

|           |       |                            |           |         |              |            |              |                 |
|-----------|-------|----------------------------|-----------|---------|--------------|------------|--------------|-----------------|
| Brechzahl | $n_d$ | <b>1,58313</b><br>1,583126 | Abbe Zahl | $\nu_d$ | <b>59,38</b> | Dispersion | $n_F-n_C$    | <b>0,009821</b> |
| Brechzahl | $n_e$ | 1,585468                   | Abbe Zahl | $\nu_e$ | 59,11        | Dispersion | $n_F-n_{C'}$ | 0,009905        |

| Brechzahlen      |          |         |
|------------------|----------|---------|
| $\lambda(\mu m)$ |          |         |
| $n_{2325}$       | 2.32542  | 1,55463 |
| $n_{1970}$       | 1.97009  | 1,55992 |
| $n_{1530}$       | 1.52958  | 1,56557 |
| $n_{1129}$       | 1.12864  | 1,57048 |
| $n_t$            | 1.01398  | 1,57208 |
| $n_s$            | 0.85211  | 1,57485 |
| $n_{A'}$         | 0.76819  | 1,57673 |
| $n_r$            | 0.70652  | 1,57844 |
| $n_C$            | 0.65627  | 1,58014 |
| $n_{C'}$         | 0.64385  | 1,58061 |
| $n_{He-Ne}$      | 0.6328   | 1,58106 |
| $n_D$            | 0.58929  | 1,58304 |
| $n_d$            | 0.58756  | 1,58313 |
| $n_e$            | 0.54607  | 1,58547 |
| $n_F$            | 0.48613  | 1,58996 |
| $n_{F'}$         | 0.47999  | 1,59052 |
| $n_{He-Cd}$      | 0.44157  | 1,59459 |
| $n_g$            | 0.435835 | 1,59530 |
| $n_h$            | 0.404656 | 1,59972 |
| $n_i$            | 0.365015 | 1,60724 |

| Konstanten der Dispersionsformel |                 |
|----------------------------------|-----------------|
| A <sub>1</sub>                   | 1,39570615E+00  |
| A <sub>2</sub>                   | 7,18505070E-02  |
| A <sub>3</sub>                   | 1,27129267E+00  |
| B <sub>1</sub>                   | 1,12218843E-02  |
| B <sub>2</sub>                   | -2,52117422E-02 |
| B <sub>3</sub>                   | 1,34497860E+02  |

| Chemische Eigenschaften                 |     |
|---|-----|
| Wasserresistenz (Pulvergruppe) RW(P)    | 1   |
| Säureresistenz (Pulvergruppe) RA(P)     | 2   |
| Klimaresistenz (Oberflächengruppe) W(S) | 1~2 |
| Säureresistenz (Oberflächengruppe) SR   | 1.2 |
| Phosphatresistenz PR                    | 1.0 |

| Mechanische Eigenschaften                                    |         |
|--|---------|
| Elastizitätsmodul E (10 <sup>9</sup> N/m <sup>2</sup> )      | 847     |
| Torsionsmodul G (10 <sup>9</sup> N/m <sup>2</sup> )          | 340     |
| Poissonzahl $\sigma$   | 0,246   |
| Knoop Härte Hk [Klasse]                                      | 570   6 |
| Schleifhärte Aa  | 121     |
| Photoelastische Konstante $\beta$ (nm/cm/10 <sup>6</sup> Pa) | 2,20    |

| Teildispersion |          |
|----------------|----------|
| $n_C-n_t$      | 0,008056 |
| $n_C-n_{A'}$   | 0,003413 |
| $n_d-n_C$      | 0,002987 |
| $n_e-n_C$      | 0,005329 |
| $n_g-n_d$      | 0,012171 |
| $n_g-n_F$      | 0,005337 |
| $n_h-n_g$      | 0,004424 |
| $n_i-n_g$      | 0,011946 |
| $n_{C'}-n_t$   | 0,008531 |
| $n_e-n_{C'}$   | 0,004854 |
| $n_{F'}-n_e$   | 0,005051 |
| $n_i-n_{F'}$   | 0,016724 |

| Relative Teildispersion |        |
|-------------------------|--------|
| $\theta_{C,t}$          | 0,8203 |
| $\theta_{C,A'}$         | 0,3475 |
| $\theta_{d,C}$          | 0,3041 |
| $\theta_{e,C}$          | 0,5426 |
| $\theta_{g,d}$          | 1,2393 |
| $\theta_{g,F}$          | 0,5434 |
| $\theta_{h,g}$          | 0,4505 |
| $\theta_{i,g}$          | 1,2164 |
| $\theta'_{C,t}$         | 0,8613 |
| $\theta'_{e,C'}$        | 0,4901 |
| $\theta'_{F,e}$         | 0,5099 |
| $\theta'_{i,F'}$        | 1,6884 |

| Abweichung relativer Teildispersion |         |
|-------------------------------------|---------|
| $\Delta \theta_{C,t}$               | -0,0050 |
| $\Delta \theta_{C,A'}$              | -0,0004 |
| $\Delta \theta_{g,d}$               | -0,0021 |
| $\Delta \theta_{g,F}$               | -0,0020 |
| $\Delta \theta_{i,g}$               | -0,0114 |

| Thermische Eigenschaften                      |       |
|---|-------|
| Untere Kühltemperatur StP (°C)                | 503   |
| Obere Kühltemperatur AP (°C)                  | 534   |
| Transformationstemperatur Tg (°C)             | 550   |
| Ausdehnungsgrenze At (°C)                     | 588   |
| Erweichungstemperatur SP (°C)                 | 672   |
| Ausdehnungskoeffizienten (-30~+70°C)          | 66    |
| $\alpha$ (10 <sup>-7</sup> /°C) (+100~+300°C) | 76    |
| Wärmeleitfähigkeit k (W/m·K)                  | 0,974 |

| Färbung        |     |             |     |
|----------------|-----|-------------|-----|
| $\lambda_{80}$ | 340 | $\lambda_5$ | 290 |
| $\lambda_{70}$ |     |             |     |

| Reintransmissionsgrad |     |                  |     |
|-----------------------|-----|------------------|-----|
| $\lambda_{0.80}$      | 335 | $\lambda_{0.05}$ | 292 |

| CCI  |      |      |
|------|------|------|
| B    | G    | R    |
| 0,00 | 0,16 | 0,14 |

| Reintransmissionsgrad |             |
|-----------------------|-------------|
| $\lambda$ (nm)        | $\tau$ 10mm |
| 280                   |             |
| 290                   | 0,03        |
| 300                   | 0,15        |
| 310                   | 0,36        |
| 320                   | 0,58        |
| 330                   | 0,75        |
| 340                   | 0,86        |
| 350                   | 0,932       |
| 360                   | 0,964       |
| 370                   | 0,979       |
| 380                   | 0,986       |
| 390                   | 0,991       |
| 400                   | 0,993       |
| 420                   | 0,995       |
| 440                   | 0,995       |
| 460                   | 0,996       |
| 480                   | 0,997       |
| 500                   | 0,998       |
| 550                   | 0,999       |
| 600                   | 0,998       |
| 650                   | 0,998       |
| 700                   | 0,998       |
| 800                   | 0,998       |
| 900                   | 0,997       |
| 1000                  | 0,997       |
| 1200                  | 0,997       |
| 1400                  | 0,987       |
| 1600                  | 0,994       |
| 1800                  | 0,985       |
| 2000                  | 0,973       |
| 2200                  | 0,917       |
| 2400                  | 0,86        |

| Andere Eigenschaften    |      |
|-------------------------|------|
| Blasenqualitätsgruppe B |      |
| Dichte d                | 3,19 |
| Bemerkungen             |      |

| Temperaturkoeffizienten der Brechzahl |                                      |     |       |     |     |     |     |
|---------------------------------------|--------------------------------------|-----|-------|-----|-----|-----|-----|
| Temperaturbereich (°C)                | dn/dT relativ (10 <sup>-6</sup> /°C) |     |       |     |     |     |     |
|                                       | t                                    | C'  | He-Ne | D   | e   | F'  | g   |
| -40~-20                               | 2,9                                  | 3,2 | 3,2   | 3,3 | 3,5 | 3,8 | 4,0 |
| -20~0                                 | 2,9                                  | 3,3 | 3,3   | 3,4 | 3,5 | 3,8 | 4,1 |
| 0~20                                  | 3,0                                  | 3,3 | 3,3   | 3,4 | 3,6 | 3,9 | 4,2 |
| 20~40                                 | 3,0                                  | 3,4 | 3,4   | 3,5 | 3,7 | 4,0 | 4,3 |
| 40~60                                 | 3,0                                  | 3,4 | 3,4   | 3,6 | 3,7 | 4,1 | 4,4 |
| 60~80                                 | 3,1                                  | 3,5 | 3,5   | 3,7 | 3,8 | 4,2 | 4,5 |