

E-FEL2

541-472

$n_d = 1.54072$ $\nu_d = 47.20$ $n_F - n_C = 0.011456$
 $n_e = 1.54344$ $\nu_e = 46.90$ $n_{F'} - n_{C'} = 0.011587$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.52841 |
| n_s | 852.11 | 1.53141 |
| $n_{A'}$ | 768.19 | 1.53348 |
| n_r | 706.52 | 1.53538 |
| n_c | 656.27 | 1.53730 |
| $n_{c'}$ | 643.85 | 1.53784 |
| n_{633} | 632.80 | 1.53835 |
| n_D | 589.29 | 1.54062 |
| n_d | 587.56 | 1.54072 |
| n_e | 546.07 | 1.54344 |
| n_F | 486.13 | 1.54876 |
| $n_{F'}$ | 479.99 | 1.54943 |
| n_g | 435.84 | 1.55526 |
| n_h | 404.66 | 1.56084 |
| n_i | 365.01 | 1.57082 |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 2.3317983 |
| A_1 | $-9.7042192 \times 10^{-3}$ |
| A_2 | 1.4032761×10^{-2} |
| A_3 | 6.4822896×10^{-4} |
| A_4 | $-4.0813761 \times 10^{-5}$ |
| A_5 | 3.9064873×10^{-6} |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_C - n_t$ | 0.008889 |
| $n_d - n_C$ | 0.003418 |
| $n_F - n_d$ | 0.008038 |
| $n_g - n_F$ | 0.006503 |
| $n_{C'} - n_t$ | 0.009429 |
| $n_e - n_{C'}$ | 0.005598 |
| $n_{F'} - n_e$ | 0.005989 |
| $n_g - n_{F'}$ | 0.005832 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{C,t}$ | 0.7759 | $P'_{C,t}$ | 0.8138 |
| $P_{d,C}$ | 0.2984 | $P'_{d,C}$ | 0.2484 |
| $P_{e,d}$ | 0.2374 | $P'_{e,d}$ | 0.2347 |
| $P_{F,e}$ | 0.4642 | $P'_{F,e}$ | 0.5169 |
| $P_{g,F}$ | 0.5677 | $P'_{g,F}$ | 0.5033 |
| $P_{h,g}$ | 0.4869 | $P'_{h,g}$ | 0.4814 |
| $P_{i,h}$ | 0.8716 | $P'_{i,h}$ | 0.8617 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{C,t}$ | 0.0095 |
| $\Delta P_{C,A'}$ | -0.0001 |
| $\Delta P_{g,d}$ | 0.0051 |
| $\Delta P_{g,F}$ | 0.0044 |
| $\Delta P_{i,g}$ | 0.0350 |

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

| 熱的性質 Thermal Properties | |
|------------------------------------|-------|
| T_g (°C) | 497 |
| T_s (°C) | 571 |
| $T_{10^{14.5}}$ (°C) | 476 |
| $T_{10^{13}}$ (°C) | 491 |
| $T_{10^{7.6}}$ (°C) | 656 |
| $\alpha_{-30/+70}$ ($10^{-7}/K$) | 82 |
| $\alpha_{100/300}$ ($10^{-7}/K$) | 100 |
| λ [W/(m·K)] | 1.130 |
| C_p [kJ/(kg·K)] | 0.772 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 550 (6) |
| F_A | 130 |
| E (GPa) | |
| G (GPa) | |
| μ | |
| 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 | 1.1 | -0.9 |
| -20/0 | 1.2 | -0.6 |
| 0/+20 | 1.3 | -0.2 |
| +20/+40 | 1.4 | 0.0 |
| +40/+60 | 1.4 | 0.2 |
| +60/+80 | 1.4 | 0.4 |

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

| 比重 Specific Gravity | |
|---------------------|------|
| d | 2.53 |

| 備考 Remarks | | | | | |
|-----------------------------------|---------|--------|---------|---------|---------|
| 硝種対照表 Glass Cross Reference Index | | | | | |
| | HOYA | SCHOTT | OHARA | HIKARI | CDGM |
| Glass Type | E-FEL2 | | S-TIL2 | E-LLF2 | H-QF8 |
| Code | 541-472 | | 541-472 | 541-472 | 541-472 |
| 作成 201104 | | | | | |

| 内部透過率 Internal Transmittance | | |
|--|------------|-------------|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.996 | 0.993 |
| 1500 | 0.998 | 0.996 |
| 1400 | 0.997 | 0.995 |
| 1300 | 0.999 | 0.998 |
| 1200 | 0.999 | 0.998 |
| 1100 | 0.999 | 0.998 |
| 1060 | 0.999 | 0.997 |
| 1050 | 0.999 | 0.997 |
| 1000 | 0.999 | 0.997 |
| 950 | 0.999 | 0.998 |
| 900 | 0.999 | 0.998 |
| 850 | 0.999 | 0.998 |
| 830 | 0.999 | 0.998 |
| 800 | 0.999 | 0.999 |
| 780 | 0.999 | 0.999 |
| 750 | 0.999 | 0.999 |
| 700 | 0.999 | 0.999 |
| 650 | 0.999 | 0.998 |
| 600 | 0.999 | 0.998 |
| 550 | 0.999 | 0.999 |
| 500 | 0.998 | 0.996 |
| 480 | 0.997 | 0.995 |
| 460 | 0.996 | 0.992 |
| 440 | 0.996 | 0.991 |
| 420 | 0.996 | 0.992 |
| 400 | 0.995 | 0.989 |
| 390 | 0.990 | 0.979 |
| 380 | 0.980 | 0.960 |
| 370 | 0.953 | 0.908 |
| 360 | 0.853 | 0.728 |
| 350 | 0.558 | 0.312 |
| 340 | 0.163 | 0.027 |
| 330 | | |
| 320 | | |
| 310 | | |
| 300 | | |
| 290 | | |
| 280 | | |
| 着色度 Coloration Code | | |
| $\lambda 80(\lambda 70)/\lambda 5$ | 370/340 | |
| 着色度 (内部透過率) Coloration of Internal Transmittance | | |
| $\lambda \tau 80/\lambda \tau 5$ | 363/342 | |