

MP-NBFD130

806-407

$n_d = 1.80610$ $\nu_d = 40.73$ $n_F - n_C = 0.019791$
 $n_e = 1.81080$ $\nu_e = 40.48$ $n_{F'} - n_{C'} = 0.020031$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.78543 |
| n_s | 852.11 | 1.79028 |
| $n_{A'}$ | 768.19 | 1.79373 |
| n_r | 706.52 | 1.79695 |
| n_c | 656.27 | 1.80022 |
| $n_{c'}$ | 643.85 | 1.80115 |
| n_{633} | 632.80 | 1.80202 |
| n_D | 589.29 | 1.80593 |
| n_d | 587.56 | 1.80610 |
| n_e | 546.07 | 1.81080 |
| n_F | 486.13 | 1.82002 |
| $n_{F'}$ | 479.99 | 1.82118 |
| n_g | 435.84 | 1.83128 |
| n_h | 404.66 | 1.84090 |
| n_i | 365.01 | 1.85794 |

| 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 | 0.995 |
| 1500 | 0.998 | 0.995 |
| 1400 | 0.997 | 0.993 |
| 1300 | 0.999 | 0.998 |
| 1200 | 0.999 | 0.996 |
| 1100 | 0.998 | 0.994 |
| 1060 | 0.998 | 0.995 |
| 1050 | 0.997 | 0.993 |
| 1000 | 0.997 | 0.992 |
| 950 | 0.997 | 0.992 |
| 900 | 0.997 | 0.991 |
| 850 | 0.996 | 0.991 |
| 830 | 0.997 | 0.991 |
| 800 | 0.996 | 0.993 |
| 780 | 0.997 | 0.992 |
| 750 | 0.997 | 0.993 |
| 700 | 0.999 | 0.999 |
| 650 | 0.999 | 0.999 |
| 600 | 0.999 | 0.999 |
| 550 | 0.999 | 0.999 |
| 500 | 0.998 | 0.996 |
| 480 | 0.996 | 0.992 |
| 460 | 0.993 | 0.986 |
| 440 | 0.989 | 0.979 |
| 420 | 0.984 | 0.968 |
| 400 | 0.971 | 0.943 |
| 390 | 0.957 | 0.916 |
| 380 | 0.931 | 0.868 |
| 370 | 0.882 | 0.779 |
| 360 | 0.778 | 0.605 |
| 350 | 0.578 | 0.334 |
| 340 | 0.309 | 0.095 |
| 330 | | |
| 320 | | |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 3.1737940 |
| A_1 | $-1.4986580 \times 10^{-2}$ |
| A_2 | 2.9067410×10^{-2} |
| A_3 | 1.2048290×10^{-3} |
| A_4 | $-5.3551580 \times 10^{-5}$ |
| A_5 | 5.2713500×10^{-6} |

| 熱的性質 Thermal Properties | |
|---|-------|
| T_g (°C) | 567 |
| T_s (°C) | 604 |
| $T_{10^{14.5}}$ (°C) | 538 |
| $T_{10^{13}}$ (°C) | 559 |
| $T_{10^{7.6}}$ (°C) | 647 |
| $\alpha_{-30/+70^\circ\text{C}}$ ($10^{-7}/\text{K}$) | 58 |
| $\alpha_{100/300^\circ\text{C}}$ ($10^{-7}/\text{K}$) | 74 |
| λ [W/(m·K)] | 0.917 |
| C_p [kJ/(kg·K)] | 0.548 |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_c - n_t$ | 0.014797 |
| $n_d - n_c$ | 0.005875 |
| $n_F - n_d$ | 0.013916 |
| $n_g - n_F$ | 0.011267 |
| $n_{c'} - n_t$ | 0.015722 |
| $n_e - n_{c'}$ | 0.009652 |
| $n_{F'} - n_e$ | 0.010379 |
| $n_g - n_{F'}$ | 0.010102 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 610 (6) |
| F_A | 76 |
| E (GPa) | 111 |
| G (GPa) | 42.7 |
| μ | 0.304 |
| σ_b (MPa) | 92 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{c,t}$ | 0.7477 | $P'_{c,t}$ | 0.7849 |
| $P_{d,c}$ | 0.2969 | $P'_{d,c}$ | 0.2471 |
| $P_{e,d}$ | 0.2376 | $P'_{e,d}$ | 0.2347 |
| $P_{F,e}$ | 0.4656 | $P'_{F,e}$ | 0.5181 |
| $P_{g,F}$ | 0.5693 | $P'_{g,F}$ | 0.5043 |
| $P_{h,g}$ | 0.4860 | $P'_{h,g}$ | 0.4802 |
| $P_{i,h}$ | 0.8607 | $P'_{i,h}$ | 0.8504 |

| 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 | 7.7 | 5.3 |
| -20/ 0 | 7.8 | 5.8 |
| 0/+20 | 7.9 | 6.2 |
| +20/+40 | 8.1 | 6.5 |
| +40/+60 | 8.2 | 6.9 |
| +60/+80 | 8.4 | 7.2 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{c,t}$ | 0.0114 |
| $\Delta P_{c,A'}$ | 0.0021 |
| $\Delta P_{g,d}$ | -0.0065 |
| $\Delta P_{g,F}$ | -0.0056 |
| $\Delta P_{i,g}$ | -0.0340 |

| 冷却速度による屈折率の変化 Difference of refractive indices by cooling rate | |
|--|-----|
| β_c | 148 |
| β_d | 149 |
| β_F | 151 |
| β_g | 152 |

| 光弾性定数 Photoelastic Constant | |
|------------------------------|------|
| B ($10^{-12}/\text{Pa}$) | 2.20 |

| 比重 Specific Gravity | |
|---------------------|------|
| d | 4.56 |

| 着色度 Coloration Code | |
|---------------------------------------|---------|
| $\lambda 80 (\lambda 70) / \lambda 5$ | 405/340 |

| 着色度 (内部透過率) Coloration of Internal Transmittance | |
|--|---------|
| $\lambda \tau 80 / \lambda \tau 5$ | 372/337 |

| 備考 Remarks | |
|------------|--|
| 作成 201104 | |