

M-PCD4

618-639

$n_d = 1.61881$ $\nu_d = 63.85$ $n_F - n_C = 0.009691$
 $n_e = 1.62112$ $\nu_e = 63.55$ $n_{F'} - n_{C'} = 0.009774$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.60793 |
| n_s | 852.11 | 1.61065 |
| $n_{A'}$ | 768.19 | 1.61250 |
| n_r | 706.52 | 1.61418 |
| n_c | 656.27 | 1.61586 |
| $n_{c'}$ | 643.85 | 1.61633 |
| n_{633} | 632.80 | 1.61677 |
| n_D | 589.29 | 1.61872 |
| n_d | 587.56 | 1.61881 |
| n_e | 546.07 | 1.62112 |
| n_F | 486.13 | 1.62555 |
| $n_{F'}$ | 479.99 | 1.62610 |
| n_g | 435.84 | 1.63080 |
| n_h | 404.66 | 1.63514 |
| n_i | 365.01 | 1.64251 |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 2.5823350 |
| A_1 | $-9.9520390 \times 10^{-3}$ |
| A_2 | 1.3291840×10^{-2} |
| A_3 | 4.5506210×10^{-4} |
| A_4 | $-3.3271320 \times 10^{-5}$ |
| A_5 | 1.7301720×10^{-6} |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_c - n_t$ | 0.007931 |
| $n_d - n_c$ | 0.002947 |
| $n_F - n_d$ | 0.006744 |
| $n_g - n_F$ | 0.005249 |
| $n_{c'} - n_t$ | 0.008399 |
| $n_e - n_{c'}$ | 0.004792 |
| $n_{F'} - n_e$ | 0.004982 |
| $n_g - n_{F'}$ | 0.004698 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{c,t}$ | 0.8184 | $P'_{c,t}$ | 0.8593 |
| $P_{d,c}$ | 0.3041 | $P'_{d,c}$ | 0.2536 |
| $P_{e,d}$ | 0.2387 | $P'_{e,d}$ | 0.2366 |
| $P_{F,e}$ | 0.4572 | $P'_{F,e}$ | 0.5097 |
| $P_{g,F}$ | 0.5416 | $P'_{g,F}$ | 0.4807 |
| $P_{h,g}$ | 0.4478 | $P'_{h,g}$ | 0.4440 |
| $P_{i,h}$ | 0.7604 | $P'_{i,h}$ | 0.7539 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{c,t}$ | -0.0258 |
| $\Delta P_{c,A'}$ | -0.0074 |
| $\Delta P_{g,d}$ | 0.0113 |
| $\Delta P_{g,F}$ | 0.0084 |
| $\Delta P_{i,g}$ | 0.0321 |

| 化学的性質 Chemical Properties | |
|---------------------------|---|
| D_W | 1 |
| D_A | 4 |
| T_{Blue} | |
| D_{NaOH} | 2 |
| D_{STPP} | 2 |
| D_o | 2 |
| D_H | 1 |

| 熱的性質 Thermal Properties | |
|------------------------------------|-------|
| T_g (°C) | 508 |
| T_s (°C) | 555 |
| $T_{10^{14.5}}$ (°C) | 486 |
| $T_{10^{13}}$ (°C) | 499 |
| $T_{10^{7.6}}$ (°C) | 588 |
| $\alpha_{-30/+70}$ ($10^{-7}/K$) | 106 |
| $\alpha_{100/300}$ ($10^{-7}/K$) | 130 |
| λ [W/(m·K)] | 0.757 |
| C_p [kJ/(kg·K)] | 0.616 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 390 (4) |
| F_A | 300 |
| E (GPa) | 86 |
| G (GPa) | 33.4 |
| μ | 0.282 |
| σ_b (MPa) | 55 |

| 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 | -2.8 | -4.9 |
| -20/ 0 | -2.9 | -4.7 |
| 0/+20 | -2.9 | -4.5 |
| +20/+40 | -3.0 | -4.4 |
| +40/+60 | -3.0 | -4.2 |
| +60/+80 | -3.0 | -4.1 |

| 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 ($10^{-12}/Pa$) | 1.03 |

| その他の性質 Other Property | |
|-----------------------|------|
| 比重 d | 3.57 |

| 内部透過率 Internal Transmittance | | |
|------------------------------|------------|-------------|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.999 | 0.997 |
| 1500 | 0.998 | 0.997 |
| 1400 | 0.999 | 0.998 |
| 1300 | 0.999 | 0.999 |
| 1200 | 0.999 | 0.999 |
| 1100 | 0.999 | 0.999 |
| 1060 | 0.999 | 0.998 |
| 1050 | 0.999 | 0.998 |
| 1000 | 0.999 | 0.998 |
| 950 | 0.999 | 0.998 |
| 900 | 0.998 | 0.997 |
| 850 | 0.998 | 0.996 |
| 830 | 0.998 | 0.997 |
| 800 | 0.998 | 0.996 |
| 780 | 0.998 | 0.995 |
| 750 | 0.998 | 0.996 |
| 700 | 0.998 | 0.996 |
| 650 | 0.999 | 0.997 |
| 600 | 0.999 | 0.998 |
| 550 | 0.999 | 0.999 |
| 500 | 0.999 | 0.998 |
| 480 | 0.998 | 0.996 |
| 460 | 0.997 | 0.994 |
| 440 | 0.996 | 0.991 |
| 420 | 0.994 | 0.988 |
| 400 | 0.989 | 0.977 |
| 390 | 0.980 | 0.960 |
| 380 | 0.961 | 0.924 |
| 370 | 0.924 | 0.854 |
| 360 | 0.850 | 0.723 |
| 350 | 0.722 | 0.521 |
| 340 | 0.548 | 0.300 |
| 330 | 0.353 | 0.125 |
| 320 | 0.185 | 0.034 |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |

| 着色度 Coloring | |
|---|---------|
| $\lambda_{80}(\lambda_{70})/\lambda_5$ | 375/325 |
| $\lambda_{\tau 0.8}$ | 365 |
| 色度(D ₆₅) Chromaticity coordinates | |
| x | 0.313 |
| y | 0.330 |

| 備考 Remarks | |
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| 作成 201004 | |
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