

| | | | |
|----------------------|-----------------|---------------|------------------------------|
| H-K9LA 517642 | $n_d = 1.51680$ | $u_d = 64.20$ | $n_F - n_C = 0.008050$ |
| | $n_e = 1.51872$ | $u_e = 64.00$ | $n_{F'} - n_{C'} = 0.008105$ |

| Refractive Indices | | |
|--------------------|----------------------|---------|
| | $\lambda(\text{nm})$ | |
| n_r | 706.52 | 1.51291 |
| n_C | 656.27 | 1.51432 |
| $n_{C'}$ | 643.85 | 1.51472 |
| $n_{\text{He-Ne}}$ | 632.80 | 1.51509 |
| n_D | 589.29 | 1.51673 |
| n_d | 587.56 | 1.51680 |
| n_e | 546.07 | 1.51872 |
| n_F | 486.13 | 1.52237 |
| $n_{F'}$ | 479.99 | 1.52282 |
| n_g | 435.84 | 1.52667 |
| n_h | 404.66 | 1.53022 |
| n_i | 365.01 | 1.53622 |

| Chemical Properties (grade) | |
|-----------------------------|---|
| RC(S) | 1 |
| RA(S) | 1 |
| D_W | 2 |
| D_A | 1 |
| $R_{\text{OH}}(\text{S})$ | 1 |
| RP(S) | 1 |

| Internal Transmittance | | |
|------------------------|---------------------|----------------------|
| $\lambda(\text{nm})$ | $\tau_{5\text{mm}}$ | $\tau_{10\text{mm}}$ |
| 2400 | 0.886 | 0.788 |
| 2200 | 0.913 | 0.839 |
| 2000 | 0.974 | 0.946 |
| 1800 | 0.991 | 0.981 |
| 1600 | 0.999 | 0.998 |
| 1400 | 0.999 | 0.998 |
| 1200 | 0.999 | 0.998 |
| 1060 | 0.999 | 0.998 |
| 1000 | 0.999 | 0.998 |
| 950 | 0.999 | 0.998 |
| 900 | 0.999 | 0.998 |
| 850 | 0.999 | 0.998 |
| 800 | 0.999 | 0.998 |
| 700 | 0.999 | 0.998 |
| 650 | 0.999 | 0.998 |
| 600 | 0.999 | 0.998 |
| 550 | 0.999 | 0.998 |
| 500 | 0.999 | 0.998 |
| 480 | 0.999 | 0.998 |
| 460 | 0.999 | 0.998 |
| 440 | 0.999 | 0.998 |
| 420 | 0.999 | 0.998 |
| 400 | 0.999 | 0.998 |
| 390 | 0.999 | 0.998 |
| 380 | 0.997 | 0.994 |
| 370 | 0.994 | 0.988 |
| 360 | 0.991 | 0.982 |
| 350 | 0.978 | 0.958 |
| 340 | 0.958 | 0.928 |
| 330 | 0.925 | 0.869 |
| 320 | 0.862 | 0.752 |
| 310 | 0.740 | 0.562 |
| 300 | 0.543 | 0.308 |
| 290 | 0.301 | 0.098 |
| 280 | 0.111 | 0.018 |

| Thermal Properties | |
|--|-----|
| $T_g(^{\circ}\text{C})$ | 563 |
| $T_s(^{\circ}\text{C})$ | 634 |
| $T_{10}^{14.5}(^{\circ}\text{C})$ | 519 |
| $T_{10}^{13}(^{\circ}\text{C})$ | 548 |
| $\alpha_{20/120^{\circ}\text{C}}(10^{-7}/\text{K})$ | 77 |
| $\alpha_{100/300^{\circ}\text{C}}(10^{-7}/\text{K})$ | 91 |

| Constants of Dispersion Formula | |
|---------------------------------|-----------------|
| A_0 | 2.27038718E+00 |
| A_1 | -9.35286298E-03 |
| A_2 | 1.16058732E-02 |
| A_3 | -9.20606381E-05 |
| A_4 | 3.23271119E-05 |
| A_5 | -1.50049137E-06 |

| Mechanical Properties | |
|-------------------------|-------|
| HK(10^7Pa) | 581 |
| F_A | 100 |
| $E(10^7\text{Pa})$ | 7438 |
| $G(10^7\text{Pa})$ | 3076 |
| μ | 0.209 |
| $B(10^{-12}/\text{Pa})$ | |

| Relative Partial Dispersion | | | |
|-----------------------------|--------|-------------|--------|
| $P_{d,C}$ | 0.3081 | $P'_{d,C'}$ | 0.2568 |
| $P_{e,d}$ | 0.2385 | $P'_{e,d}$ | 0.2370 |
| $P_{g,F}$ | 0.5342 | $P'_{g,F'}$ | 0.4753 |

| Anomalous dispersions | |
|-----------------------|---------|
| $\Delta P_{F,e}$ | -0.0013 |
| $\Delta P_{g,F}$ | -0.0028 |

| Range of Temperature ($^{\circ}\text{C}$) | Temperature Coefficients of Refractive Index | | | | | | |
|---|---|----|-------|---|---|----|---|
| | dn/dt relative ($10^{-6} / ^{\circ}\text{C}$) | | | | | | |
| | t | C' | He-Ne | D | e | F' | g |
| -40 ~ -20 | | | | | | | |
| -20 ~ 0 | | | | | | | |
| 0 ~ 20 | | | | | | | |
| 20 ~ 40 | | | | | | | |
| 40 ~ 60 | | | | | | | |
| 60 ~ 80 | | | | | | | |

| Density | |
|------------------------------|------|
| $\rho(\text{g}/\text{cm}^3)$ | 2.49 |

| Coloration Code | | |
|--------------------------|---------|--------------------------|
| λ_{80}/λ_5 | 330/290 | λ_{70}/λ_5 |

| Remarks | | |
|---------|-----|------|
| Sb | wt% | 0.05 |