

| | | | | | | | | |
|------------------|-------|----------------------------|-------------|---------|--------------|------------|--------------|-----------------|
| Refractive Index | n_d | 1,79360 1,793600 | Abbe Number | ν_d | 37,09 | Dispersion | n_F-n_C | 0,021397 |
| Refractive Index | n_e | 1,798672 | Abbe Number | ν_e | 36,82 | Dispersion | $n_F-n_{C'}$ | 0,021692 |

| Refractive Indices | | |
|------------------------|----------|---------|
| $\lambda(\mu\text{m})$ | | |
| n_{2325} | 2.32542 | 1,75073 |
| n_{1970} | 1.97009 | 1,75638 |
| n_{1530} | 1.52958 | 1,76285 |
| n_{1129} | 1.12864 | 1,76952 |
| n_t | 1.01398 | 1,77207 |
| n_s | 0.85211 | 1,77692 |
| $n_{A'}$ | 0.76819 | 1,78047 |
| n_r | 0.70652 | 1,78385 |
| n_c | 0.65627 | 1,78732 |
| $n_{c'}$ | 0.64385 | 1,78830 |
| $n_{\text{He-Ne}}$ | 0.6328 | 1,78923 |
| n_D | 0.58929 | 1,79341 |
| n_d | 0.58756 | 1,79360 |
| n_e | 0.54607 | 1,79867 |
| n_F | 0.48613 | 1,80872 |
| $n_{F'}$ | 0.47999 | 1,81000 |
| $n_{\text{He-Cd}}$ | 0.44157 | 1,81950 |
| n_g | 0.435835 | 1,82119 |
| n_h | 0.404656 | 1,83200 |
| n_i | 0.365015 | |

| Constants of Dispersion Formula | |
|---------------------------------|----------------|
| A ₁ | 1,86353123E+00 |
| A ₂ | 2,55215617E-01 |
| A ₃ | 1,23399133E+00 |
| B ₁ | 1,07620673E-02 |
| B ₂ | 4,87248679E-02 |
| B ₃ | 1,17125110E+02 |

| Chemical Properties | |
|---------------------------------------|------|
| Water Resistance (Powder) Group RW(P) | 1 |
| Acid Resistance (Powder) Group RA(P) | 4 |
| Weathering Resistance (Surface) Group | 3 |
| Acid Resistance (Surface) Group SR | 52.2 |
| Phosphate Resistance PR | 2.2 |

| Mechanical Properties | |
|--|---------|
| Young's Modulus E (10 ⁹ N/m ²) | 86,8 |
| Rigidity Modulus G (10 ⁹ N/m ²) | 33,2 |
| Poisson's Ratio σ | 0,306 |
| Knoop Hardness Hk [Class] | 520 5 |
| Abrasion Aa | 182 |
| Photoelastic Constant β (nm/cm/10 ⁹ Pa) | 1,52 |

| Partial Dispersions | |
|---------------------|----------|
| n_C-n_t | 0,015250 |
| $n_C-n_{A'}$ | 0,006846 |
| n_d-n_C | 0,006281 |
| n_e-n_C | 0,011353 |
| n_g-n_d | 0,027586 |
| n_g-n_F | 0,012470 |
| n_h-n_g | 0,010815 |
| n_i-n_g | |
| $n_{C'}-n_t$ | 0,016234 |
| $n_e-n_{C'}$ | 0,010369 |
| $n_{F'}-n_e$ | 0,011323 |
| $n_i-n_{F'}$ | |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $\theta_{C,t}$ | 0,7127 |
| $\theta_{C,A'}$ | 0,3200 |
| $\theta_{d,C}$ | 0,2935 |
| $\theta_{e,C}$ | 0,5306 |
| $\theta_{g,d}$ | 1,2892 |
| $\theta_{g,F}$ | 0,5828 |
| $\theta_{h,g}$ | 0,5054 |
| $\theta_{i,g}$ | |
| $\theta'_{C,t}$ | 0,7484 |
| $\theta'_{e,C'}$ | 0,4780 |
| $\theta'_{F,e}$ | 0,5220 |
| $\theta'_{i,F'}$ | |

| Deviation of Relative Dispersions | |
|-----------------------------------|---------|
| $\Delta \theta_{C,t}$ | -0,0080 |
| $\Delta \theta_{C,A'}$ | -0,0008 |
| $\Delta \theta_{g,d}$ | 0,0015 |
| $\Delta \theta_{g,F}$ | 0,0013 |
| $\Delta \theta_{i,g}$ | |

| Thermal Properties | |
|---|-------|
| Strain Point STP (°C) | 584 |
| Annealing Point AP (°C) | 607 |
| Transformation Temperature Tg (°C) | 623 |
| Yield Point At (°C) | 658 |
| Softening Point SP (°C) | 695 |
| Expansion Coefficients (-30~+70°C) | 89 |
| α (10 ⁻⁷ /°C) (+100~+300°C) | 105 |
| Thermal Conductivity k (W/m·K) | 0,648 |

| Coloring | | | |
|----------------|-----|-------------|-----|
| λ_{80} | 415 | λ_5 | 350 |
| λ_{70} | | | |

| Internal Transmittance | | | |
|------------------------|-----|------------------|-----|
| $\lambda_{0.80}$ | 382 | $\lambda_{0.05}$ | 349 |

| CCI | | |
|------|------|------|
| B | G | R |
| 0,00 | 1,77 | 1,79 |

| Internal Transmittance | |
|------------------------|-------------|
| $\lambda(\text{nm})$ | τ 10mm |
| 280 | |
| 290 | |
| 300 | |
| 310 | |
| 320 | |
| 330 | |
| 340 | |
| 350 | 0,08 |
| 360 | 0,34 |
| 370 | 0,62 |
| 380 | 0,78 |
| 390 | 0,87 |
| 400 | 0,916 |
| 420 | 0,954 |
| 440 | 0,968 |
| 460 | 0,976 |
| 480 | 0,983 |
| 500 | 0,989 |
| 550 | 0,995 |
| 600 | 0,994 |
| 650 | 0,994 |
| 700 | 0,996 |
| 800 | 0,998 |
| 900 | 0,998 |
| 1000 | 0,998 |
| 1200 | 0,998 |
| 1400 | 0,997 |
| 1600 | 0,995 |
| 1800 | 0,984 |
| 2000 | 0,964 |
| 2200 | 0,925 |
| 2400 | 0,80 |

| Other Properties | |
|------------------|------|
| Density d | 4,45 |

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