

| | | | | | |
|------------------------|----------------------------|---------------------|--------------|-------------------------|-----------------|
| Refractive Index n_d | 1,54814 1,548141 | Abbe Number ν_d | 45,73 | Dispersion n_F-n_C | 0,011986 |
| Refractive Index n_e | 1,550989 | Abbe Number ν_e | 45,45 | Dispersion $n_F-n_{C'}$ | 0,012123 |

| Refractive Indices | | |
|--------------------|----------|---------|
| $\lambda(\mu m)$ | | |
| n_{2325} | 2.32542 | 1,51892 |
| n_{1970} | 1.97009 | 1,52371 |
| n_{1530} | 1.52958 | 1,52892 |
| n_{1129} | 1.12864 | 1,53374 |
| n_t | 1.01398 | 1,53542 |
| n_s | 0.85211 | 1,53845 |
| $n_{A'}$ | 0.76819 | 1,54058 |
| n_r | 0.70652 | 1,54256 |
| n_C | 0.65627 | 1,54456 |
| $n_{C'}$ | 0.64385 | 1,54513 |
| n_{He-Ne} | 0.6328 | 1,54566 |
| n_D | 0.58929 | 1,54804 |
| n_d | 0.58756 | 1,54814 |
| n_e | 0.54607 | 1,55099 |
| n_F | 0.48613 | 1,55655 |
| $n_{F'}$ | 0.47999 | 1,55725 |
| n_{He-Cd} | 0.44157 | 1,56242 |
| n_g | 0.435835 | 1,56333 |
| n_h | 0.404656 | 1,56911 |
| n_i | 0.365015 | 1,57931 |
| n_{334} | 0.334148 | 1,59092 |
| N_{326} | 0.326106 | 1,59476 |

| Partial Dispersions | |
|---------------------|----------|
| n_C-n_t | 0,009141 |
| $n_C-n_{A'}$ | 0,003985 |
| n_d-n_C | 0,003576 |
| n_e-n_C | 0,006424 |
| n_g-n_d | 0,015189 |
| n_g-n_F | 0,006779 |
| n_h-n_g | 0,005775 |
| n_i-n_g | 0,015976 |
| $n_{C'}-n_t$ | 0,009705 |
| $n_e-n_{C'}$ | 0,005860 |
| $n_{F'}-n_e$ | 0,006263 |
| $n_i-n_{F'}$ | 0,022054 |

| Coloring | | | |
|----------------|-----|-------------|-----|
| λ_{80} | 325 | λ_5 | 305 |
| λ_{70} | | | |

| Internal Transmittance | | | |
|------------------------|-----|------------------|-----|
| $\lambda_{0.80}$ | 320 | $\lambda_{0.05}$ | 305 |

| CCI | | |
|------|------|------|
| B | G | R |
| 0,00 | 0,00 | 0,00 |

| Internal Transmittance | | |
|------------------------|-------------|--------|
| $\lambda(nm)$ | τ 10mm | T 25mm |
| 240 | | |
| 250 | | |
| 260 | | |
| 270 | | |
| 280 | | |
| 290 | | |
| 300 | | |
| 310 | 0,29 | 0,04 |
| 320 | 0,80 | 0,57 |
| 330 | 0,954 | 0,88 |
| 340 | 0,988 | 0,970 |
| 350 | 0,995 | 0,988 |
| 360 | 0,997 | 0,993 |
| 365 | 0,997 | 0,994 |
| 370 | 0,998 | 0,995 |
| 380 | 0,998 | 0,996 |
| 390 | 0,999 | 0,997 |
| 400 | 0,999 | 0,998 |
| 420 | 0,999 | 0,998 |
| 440 | 0,999 | 0,998 |
| 460 | 0,999 | 0,998 |
| 480 | 0,999 | 0,998 |
| 500 | 0,999 | 0,999 |
| 550 | 0,999 | 0,999 |
| 600 | 0,999 | 0,999 |
| 650 | 0,999 | 0,999 |
| 700 | 0,999 | 0,999 |
| 800 | 0,999 | 0,999 |
| 900 | 0,999 | 0,999 |
| 1000 | 0,999 | 0,999 |
| 1200 | 0,999 | 0,999 |
| 1400 | 0,998 | 0,996 |
| 1600 | 0,996 | 0,991 |
| 1800 | 0,983 | 0,958 |
| 2000 | 0,960 | 0,903 |
| 2200 | 0,919 | 0,81 |
| 2400 | 0,88 | 0,73 |

| Constants of Dispersion Formula | |
|---------------------------------|----------------|
| A ₁ | 1,24772961E+00 |
| A ₂ | 1,01954909E-01 |
| A ₃ | 3,50479619E-01 |
| B ₁ | 9,26606623E-03 |
| B ₂ | 4,51754311E-02 |
| B ₃ | 4,50186705E+01 |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $\theta_{C,t}$ | 0,7626 |
| $\theta_{C,A'}$ | 0,3325 |
| $\theta_{d,C}$ | 0,2983 |
| $\theta_{e,C}$ | 0,5360 |
| $\theta_{g,d}$ | 1,2672 |
| $\theta_{g,F}$ | 0,5656 |
| $\theta_{h,g}$ | 0,4818 |
| $\theta_{i,g}$ | 1,3329 |
| $\theta'_{C,t}$ | 0,8005 |
| $\theta'_{e,C'}$ | 0,4834 |
| $\theta'_{F,e}$ | 0,5166 |
| $\theta'_{i,F'}$ | 1,8192 |

| Chemical Properties | |
|---------------------------------------|-----|
| Water Resistance (Powder) Group RW(P) | 2 |
| Acid Resistance (Powder) Group RA(P) | 1 |
| Weathering Resistance (Surface) Group | 2 |
| Acid Resistance (Surface) Group SR | 1.0 |
| Phosphate Resistance PR | 1,1 |

| Deviation of Relative Dispersions | |
|-----------------------------------|---------|
| $\Delta \theta_{C,t}$ | 0,0014 |
| $\Delta \theta_{C,A'}$ | 0,0012 |
| $\Delta \theta_{g,d}$ | -0,0025 |
| $\Delta \theta_{g,F}$ | -0,0019 |
| $\Delta \theta_{i,g}$ | -0,0092 |

| Mechanical Properties | |
|--|---------|
| Young's Modulus E (10 ⁹ N/m ²) | 61,3 |
| Rigidity Modulus G (10 ⁹ N/m ²) | 25,2 |
| Poisson's Ratio σ | 0,217 |
| Knoop Hardness Hk [Class] | 420 4 |
| Abrasion Aa | 127 |
| Photoelastic Constant β (nm/cm/10 ⁵ Pa) | 2,90 |

| Thermal Properties | |
|---|-------|
| Strain Point STP (°C) | 361 |
| Annealing Point AP (°C) | 396 |
| Transformation Temperature Tg (°C) | 407 |
| Yield Point At (°C) | 467 |
| Softening Point SP (°C) | 567 |
| Expansion Coefficients (-30~+70°C) | 92 |
| α (10 ⁻⁷ /°C) (+100~+300°C) | 111 |
| Thermal Conductivity k (W/m·K) | 0,951 |

| Temperature Coefficients of Refractive Index | | | | | | | | |
|--|---|-----|-------|-----|-----|-----|-----|-----|
| Range of (°C) | dn/dT relative (10 ⁻⁶ /°C) | | | | | | | |
| | t | C' | He-Ne | D | e | F' | g | i |
| -40~-20 | 1,2 | 1,6 | 1,7 | 1,8 | 2,0 | 2,5 | 3,0 | 4,5 |
| -20~0 | 1,2 | 1,7 | 1,7 | 1,9 | 2,1 | 2,6 | 3,1 | 4,7 |
| 0~20 | 1,2 | 1,7 | 1,8 | 1,9 | 2,2 | 2,7 | 3,2 | 4,9 |
| 20~40 | 1,3 | 1,8 | 1,8 | 2,0 | 2,2 | 2,8 | 3,3 | 5,0 |
| 40~60 | 1,3 | 1,8 | 1,9 | 2,1 | 2,3 | 2,9 | 3,4 | 5,2 |
| 60~80 | 1,3 | 1,9 | 1,9 | 2,1 | 2,4 | 2,9 | 3,5 | 5,4 |

| Other Properties | |
|------------------|------|
| Density d | 2,95 |