

## D-LaK6 694532

|             |           |                     |
|-------------|-----------|---------------------|
| nd =1.69350 | vd =53.20 | nF – nC =0.013036   |
| ne =1.69661 | ve =52.97 | nF' - nc' =0.013152 |

| Refractive Indices |                  |         |
|--------------------|------------------|---------|
|                    | $\lambda$ ( nm ) |         |
| $n_r$              | 706.5            | 1.68730 |
| $n_c$              | 656.3            | 1.68955 |
| $n_{c'}$           | 643.8            | 1.69017 |
| $n_{He-Ne}$        | 632.8            | 1.69076 |
| $n_D$              | 589.3            | 1.69338 |
| $n_d$              | 587.6            | 1.69350 |
| $n_e$              | 546.1            | 1.69661 |
| $n_F$              | 486.1            | 1.70258 |
| $n_{F'}$           | 480.0            | 1.70333 |
| $n_g$              | 435.8            | 1.70970 |
| $n_h$              | 404.7            | 1.71564 |
| $n_i$              | 365.0            | 1.72581 |

| Constants of Dispersion (Cauchy) |                             |
|----------------------------------|-----------------------------|
| $A_0$                            | 2.813412                    |
| $A_1$                            | $-1.3324481 \times 10^{-2}$ |
| $A_2$                            | $1.9278652 \times 10^{-2}$  |
| $A_3$                            | $4.1244521 \times 10^{-4}$  |
| $A_4$                            | $-9.9404319 \times 10^{-6}$ |
| $A_5$                            | $9.6220244 \times 10^{-7}$  |

| Relative Partial Dispersions |        |             |        |
|------------------------------|--------|-------------|--------|
| $P_{d,c}$                    | 0.3031 | $P'_{d,c'}$ | 0.253  |
| $P_{e,d}$                    | 0.2387 | $P'_{e,d}$  | 0.2363 |
| $P_{g,F}$                    | 0.5464 | $P'_{g,F'}$ | 0.4840 |

| Deviation of Relative Partial Dispersions |         |
|---|---------|
| $\Delta P_{F,e}$                          | -0.0027 |
| $\Delta P_{g,F}$                          | -0.0088 |
|   |         |

| NHG    | HOYA     | OHARA   | SCHOTT |
|--------|----------|---------|--------|
| D-LaK6 | M-LAC130 | L-LAL12 |        |

| Chemical Properties |       |
|---------------------|-------|
|                     | Group |
| RC(S)               |       |
| RA(S)               |       |
| DW                  | 1     |
| DA                  | 3     |

| Thermal Properties                        |       |
|---|-------|
| $T_g$ ( °C )                              | 522   |
| $T_s$ ( °C )                              | 571   |
| $T_{10}^{14.5}$ ( °C )                    |       |
| $T_{10}^{13}$ ( °C )                      |       |
| $\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ ) | 71.29 |
| $\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ ) | 81.17 |

| Mechanical Properties          |       |
|--------------------------------|-------|
| Hardness ( $10^7 Pa$ )         | 650   |
| FA (Relative Abrasion)         |       |
| Young's Modulus ( $10^7 Pa$ )  | 11350 |
| Rigidity Modulus ( $10^7 Pa$ ) | 4400  |
| Poisson's Ratio                | 0.289 |

| Stress-Optical Coefficient |      |
|----------------------------|------|
| $B$ ( $10^{-12}/Pa$ )      | 2.01 |

| Color                    |       |
|--------------------------|-------|
| $\lambda_{80}/\lambda_5$ | 37/29 |

| Specific Gravity    |      |
|---------------------|------|
| $\rho$ ( $g/cm^3$ ) | 3.50 |
|                     |      |

| Internal Transmittance |              |               |
|------------------------|--------------|---------------|
| $\lambda$ ( nm )       | $\tau_{5mm}$ | $\tau_{10mm}$ |
| 2400                   |              |               |
| 2200                   |              |               |
| 2000                   |              |               |
| 1800                   |              |               |
| 1600                   |              |               |
| 1400                   |              |               |
| 1200                   |              |               |
| 1060                   |              |               |
| 1000                   |              |               |
| 950                    |              |               |
| 900                    |              |               |
| 850                    |              |               |
| 800                    |              |               |
| 700                    | 0.999        | 0.998         |
| 650                    | 0.999        | 0.997         |
| 600                    | 0.999        | 0.997         |
| 550                    | 0.999        | 0.997         |
| 500                    | 0.998        | 0.996         |
| 480                    | 0.997        | 0.995         |
| 460                    | 0.996        | 0.993         |
| 440                    | 0.995        | 0.989         |
| 420                    | 0.993        | 0.986         |
| 400                    | 0.989        | 0.979         |
| 390                    | 0.985        | 0.971         |
| 380                    | 0.978        | 0.957         |
| 370                    | 0.966        | 0.934         |
| 360                    | 0.95         | 0.9           |
| 350                    | 0.91         | 0.82          |
| 340                    | 0.85         | 0.73          |
| 330                    | 0.77         | 0.59          |
| 320                    | 0.66         | 0.44          |
| 310                    | 0.52         | 0.27          |
| 300                    | 0.37         | 0.14          |
| 290                    | 0.2          | 0.04          |
| 280                    | 0.06         |               |



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