

|           |       |                          |           |         |              |            |              |                 |
|-----------|-------|--------------------------|-----------|---------|--------------|------------|--------------|-----------------|
| Brechzahl | $n_d$ | <b>1,83220</b><br>1,8322 | Abbe Zahl | $\nu_d$ | <b>40,10</b> | Dispersion | $n_F-n_C$    | <b>0,020755</b> |
| Brechzahl | $n_e$ | 1,837128                 | Abbe Zahl | $\nu_e$ | 39,84        | Dispersion | $n_F-n_{C'}$ | 0,021011        |

| Brechzahlen            |          |         |
|------------------------|----------|---------|
| $\lambda(\mu\text{m})$ |          |         |
| $n_{2325}$             | 2.32542  | 1,78602 |
| $n_{1970}$             | 1.97009  | 1,79293 |
| $n_{1530}$             | 1.52958  | 1,80058 |
| $n_{1129}$             | 1.12864  | 1,80800 |
| $n_t$                  | 1.01398  | 1,81069 |
| $n_s$                  | 0.85211  | 1,81568 |
| $n_{A'}$               | 0.76819  | 1,81926 |
| $n_r$                  | 0.70652  | 1,82262 |
| $n_C$                  | 0.65627  | 1,82605 |
| $n_{C'}$               | 0.64385  | 1,82701 |
| $n_{\text{He-Ne}}$     | 0.6328   | 1,82792 |
| $n_D$                  | 0.58929  | 1,83202 |
| $n_d$                  | 0.58756  | 1,83220 |
| $n_e$                  | 0.54607  | 1,83713 |
| $n_F$                  | 0.48613  | 1,84680 |
| $n_{F'}$               | 0.47999  | 1,84803 |
| $n_{\text{He-Cd}}$     | 0.44157  | 1,85707 |
| $n_g$                  | 0.435835 | 1,85866 |
| $n_h$                  | 0.404656 | 1,86881 |
| $n_i$                  | 0.365015 | 1,88683 |

| Konstanten der Dispersionsformel |                |
|----------------------------------|----------------|
| A <sub>1</sub>                   | 1,97595301E+00 |
| A <sub>2</sub>                   | 2,83924985E-01 |
| A <sub>3</sub>                   | 1,35176368E+00 |
| B <sub>1</sub>                   | 1,04276395E-02 |
| B <sub>2</sub>                   | 4,27708222E-02 |
| B <sub>3</sub>                   | 1,01453710E+02 |

| Chemische Eigenschaften                 |     |
|---|-----|
| Wasserresistenz (Pulvergruppe) RW(P)    | 1   |
| Säureresistenz (Pulvergruppe) RA(P)     | 3   |
| Klimaresistenz (Oberflächengruppe) W(S) | 2   |
| Säureresistenz (Oberflächengruppe) SR   | 5.2 |
| Phosphatresistenz PR                    | 1.2 |

| Mechanische Eigenschaften                                    |         |
|--|---------|
| Elastizitätsmodul E (10 <sup>9</sup> N/m <sup>2</sup> )      | 114,8   |
| Torsionsmodul G (10 <sup>9</sup> N/m <sup>2</sup> )          | 44,0    |
| Poissonzahl $\sigma$   | 0,304   |
| Knoop Härte Hk [Klasse]                                      | 660   7 |
| Schleifhärte Aa  | 80      |
| Photoelastische Konstante $\beta$ (nm/cm/10 <sup>5</sup> Pa) | 1,93    |

| Teildispersion |          |
|----------------|----------|
| $n_C-n_t$      | 0,015354 |
| $n_C-n_{A'}$   | 0,006789 |
| $n_d-n_C$      | 0,006153 |
| $n_e-n_C$      | 0,011081 |
| $n_g-n_d$      | 0,026462 |
| $n_g-n_F$      | 0,011860 |
| $n_h-n_g$      | 0,010152 |
| $n_i-n_g$      | 0,028165 |
| $n_{C'}-n_t$   | 0,016322 |
| $n_e-n_{C'}$   | 0,010113 |
| $n_{F'}-n_e$   | 0,010898 |
| $n_i-n_{F'}$   | 0,038801 |

| Relative Teildispersion |        |
|-------------------------|--------|
| $\theta_{C,t}$          | 0,7398 |
| $\theta_{C,A'}$         | 0,3271 |
| $\theta_{d,C}$          | 0,2965 |
| $\theta_{e,C}$          | 0,5339 |
| $\theta_{g,d}$          | 1,2750 |
| $\theta_{g,F}$          | 0,5714 |
| $\theta_{h,g}$          | 0,4891 |
| $\theta_{i,g}$          | 1,3570 |
| $\theta_{C',t}$         | 0,7768 |
| $\theta'_{e,C'}$        | 0,4813 |
| $\theta'_{F,e}$         | 0,5187 |
| $\theta'_{i,F'}$        | 1,8467 |

| Abweichung relativer Teildispersion |         |
|-------------------------------------|---------|
| $\Delta \theta_{C,t}$               | 0,0050  |
| $\Delta \theta_{C,A'}$              | 0,0026  |
| $\Delta \theta_{g,d}$               | -0,0064 |
| $\Delta \theta_{g,F}$               | -0,0052 |
| $\Delta \theta_{i,g}$               | -0,0322 |

| Thermische Eigenschaften                      |       |
|---|-------|
| Untere Kühltemperatur StP (°C)                | 578   |
| Obere Kühltemperatur AP (°C)                  | 597   |
| Transformationstemperatur Tg (°C)             | 615   |
| Ausdehnungsgrenze At (°C)                     | 654   |
| Erweichungstemperatur SP (°C)                 | 677   |
| Ausdehnungskoeffizienten (-30~+70°C)          | 62    |
| $\alpha$ (10 <sup>-7</sup> /°C) (+100~+300°C) | 76    |
| Wärmeleitfähigkeit k (W/m·K)                  | 0,839 |

| Färbung        |     |             |     |
|----------------|-----|-------------|-----|
| $\lambda_{80}$ | 410 | $\lambda_5$ | 340 |
| $\lambda_{70}$ |     |             |     |

| Reintransmissionsgrad |     |                  |     |
|-----------------------|-----|------------------|-----|
| $\lambda_{0.80}$      | 376 | $\lambda_{0.05}$ | 340 |

| CCI  |      |      |
|------|------|------|
| B    | G    | R    |
| 0,00 | 1,32 | 1,36 |

| Reintransmissionsgrad |             |
|-----------------------|-------------|
| $\lambda(\text{nm})$  | $\tau$ 10mm |
| 280                   |             |
| 290                   |             |
| 300                   |             |
| 310                   |             |
| 320                   |             |
| 330                   |             |
| 340                   | 0,05        |
| 350                   | 0,26        |
| 360                   | 0,55        |
| 370                   | 0,73        |
| 380                   | 0,84        |
| 390                   | 0,903       |
| 400                   | 0,936       |
| 420                   | 0,966       |
| 440                   | 0,978       |
| 460                   | 0,985       |
| 480                   | 0,990       |
| 500                   | 0,994       |
| 550                   | 0,998       |
| 600                   | 0,998       |
| 650                   | 0,998       |
| 700                   | 0,999       |
| 800                   | 0,999       |
| 900                   | 0,998       |
| 1000                  | 0,997       |
| 1200                  | 0,997       |
| 1400                  | 0,996       |
| 1600                  | 0,994       |
| 1800                  | 0,988       |
| 2000                  | 0,969       |
| 2200                  | 0,925       |
| 2400                  | 0,75        |

| Andere Eigenschaften |      |
|----------------------|------|
| Dichte d             | 4,65 |

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