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|--|-----------------|---|-----|--|---------|---|-----|-------------------------------|--------------|---------------|---|----------|----------------|-------|-----|-------|-------|
| H-QF50 | | 581409 | | $n_d = 1.58144$ | | $v_d = 40.89$ | | $n_F - n_C = 0.014220$ | | | | | | | | | |
| | | | | $n_e = 1.58481$ | | $v_e = 40.61$ | | $n_{F'} - n_{C'} = 0.014400$ | | | | | | | | | |
| Refractive Indices | | | | Relative Partial Dispersion | | Chemical Properties (grade) | | Internal Transmittance | | | | | | | | | |
| | λ (nm) | n_λ | | $P_{d,C}$ | 0.2961 | RC (S) | 1 | λ (nm) | τ_{5mm} | τ_{10mm} | | | | | | | |
| n_{2325} | 2325.42 | 1.54848 | | $P_{e,d}$ | 0.2370 | RA (S) | 1 | 2400 | 0.933 | 0.810 | | | | | | | |
| n_{1970} | 1970.09 | 1.55364 | | $P_{g,F}$ | 0.5738 | D_W | 1 | 2200 | 0.946 | 0.859 | | | | | | | |
| n_{1530} | 1529.58 | 1.55940 | | $P'_{d,c'}$ | 0.2465 | D_A | 1 | 2000 | 0.980 | 0.960 | | | | | | | |
| n_{1129} | 1128.64 | 1.56481 | | $P'_{e,d}$ | 0.2340 | R_{OH} (S) | 1 | 1800 | 0.990 | 0.980 | | | | | | | |
| n_{1064} | 1064.00 | 1.56584 | | $P'_{g,F'}$ | 0.5083 | RP (S) | 1 | 1600 | 0.999 | 0.998 | | | | | | | |
| n_t | 1013.98 | 1.56671 | | Deviation of Relative Partial Dispersions | | Expansion Coefficient α ($\times 10^{-7}/K$) | | 1400 | 0.999 | 0.998 | | | | | | | |
| n_s | 852.11 | 1.57015 | | | | | | $\Delta P_{F,e}$ | -0.0007 | $^{\circ}C$ | α | 1200 | 0.999 | 0.998 | | | |
| $n_{A'}$ | 768.19 | 1.57260 | | $\Delta P_{g,F}$ | -0.0018 | -50/-40 | 73 | 1060 | 0.999 | 0.998 | | | | | | | |
| n_r | 706.52 | 1.57490 | | $\Delta P_{C,t}$ | 0.0016 | -40/-30 | 76 | 1000 | 0.999 | 0.998 | | | | | | | |
| n_C | 656.27 | 1.57723 | | $\Delta P_{C,s}$ | -0.0006 | -30/-20 | 78 | 950 | 0.999 | 0.998 | | | | | | | |
| $n_{C'}$ | 643.85 | 1.57789 | | Thermal Properties | | -20/-10 | 79 | 900 | 0.999 | 0.998 | | | | | | | |
| n_{He-Ne} | 632.80 | 1.57852 | | | | Tg ($^{\circ}C$) | 584 | -10/0 | 80 | 850 | 0.999 | 0.998 | | | | | |
| n_D | 589.29 | 1.58131 | | Ts ($^{\circ}C$) | 638 | 0/10 | 80 | 800 | 0.999 | 0.998 | | | | | | | |
| n_d | 587.56 | 1.58144 | | $T_{10}^{14.5}$ ($^{\circ}C$) | 515 | 10/20 | 81 | 750 | 0.999 | 0.998 | | | | | | | |
| n_e | 546.07 | 1.58481 | | T_{10}^{13} ($^{\circ}C$) | 559 | 20/30 | 82 | 700 | 0.999 | 0.998 | | | | | | | |
| n_F | 486.13 | 1.59145 | | $\alpha_{.50/80^{\circ}C}$ ($10^{-7}/K$) | 82 | 30/40 | 82 | 650 | 0.999 | 0.998 | | | | | | | |
| $n_{F'}$ | 479.99 | 1.59229 | | $\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$) | 98 | 40/50 | 83 | 600 | 0.999 | 0.998 | | | | | | | |
| n_g | 435.84 | 1.59961 | | λ (W/(m·K)) | 0.98 | 50/60 | 84 | 550 | 0.999 | 0.998 | | | | | | | |
| n_h | 404.66 | 1.60669 | | Mechanical Properties | | 60/70 | 84 | 500 | 0.999 | 0.998 | | | | | | | |
| n_i | 365.01 | 1.61951 | | | | HK ($10^7 Pa$) | 499 | 70/80 | 85 | 480 | 0.998 | 0.996 | | | | | |
| Constants of Dispersion Formula | | | | σ_b (MPa) | 62 | 80/90 | 85 | 460 | 0.997 | 0.994 | | | | | | | |
| A_0 | 2.44672171E+00 | | | B ($10^{-12}/Pa$) | 3.07 | 90/100 | 86 | 440 | 0.996 | 0.992 | | | | | | | |
| A_1 | -9.64692814E-03 | | | | | | | | | | 420 | 0.994 | 0.989 | | | | |
| A_2 | 1.72763622E-02 | | | | | | | | | | μ | 0.269 | 100/110 | 87 | 400 | 0.992 | 0.981 |
| A_3 | 1.09967502E-03 | | | | | | | | | | σ_b (MPa) | 62 | 110/120 | 88 | 390 | 0.986 | 0.966 |
| A_4 | -9.37435013E-05 | | | | | | | | | | σ_b (MPa) | 62 | 120/130 | 90 | 380 | 0.966 | 0.926 |
| A_5 | 8.00160916E-06 | | | | | | | | | | σ_b (MPa) | 62 | 130/140 | 91 | 370 | 0.903 | 0.808 |
| Density | | 2.64 | | Solarization | | $\Delta\lambda$ (%) | | -0.6 | | 360 | 0.701 | 0.488 | | | | | |
| ρ (g/cm ³) | | 2.64 | | $\Delta\lambda$ (%) | | -0.6 | | 350 | 0.268 | 0.075 | 340 | | | | | | |
| Range of Temperature ($^{\circ}C$) | | Temperature Coefficients of Refractive Index | | | | | | | | | 330 | | | | | | |
| | | dn/dt relative ($\times 10^{-6} / ^{\circ}C$) | | | | | | | | | 320 | | | | | | |
| | t | s | C | C' | He-Ne | d | e | F | F' | g | 310 | | | | | | |
| -60~-40 | 1.4 | 1.8 | 2.0 | 2.1 | 2.1 | 2.5 | 2.6 | 2.9 | 3.0 | 3.6 | 300 | | | | | | |
| -40~-20 | 1.6 | 1.9 | 2.2 | 2.3 | 2.3 | 2.5 | 2.7 | 3.1 | 3.1 | 3.8 | 290 | | | | | | |
| -20~0 | 1.5 | 2.0 | 2.3 | 2.4 | 2.5 | 2.6 | 2.8 | 3.4 | 3.5 | 4.2 | 280 | | | | | | |
| 0~20 | 1.6 | 2.3 | 2.5 | 2.6 | 2.6 | 2.8 | 3.1 | 3.5 | 3.6 | 4.4 | Coloration Code | | | | | | |
| 20~40 | 1.9 | 2.6 | 2.7 | 2.7 | 2.7 | 3.0 | 3.3 | 3.7 | 3.7 | 4.6 | $\lambda_{80}(\lambda_{70})/\lambda_5$ | 380/350 | | | | | |
| 40~60 | 2.0 | 2.6 | 2.8 | 2.8 | 2.8 | 3.2 | 3.5 | 3.9 | 3.9 | 4.8 | Coloration of Internal Transmittance | | | | | | |
| 60~80 | 2.3 | 2.7 | 3.0 | 3.0 | 3.0 | 3.3 | 3.8 | 4.2 | 4.2 | 5.0 | $\lambda\tau_{80}/\lambda\tau_5$ | 370/350 | | | | | |
| 80~100 | 2.3 | 2.8 | 3.1 | 3.1 | 3.2 | 3.5 | 3.9 | 4.3 | 4.4 | 5.3 | Constants of dn/dt | | | | | | |
| 100~120 | 2.3 | 2.9 | 3.1 | 3.2 | 3.3 | 3.6 | 4.1 | 4.4 | 4.5 | 5.4 | D_0 | D_1 | D_2 | | | | |
| 120~140 | 2.5 | 3.1 | 3.3 | 3.3 | 3.4 | 3.7 | 4.2 | 4.5 | 4.6 | 5.6 | 3.81E-07 | 1.80E-08 | -3.28E-11 | | | | |
| 140~160 | 2.7 | 3.2 | 3.5 | 3.5 | 3.6 | 3.9 | 4.3 | 4.7 | 4.8 | 5.8 | E_0 | E_1 | λ_{TK} | | | | |
| | | | | | | | | | | | 7.19E-07 | 6.44E-10 | 2.45E-01 | | | | |