ガラスレンズ用プレス品硝種　Glass Lens Pressed Blanks
ガラス研磨レンズ用硝種　Glass Polished Lens

Ref

# LACL60

## 640-602

$n_d = 1.64000$　$\nu_d = 60.20$　$n_F - n_C = 0.010631$
$n_e = 1.64254$　$\nu_e = 60.00$　$n_{F'} - n_{C'} = 0.010709$

| 屈折率 Refractive Index | | |
|---|---|---|
| | λ (nm) | |
| $n_t$ | 1013.98 | 1.62759 |
| $n_s$ | 852.11 | 1.63083 |
| $n_{A'}$ | 768.19 | 1.63296 |
| $n_r$ | 706.52 | 1.63486 |
| $n_C$ | 656.27 | 1.63674 |
| $n_{C'}$ | 643.85 | 1.63726 |
| $n_{633}$ | 632.80 | 1.63775 |
| $n_D$ | 589.29 | 1.63990 |
| $n_d$ | 587.56 | 1.64000 |
| $n_e$ | 546.07 | 1.64254 |
| $n_F$ | 486.13 | 1.64737 |
| $n_{F'}$ | 479.99 | 1.64797 |
| $n_g$ | 435.84 | 1.65307 |
| $n_h$ | 404.66 | 1.65777 |
| $n_i$ | 365.01 | 1.66577 |

| 分散式の定数 Constants of dispersion formula | |
|---|---|
| $A_0$ | 2.6490884 |
| $A_1$ | $-1.4159869 \times 10^{-2}$ |
| $A_2$ | $1.4451135 \times 10^{-2}$ |
| $A_3$ | $5.2707873 \times 10^{-4}$ |
| $A_4$ | $-4.3447523 \times 10^{-5}$ |
| $A_5$ | $2.4612971 \times 10^{-6}$ |

| 部分分散 Partial dispersions | |
|---|---|
| $n_C - n_t$ | 0.009149 |
| $n_d - n_C$ | 0.003261 |
| $n_F - n_d$ | 0.007370 |
| $n_g - n_F$ | 0.005698 |
| $n_{C'} - n_t$ | 0.009670 |
| $n_e - n_{C'}$ | 0.005278 |
| $n_{F'} - n_e$ | 0.005431 |
| $n_g - n_{F'}$ | 0.005099 |

| 部分分散比 Partial dispersion rates | | | |
|---|---|---|---|
| $P_{C\_t}$ | 0.8606 | $P'_{C'\_t}$ | 0.9030 |
| $P_{d\_C}$ | 0.3067 | $P'_{d\_C'}$ | 0.2559 |
| $P_{e\_d}$ | 0.2387 | $P'_{e\_d}$ | 0.2370 |
| $P_{F\_e}$ | 0.4545 | $P'_{F'\_e}$ | 0.5071 |
| $P_{g\_F}$ | 0.5360 | $P'_{g\_F'}$ | 0.4761 |
| $P_{h\_g}$ | 0.4425 | $P'_{h\_g}$ | 0.4393 |
| $P_{i\_h}$ | 0.7527 | $P'_{i\_h}$ | 0.7472 |

| 異常分散性 Anomalous dispersions | |
|---|---|
| $\Delta P_{C\_t}$ | 0.0334 |
| $\Delta P_{C\_A'}$ | 0.0059 |
| $\Delta P_{g\_d}$ | -0.0053 |
| $\Delta P_{g\_F}$ | -0.0039 |
| $\Delta P_{i\_g}$ | -0.0133 |

| 化学的性質 Chemical Properties | |
|---|---|
| $D_W$ | 3 |
| $D_A$ | 4 |
| $T_{Blue}$ | 5 |
| $D_{NaOH}$ | 5 |
| $D_{STPP}$ | 5 |
| $D_0$ | 5 |
| $D_H$ | |

| 熱的性質 Thermal Properties | |
|---|---|
| $T_g$ (℃) | 656 |
| $T_s$ (℃) | 691 |
| $T_{10^{14.5}}$ (℃) | 630 |
| $T_{10^{13}}$ (℃) | 649 |
| $T_{10^{7.6}}$ (℃) | 722 |
| $\alpha_{-30/+70℃}$ ($10^{-7}$/K) | 60 |
| $\alpha_{100/300℃}$ ($10^{-7}$/K) | 78 |
| λ [W/(m·K)] | 0.972 |
| $C_P$ [kJ/(kg·K)] | 0.696 |

| 機械的性質 Mechanical Properties | |
|---|---|
| $H_K$ | 665(7) |
| $F_A$ | 90 |
| E (GPa) | 106 |
| G (GPa) | 41.3 |
| μ | 0.282 |
| $\sigma_b$ (MPa) | |

| 屈折率の温度係数 ($\times 10^{-6}$/K) Thermal coefficient of refractive indices | | |
|---|---|---|
| (℃) | dn/dT (rel.) | dn/dT (abs.) |
| -40/-20 | 3.1 | 0.9 |
| -20/ 0 | 3.0 | 1.1 |
| 0/+20 | 3.1 | 1.4 |
| +20/+40 | 3.1 | 1.7 |
| +40/+60 | 3.3 | 2.0 |
| +60/+80 | 3.5 | 2.3 |

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

| 比重 Specific Gravity | |
|---|---|
| d | 3.02 |

| 内部透過率 Internal Transmittance | | |
|---|---|---|
| λ (nm) | τ 5mm | τ 10mm |
| 1550 | 0.997 | 0.993 |
| 1500 | 0.996 | 0.992 |
| 1400 | 0.995 | 0.991 |
| 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 | 0.999 |
| 830 | 0.999 | 0.998 |
| 800 | 0.999 | 0.998 |
| 780 | 0.999 | 0.998 |
| 750 | 0.999 | 0.998 |
| 700 | 0.999 | 0.998 |
| 650 | 0.999 | 0.997 |
| 600 | 0.998 | 0.997 |
| 550 | 0.999 | 0.998 |
| 500 | 0.999 | 0.997 |
| 480 | 0.998 | 0.996 |
| 460 | 0.997 | 0.994 |
| 440 | 0.996 | 0.993 |
| 420 | 0.995 | 0.990 |
| 400 | 0.993 | 0.985 |
| 390 | 0.990 | 0.979 |
| 380 | 0.984 | 0.969 |
| 370 | 0.976 | 0.952 |
| 360 | 0.960 | 0.922 |
| 350 | 0.940 | 0.870 |
| 340 | 0.900 | 0.800 |
| 330 | 0.840 | 0.700 |
| 320 | 0.760 | 0.570 |
| 310 | 0.650 | 0.430 |
| 300 | 0.540 | 0.290 |
| 290 | 0.410 | 0.170 |
| 280 | 0.280 | 0.080 |

| 着色度 Coloration Code | |
|---|---|
| λ80(λ70)/λ5 | 350/280 |

| 着色度(内部透過率) Coloration of Internal Transmittance | |
|---|---|
| λτ80/λτ5 | |

備考 Remarks

硝種対照表 Glass Cross Reference Index

| | HOYA | SCHOTT | OHARA | HIKARI | CDGM |
|---|---|---|---|---|---|
| Glass Type | LACL60 | N-LAK21 | S-BSM81 | | |
| Code | 640-602 | 640-601 | 640-601 | | |

作成 201104