
| n_s | 852.11 | 1.65660 |
| $n_{A'}$ | 768.19 | 1.66002 |
| n_r | 706.52 | 1.66327 |
| n_c | 656.27 | 1.66661 |
| $n_{c'}$ | 643.85 | 1.66756 |
| n_{633} | 632.80 | 1.66846 |
| n_D | 589.29 | 1.67252 |
| n_d | 587.56 | 1.67270 |
| n_e | 546.07 | 1.67764 |
| n_F | 486.13 | 1.68752 |
| $n_{F'}$ | 479.99 | 1.68879 |
| n_g | 435.84 | 1.69999 |
| n_h | 404.66 | 1.71105 |
| n_i | 365.01 | 1.73182 |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 2.7135839 |
| A_1 | $-1.1419719 \times 10^{-2}$ |
| A_2 | 2.6133708×10^{-2} |
| A_3 | 1.7576479×10^{-3} |
| A_4 | $-1.3307737 \times 10^{-4}$ |
| A_5 | 1.5203351×10^{-5} |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_c - n_t$ | 0.014700 |
| $n_d - n_c$ | 0.006087 |
| $n_F - n_d$ | 0.014823 |
| $n_g - n_F$ | 0.012467 |
| $n_{c'} - n_t$ | 0.015651 |
| $n_e - n_{c'}$ | 0.010081 |
| $n_{F'} - n_e$ | 0.011146 |
| $n_g - n_{F'}$ | 0.011199 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{c,t}$ | 0.7030 | $P'_{c,t}$ | 0.7373 |
| $P_{d,c}$ | 0.2911 | $P'_{d,c}$ | 0.2420 |
| $P_{e,d}$ | 0.2365 | $P'_{e,d}$ | 0.2330 |
| $P_{F,e}$ | 0.4724 | $P'_{F,e}$ | 0.5251 |
| $P_{g,F}$ | 0.5962 | $P'_{g,F}$ | 0.5276 |
| $P_{h,g}$ | 0.5290 | $P'_{h,g}$ | 0.5211 |
| $P_{i,h}$ | 0.9934 | $P'_{i,h}$ | 0.9786 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{c,t}$ | 0.0068 |
| $\Delta P_{c,A'}$ | -0.0004 |
| $\Delta P_{g,d}$ | 0.0067 |
| $\Delta P_{g,F}$ | 0.0059 |
| $\Delta P_{i,g}$ | 0.0659 |

| 化学的性質 Chemical Properties | |
|---------------------------|---|
| D_W | 1 |
| D_A | 1 |
| T_{Blue} | 1 |
| D_{NaOH} | 1 |
| D_{STPP} | 1 |
| D_o | 1 |
| D_H | |

| 熱的性質 Thermal Properties | |
|------------------------------------|-------|
| T_g (°C) | 580 |
| T_s (°C) | 629 |
| $T_{10^{14.5}}$ (°C) | 557 |
| $T_{10^{13}}$ (°C) | 570 |
| $T_{10^{7.6}}$ (°C) | 678 |
| $\alpha_{-30/+70}$ ($10^{-7}/K$) | 89 |
| $\alpha_{100/300}$ ($10^{-7}/K$) | 109 |
| λ [W/(m·K)] | 1.030 |
| C_p [kJ/(kg·K)] | 0.721 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 520 (5) |
| F_A | 170 |
| E (GPa) | 82 |
| G (GPa) | 32.9 |
| μ | 0.251 |
| σ_b (MPa) | |

| 屈折率の温度係数 Thermal coefficient of refractive indices ($\times 10^{-6}/K$) | | |
|---|----------------|----------------|
| (°C) | dn/dT (rel.) | dn/dT (abs.) |
| -40/-20 | 1.2 | -1.1 |
| -20/ 0 | 1.2 | -0.7 |
| 0/+20 | 1.3 | -0.4 |
| +20/+40 | 1.3 | -0.1 |
| +40/+60 | 1.4 | 0.1 |
| +60/+80 | 1.5 | 0.3 |

| 冷却速度による屈折率の変化 Difference of refractive indices by cooling rate | |
|--|--|
| β_c | |
| β_d | |
| β_F | |
| β_g | |

| 光弾性定数 Photoelastic Constant | |
|-----------------------------|--|
| B ($10^{-12}/Pa$) | |

| その他の性質 Other Property | |
|-----------------------|------|
| 比重 d | 2.90 |

| 内部透過率 Internal Transmittance | | |
|------------------------------|------------|-------------|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.997 | 0.994 |
| 1500 | 0.997 | 0.993 |
| 1400 | 0.997 | 0.995 |
| 1300 | 0.999 | 0.998 |
| 1200 | 0.999 | 0.997 |
| 1100 | 0.998 | 0.996 |
| 1060 | 0.998 | 0.996 |
| 1050 | 0.998 | 0.996 |
| 1000 | 0.998 | 0.996 |
| 950 | 0.998 | 0.996 |
| 900 | 0.997 | 0.995 |
| 850 | 0.997 | 0.994 |
| 830 | 0.998 | 0.996 |
| 800 | 0.998 | 0.997 |
| 780 | 0.999 | 0.997 |
| 750 | 0.999 | 0.997 |
| 700 | 0.998 | 0.996 |
| 650 | 0.998 | 0.996 |
| 600 | 0.998 | 0.997 |
| 550 | 0.998 | 0.996 |
| 500 | 0.997 | 0.994 |
| 480 | 0.996 | 0.991 |
| 460 | 0.993 | 0.986 |
| 440 | 0.992 | 0.984 |
| 420 | 0.986 | 0.972 |
| 400 | 0.961 | 0.924 |
| 390 | 0.920 | 0.850 |
| 380 | 0.820 | 0.670 |
| 370 | 0.580 | 0.340 |
| 360 | 0.220 | 0.050 |
| 350 | | |
| 340 | | |
| 330 | | |
| 320 | | |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |

| 着色度 Coloring | |
|--|-------|
| $\lambda_{80}(\lambda_{70})/\lambda_5$ | 40/36 |
| $\lambda_{\tau 0.8}$ | |
| 色度 (D_{65}) Chromaticity coordinates | |
| x | |
| y | |

| 備考 Remarks | |
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| 作成 201004 | |
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