

BAC4

569-560

$n_d = 1.56883$ $\nu_d = 56.04$ $n_F - n_C = 0.010150$
 $n_e = 1.57125$ $\nu_e = 55.77$ $n_{F'} - n_{C'} = 0.010242$

| 屈折率 Refractive Index | | |
|----------------------|----------------|---------|
| | λ (nm) | |
| n_t | 1013.98 | 1.55755 |
| n_s | 852.11 | 1.56033 |
| $n_{A'}$ | 768.19 | 1.56225 |
| n_r | 706.52 | 1.56400 |
| n_c | 656.27 | 1.56575 |
| $n_{c'}$ | 643.85 | 1.56624 |
| n_{633} | 632.80 | 1.56670 |
| n_D | 589.29 | 1.56874 |
| n_d | 587.56 | 1.56883 |
| n_e | 546.07 | 1.57125 |
| n_F | 486.13 | 1.57590 |
| $n_{F'}$ | 479.99 | 1.57648 |
| n_g | 435.84 | 1.58147 |
| n_h | 404.66 | 1.58611 |
| n_i | 365.01 | 1.59402 |

| 分散式の定数 Constants of dispersion formula | |
|--|-----------------------------|
| A_0 | 2.4196645 |
| A_1 | $-8.3329314 \times 10^{-3}$ |
| A_2 | 1.5397390×10^{-2} |
| A_3 | $-1.7391654 \times 10^{-4}$ |
| A_4 | 6.2183220×10^{-5} |
| A_5 | $-3.0621310 \times 10^{-6}$ |

| 部分分散 Partial dispersions | |
|--------------------------|----------|
| $n_C - n_t$ | 0.008201 |
| $n_d - n_C$ | 0.003078 |
| $n_F - n_d$ | 0.007072 |
| $n_g - n_F$ | 0.005566 |
| $n_{C'} - n_t$ | 0.008690 |
| $n_e - n_{C'}$ | 0.005007 |
| $n_{F'} - n_e$ | 0.005235 |
| $n_g - n_{F'}$ | 0.004985 |

| 部分分散比 Partial dispersion rates | | | |
|--------------------------------|--------|------------|--------|
| $P_{C,t}$ | 0.8080 | $P'_{C,t}$ | 0.8485 |
| $P_{d,C}$ | 0.3033 | $P'_{d,C}$ | 0.2528 |
| $P_{e,d}$ | 0.2382 | $P'_{e,d}$ | 0.2361 |
| $P_{F,e}$ | 0.4585 | $P'_{F,e}$ | 0.5111 |
| $P_{g,F}$ | 0.5484 | $P'_{g,F}$ | 0.4867 |
| $P_{h,g}$ | 0.4574 | $P'_{h,g}$ | 0.4533 |
| $P_{i,h}$ | 0.7792 | $P'_{i,h}$ | 0.7722 |

| 異常分散性 Anomalous dispersions | |
|-----------------------------|---------|
| $\Delta P_{C,t}$ | 0.0002 |
| $\Delta P_{C,A'}$ | 0.0003 |
| $\Delta P_{g,d}$ | 0.0011 |
| $\Delta P_{g,F}$ | 0.0010 |
| $\Delta P_{i,g}$ | -0.0086 |

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

| 熱的性質 Thermal Properties | |
|------------------------------------|-------|
| T_g (°C) | 590 |
| T_s (°C) | 664 |
| $T_{10^{14.5}}$ (°C) | 565 |
| $T_{10^{13}}$ (°C) | 583 |
| $T_{10^{7.6}}$ (°C) | 748 |
| $\alpha_{-30/+70}$ ($10^{-7}/K$) | 54 |
| $\alpha_{100/300}$ ($10^{-7}/K$) | 69 |
| λ [W/(m·K)] | 1.190 |
| C_p [kJ/(kg·K)] | 0.703 |

| 機械的性質 Mechanical Properties | |
|-----------------------------|---------|
| H_K | 615 (6) |
| F_A | 90 |
| E (GPa) | 81 |
| G (GPa) | 32.2 |
| μ | 0.253 |
| σ_b (MPa) | 122 |

| 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 | 6.6 | 4.5 |
| -20/ 0 | 6.7 | 4.9 |
| 0/+20 | 6.8 | 5.3 |
| +20/+40 | 7.0 | 5.7 |
| +40/+60 | 7.3 | 6.1 |
| +60/+80 | 7.5 | 6.5 |

| 光弾性定数 Photoelastic Constant | |
|-----------------------------|------|
| B ($10^{-12}/Pa$) | 3.22 |

| 比重 Specific Gravity | |
|---------------------|------|
| d | 2.85 |

| 備考 Remarks | | | | | |
|-----------------------------------|---------|---------|---------|---------|---------|
| 硝種対照表 Glass Cross Reference Index | | | | | |
| | HOYA | SCHOTT | OHARA | HIKARI | CDGM |
| Glass Type | BAC4 | N-BAK4 | S-BAL14 | E-BAK4 | H-BAK7 |
| Code | 569-560 | 569-560 | 569-563 | 569-563 | 569-560 |
| 作成 201104 | | | | | |

| 内部透過率 Internal Transmittance | | |
|------------------------------|------------|-------------|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.997 | 0.995 |
| 1500 | 0.997 | 0.995 |
| 1400 | 0.994 | 0.987 |
| 1300 | 0.999 | 0.998 |
| 1200 | 0.999 | 0.998 |
| 1100 | 0.999 | 0.998 |
| 1060 | 0.999 | 0.998 |
| 1050 | 0.999 | 0.998 |
| 1000 | 0.999 | 0.998 |
| 950 | 0.999 | 0.998 |
| 900 | 0.999 | 0.998 |
| 850 | 0.999 | 0.998 |
| 830 | 0.999 | 0.998 |
| 800 | 0.999 | 0.998 |
| 780 | 0.999 | 0.998 |
| 750 | 0.999 | 0.997 |
| 700 | 0.998 | 0.996 |
| 650 | 0.998 | 0.995 |
| 600 | 0.998 | 0.997 |
| 550 | 0.999 | 0.997 |
| 500 | 0.998 | 0.995 |
| 480 | 0.997 | 0.994 |
| 460 | 0.996 | 0.992 |
| 440 | 0.995 | 0.991 |
| 420 | 0.995 | 0.990 |
| 400 | 0.994 | 0.988 |
| 390 | 0.993 | 0.985 |
| 380 | 0.988 | 0.976 |
| 370 | 0.982 | 0.964 |
| 360 | 0.969 | 0.938 |
| 350 | 0.945 | 0.892 |
| 340 | 0.901 | 0.812 |
| 330 | 0.827 | 0.684 |
| 320 | 0.707 | 0.500 |
| 310 | 0.530 | 0.281 |
| 300 | 0.311 | 0.097 |
| 290 | 0.122 | 0.015 |
| 280 | | |

| 着色度 Coloration Code | |
|--|---------|
| $\lambda 80 (\lambda 70) / \lambda 5$ | 350/295 |
| 着色度 (内部透過率) Coloration of Internal Transmittance | |
| $\lambda \tau 80 / \lambda \tau 5$ | 339/296 |