

| | | | | | | | | |
|------------------|-------|----------------------------|-------------|---------|--------------|------------|--------------|-----------------|
| Refractive Index | n_d | 1,59551 1,595509 | Abbe Number | ν_d | 39,24 | Dispersion | n_F-n_C | 0,015176 |
| Refractive Index | n_e | 1,599106 | Abbe Number | ν_e | 38,97 | Dispersion | $n_F-n_{C'}$ | 0,015375 |

| Refractive Indices | | |
|------------------------|----------|---------|
| $\lambda(\mu\text{m})$ | | |
| n_{2325} | 2.32542 | 1,56075 |
| n_{1970} | 1.97009 | 1,56615 |
| n_{1530} | 1.52958 | 1,57212 |
| n_{1129} | 1.12864 | 1,57778 |
| n_t | 1.01398 | 1,57980 |
| n_s | 0.85211 | 1,58347 |
| $n_{A'}$ | 0.76819 | 1,58609 |
| n_r | 0.70652 | 1,58854 |
| n_C | 0.65627 | 1,59103 |
| $n_{C'}$ | 0.64385 | 1,59173 |
| $n_{\text{He-Ne}}$ | 0.6328 | 1,59240 |
| n_D | 0.58929 | 1,59538 |
| n_d | 0.58756 | 1,59551 |
| n_e | 0.54607 | 1,59911 |
| n_F | 0.48613 | 1,60621 |
| $n_{F'}$ | 0.47999 | 1,60711 |
| $n_{\text{He-Cd}}$ | 0.44157 | 1,61382 |
| n_g | 0.435835 | 1,61501 |
| n_h | 0.404656 | 1,62267 |
| n_i | 0.365015 | 1,63661 |

| Constants of Dispersion Formula | |
|---------------------------------|----------------|
| A ₁ | 1,37262713E+00 |
| A ₂ | 1,12636276E-01 |
| A ₃ | 1,39786421E+00 |
| B ₁ | 1,03220068E-02 |
| B ₂ | 5,50195044E-02 |
| B ₃ | 1,47735609E+02 |

| Chemical Properties | |
|---------------------------------------|-----|
| Water Resistance (Powder) Group RW(P) | 1 |
| Acid Resistance (Powder) Group RA(P) | 1 |
| Weathering Resistance (Surface) Group | 2~3 |
| Acid Resistance (Surface) Group SR | 1.0 |
| Phosphate Resistance PR | 1.0 |

| Mechanical Properties | |
|--|---------|
| Young's Modulus E (10 ⁹ N/m ²) | 750 |
| Rigidity Modulus G (10 ⁹ N/m ²) | 305 |
| Poisson's Ratio σ | 0,231 |
| Knoop Hardness Hk [Class] | 530 5 |
| Abrasion Aa | 135 |
| Photoelastic Constant β (nm/cm/10 ⁹ Pa) | 2,79 |

| Partial Dispersions | |
|---------------------|----------|
| n_C-n_t | 0,011234 |
| $n_C-n_{A'}$ | 0,004942 |
| n_d-n_C | 0,004479 |
| n_e-n_C | 0,008076 |
| n_g-n_d | 0,019504 |
| n_g-n_F | 0,008807 |
| n_h-n_g | 0,007657 |
| n_i-n_g | 0,021600 |
| $n_{C'}-n_t$ | 0,011938 |
| $n_e-n_{C'}$ | 0,007372 |
| $n_{F'}-n_e$ | 0,008003 |
| $n_i-n_{F'}$ | 0,029504 |

| Relative Partial Dispersion | |
|-----------------------------|--------|
| $\theta_{C,t}$ | 0,7402 |
| $\theta_{C,A'}$ | 0,3256 |
| $\theta_{d,C}$ | 0,2951 |
| $\theta_{e,C}$ | 0,5322 |
| $\theta_{g,d}$ | 1,2852 |
| $\theta_{g,F}$ | 0,5803 |
| $\theta_{h,g}$ | 0,5045 |
| $\theta_{i,g}$ | 1,4233 |
| $\theta'_{C,t}$ | 0,7765 |
| $\theta'_{e,C'}$ | 0,4795 |
| $\theta'_{F,e}$ | 0,5205 |
| $\theta'_{i,F'}$ | 1,9190 |

| Deviation of Relative Dispersions | |
|-----------------------------------|--------|
| $\Delta \theta_{C,t}$ | 0,0094 |
| $\Delta \theta_{C,A'}$ | 0,0022 |
| $\Delta \theta_{g,d}$ | 0,0020 |
| $\Delta \theta_{g,F}$ | 0,0023 |
| $\Delta \theta_{i,g}$ | 0,0269 |

| Thermal Properties | |
|---|------|
| Strain Point STP (°C) | 529 |
| Annealing Point AP (°C) | 560 |
| Transformation Temperature Tg (°C) | 585 |
| Yield Point At (°C) | 610 |
| Softening Point SP (°C) | 695 |
| Expansion Coefficients (-30~+70°C) | 84 |
| α (10 ⁻⁷ /°C) (+100~+300°C) | 104 |
| Thermal Conductivity k (W/m·K) | 1,03 |

| Coloring | | | |
|----------------|-----|-------------|-----|
| λ_{80} | 380 | λ_5 | 350 |
| λ_{70} | | | |

| Internal Transmittance | | | |
|------------------------|-----|------------------|-----|
| $\lambda_{0.80}$ | 378 | $\lambda_{0.05}$ | 351 |

| CCI | | |
|------|------|------|
| B | G | R |
| 0,00 | 0,82 | 0,82 |

| Internal Transmittance | |
|------------------------|-------------|
| $\lambda(\text{nm})$ | τ 10mm |
| 280 | |
| 290 | |
| 300 | |
| 310 | |
| 320 | |
| 330 | |
| 340 | |
| 350 | 0,02 |
| 360 | 0,27 |
| 370 | 0,64 |
| 380 | 0,84 |
| 390 | 0,928 |
| 400 | 0,962 |
| 420 | 0,982 |
| 440 | 0,988 |
| 460 | 0,990 |
| 480 | 0,992 |
| 500 | 0,994 |
| 550 | 0,997 |
| 600 | 0,997 |
| 650 | 0,996 |
| 700 | 0,997 |
| 800 | 0,998 |
| 900 | 0,997 |
| 1000 | 0,996 |
| 1200 | 0,996 |
| 1400 | 0,994 |
| 1600 | 0,993 |
| 1800 | 0,983 |
| 2000 | 0,968 |
| 2200 | 0,935 |
| 2400 | 0,915 |

| Other Properties | |
|------------------------|------|
| Bubble Quality Group B | |
| Density d | 2,63 |
| Remarks | |

| 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 | 1,3 | 1,7 | 1,7 | 1,9 | 2,2 | 2,8 | 3,4 |
| -20~0 | 1,3 | 1,8 | 1,8 | 2,0 | 2,3 | 2,9 | 3,5 |
| 0~20 | 1,3 | 1,8 | 1,9 | 2,1 | 2,3 | 3,0 | 3,7 |
| 20~40 | 1,4 | 1,9 | 1,9 | 2,1 | 2,4 | 3,1 | 3,8 |
| 40~60 | 1,4 | 1,9 | 2,0 | 2,2 | 2,5 | 3,2 | 4,0 |
| 60~80 | 1,5 | 2,0 | 2,0 | 2,3 | 2,6 | 3,3 | 4,1 |