

MP-BACD12

583-595

$n_d = 1.58313$ $\nu_d = 59.46$ $n_F - n_C = 0.009807$
 $n_e = 1.58547$ $\nu_e = 59.22$ $n_{F'} - n_{C'} = 0.009887$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.57197 |
| n_s | 852.11 | 1.57481 |
| $n_{A'}$ | 768.19 | 1.57671 |
| n_r | 706.52 | 1.57843 |
| n_c | 656.27 | 1.58014 |
| $n_{c'}$ | 643.85 | 1.58061 |
| n_{633} | 632.80 | 1.58106 |
| n_D | 589.29 | 1.58304 |
| n_d | 587.56 | 1.58313 |
| n_e | 546.07 | 1.58547 |
| n_F | 486.13 | 1.58995 |
| $n_{F'}$ | 479.99 | 1.59050 |
| n_g | 435.84 | 1.59525 |
| n_h | 404.66 | 1.59963 |
| n_i | 365.01 | 1.60713 |

| 化学的性質 Chemical Properties | |
|---------------------------|---|
| D_W | 1 |
| D_A | 3 |
| T_{Blue} | 3 |
| D_{NaOH} | 2 |
| D_{STPP} | 2 |
| D_0 | 2 |
| D_H | 1 |

| 内部透過率 Internal Transmittance | | |
|------------------------------|------------|-------------|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.998 | 0.996 |
| 1500 | 0.998 | 0.996 |
| 1400 | 0.998 | 0.996 |
| 1300 | 0.999 | 0.997 |
| 1200 | 0.998 | 0.997 |
| 1100 | 0.998 | 0.996 |
| 1060 | 0.998 | 0.996 |
| 1050 | 0.998 | 0.996 |
| 1000 | 0.998 | 0.995 |
| 950 | 0.998 | 0.995 |
| 900 | 0.998 | 0.995 |
| 850 | 0.998 | 0.996 |
| 830 | 0.998 | 0.996 |
| 800 | 0.998 | 0.997 |
| 780 | 0.998 | 0.996 |
| 750 | 0.999 | 0.998 |
| 700 | 0.999 | 0.999 |
| 650 | 0.999 | 0.999 |
| 600 | 0.999 | 0.999 |
| 550 | 0.999 | 0.999 |
| 500 | 0.999 | 0.999 |
| 480 | 0.999 | 0.999 |
| 460 | 0.999 | 0.998 |
| 440 | 0.998 | 0.996 |
| 420 | 0.998 | 0.997 |
| 400 | 0.998 | 0.996 |
| 390 | 0.996 | 0.993 |
| 380 | 0.994 | 0.988 |
| 370 | 0.990 | 0.981 |
| 360 | 0.982 | 0.964 |
| 350 | 0.964 | 0.929 |
| 340 | 0.932 | 0.869 |
| 330 | 0.876 | 0.768 |
| 320 | 0.782 | 0.612 |
| 310 | 0.643 | 0.413 |
| 300 | 0.469 | 0.220 |
| 290 | 0.297 | 0.088 |
| 280 | 0.160 | 0.026 |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 2.4687810 |
| A_1 | $-1.0626390 \times 10^{-2}$ |
| A_2 | 1.3251840×10^{-2} |
| A_3 | 4.0486120×10^{-4} |
| A_4 | $-2.9747990 \times 10^{-5}$ |
| A_5 | 1.8258840×10^{-6} |

| 熱的性質 Thermal Properties | |
|---|-------|
| T_g (°C) | 500 |
| T_s (°C) | 548 |
| $T_{10^{14.5}}$ (°C) | 474 |
| $T_{10^{13}}$ (°C) | 495 |
| $T_{10^{7.6}}$ (°C) | 596 |
| $\alpha_{-30/+70^\circ\text{C}}$ ($10^{-7}/\text{K}$) | 70 |
| $\alpha_{100/300^\circ\text{C}}$ ($10^{-7}/\text{K}$) | 90 |
| λ [W/(m·K)] | 1.117 |
| C_p [kJ/(kg·K)] | 0.816 |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_c - n_t$ | 0.008165 |
| $n_d - n_c$ | 0.002992 |
| $n_F - n_d$ | 0.006815 |
| $n_g - n_F$ | 0.005300 |
| $n_{c'} - n_t$ | 0.008641 |
| $n_e - n_{c'}$ | 0.004855 |
| $n_{F'} - n_e$ | 0.005032 |
| $n_g - n_{F'}$ | 0.004744 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 575 (6) |
| F_A | 110 |
| E (GPa) | 90 |
| G (GPa) | 35.8 |
| μ | 0.252 |
| σ_b (MPa) | 112 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{c,t}$ | 0.8326 | $P'_{c,t}$ | 0.8740 |
| $P_{d,c}$ | 0.3051 | $P'_{d,c}$ | 0.2545 |
| $P_{e,d}$ | 0.2385 | $P'_{e,d}$ | 0.2366 |
| $P_{F,e}$ | 0.4564 | $P'_{F,e}$ | 0.5090 |
| $P_{g,F}$ | 0.5404 | $P'_{g,F}$ | 0.4798 |
| $P_{h,g}$ | 0.4475 | $P'_{h,g}$ | 0.4439 |
| $P_{i,h}$ | 0.7638 | $P'_{i,h}$ | 0.7577 |

| 屈折率の温度係数 Thermal coefficient of refractive indices ($\times 10^{-6}/\text{K}$) | | |
|--|----------------|----------------|
| (°C) | dn/dT (rel.) | dn/dT (abs.) |
| -40/-20 | 3.5 | 1.4 |
| -20/ 0 | 3.6 | 1.8 |
| 0/+20 | 3.7 | 2.1 |
| +20/+40 | 3.8 | 2.4 |
| +40/+60 | 3.8 | 2.6 |
| +60/+80 | 3.8 | 2.7 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{c,t}$ | 0.0089 |
| $\Delta P_{c,A'}$ | 0.0010 |
| $\Delta P_{g,d}$ | -0.0009 |
| $\Delta P_{g,F}$ | -0.0008 |
| $\Delta P_{i,g}$ | -0.0037 |

| 冷却速度による屈折率の変化 Difference of refractive indices by cooling rate | |
|--|----|
| β_c | 85 |
| β_d | 85 |
| β_F | 85 |
| β_g | 85 |

| 光弾性定数 Photoelastic Constant | |
|------------------------------|------|
| B ($10^{-12}/\text{Pa}$) | 2.24 |

| 比重 Specific Gravity | |
|---------------------|------|
| d | 3.01 |

| 着色度 Coloration Code | |
|---------------------------------------|---------|
| $\lambda 80 (\lambda 70) / \lambda 5$ | 345/290 |

| 着色度 (内部透過率) Coloration of Internal Transmittance | |
|--|---------|
| $\lambda \tau 80 / \lambda \tau 5$ | 333/285 |

| 備考 Remarks | |
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| 作成 201104 | |
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