

## N-BAK4HT 569560.305

|                 |               |                          |
|-----------------|---------------|--------------------------|
| $n_d = 1.56883$ | $v_d = 55.98$ | $n_F - n_C = 0.010162$   |
| $n_e = 1.57125$ | $v_e = 55.70$ | $n_F' - n_C' = 0.010255$ |

| Refractive Indices |                |         |
|--------------------|----------------|---------|
|                    | $\lambda$ [nm] |         |
| $n_{2325.4}$       | 2325.4         | 1.54044 |
| $n_{1970.1}$       | 1970.1         | 1.54561 |
| $n_{1529.6}$       | 1529.6         | 1.55111 |
| $n_{1060.0}$       | 1060.0         | 1.55688 |
| $n_t$              | 1014.0         | 1.55755 |
| $n_s$              | 852.1          | 1.56034 |
| $n_f$              | 706.5          | 1.56400 |
| $n_C$              | 656.3          | 1.56575 |
| $n_{C'}$           | 643.8          | 1.56624 |
| $n_{632.8}$        | 632.8          | 1.56670 |
| $n_D$              | 589.3          | 1.56874 |
| $n_d$              | 587.6          | 1.56883 |
| $n_e$              | 546.1          | 1.57125 |
| $n_F$              | 486.1          | 1.57591 |
| $n_{F'}$           | 480.0          | 1.57649 |
| $n_g$              | 435.8          | 1.58149 |
| $n_h$              | 404.7          | 1.58614 |
| $n_i$              | 365.0          | 1.59415 |
| $n_{334.1}$        | 334.1          |         |
| $n_{312.6}$        | 312.6          |         |
| $n_{296.7}$        | 296.7          |         |
| $n_{280.4}$        | 280.4          |         |
| $n_{248.3}$        | 248.3          |         |

| Constants of Dispersion Formula |               |
|---------------------------------|---------------|
| $B_1$                           | 1.28834642    |
| $B_2$                           | 0.132817724   |
| $B_3$                           | 0.945395373   |
| $C_1$                           | 0.00779980626 |
| $C_2$                           | 0.0315631177  |
| $C_3$                           | 105.9658750   |

| Constants of Formula for dn/dT |           |
|--------------------------------|-----------|
| $D_0$                          | 3.06E-06  |
| $D_1$                          | 1.44E-08  |
| $D_2$                          | -2.23E-11 |
| $E_0$                          | 5.46E-07  |
| $E_1$                          | 6.05E-10  |
| $\lambda_{TK}$ [ $\mu m$ ]     | 0.189     |

| Temperature Coefficients of the Refractive Index |   |     |     |   |     |     |
|--|---|-----|-----|---|-----|-----|
|  | $\Delta n_{rel}/\Delta T$ [ $10^{-6}/K$ ] |     |     | $\Delta n_{abs}/\Delta T$ [ $10^{-6}/K$ ] |     |     |
| [ $^{\circ}C$ ]                                  | 1060.0                                    | e   | g   | 1060.0                                    | e   | g   |
| -40/-20  | 3.0                                       | 3.7 | 4.4 | 0.9                                       | 1.5 | 2.2 |
| +20/+40  | 3.1                                       | 3.9 | 4.7 | 1.8                                       | 2.6 | 3.3 |
| +60/+80  | 3.3                                       | 4.2 | 5.0 | 2.2                                       | 3.1 | 3.9 |

| Internal Transmittance $\tau_i$ |                 |                 |
|---------------------------------|-----------------|-----------------|
| $\lambda$ [nm]                  | $\tau_i$ [10mm] | $\tau_i$ [25mm] |
| <b>2500</b>                     | 0.850           | 0.670           |
| <b>2325</b>                     | 0.920           | 0.810           |
| <b>1970</b>                     | 0.979           | 0.950           |
| <b>1530</b>                     | 0.996           | 0.991           |
| <b>1060</b>                     | 0.999           | 0.998           |
| <b>700</b>                      | 0.998           | 0.996           |
| <b>660</b>                      | 0.998           | 0.996           |
| <b>620</b>                      | 0.998           | 0.996           |
| <b>580</b>                      | 0.998           | 0.996           |
| <b>546</b>                      | 0.998           | 0.996           |
| <b>500</b>                      | 0.998           | 0.995           |
| <b>460</b>                      | 0.997           | 0.993           |
| <b>436</b>                      | 0.997           | 0.992           |
| <b>420</b>                      | 0.996           | 0.991           |
| <b>405</b>                      | 0.994           | 0.985           |
| <b>400</b>                      | 0.993           | 0.983           |
| <b>390</b>                      | 0.989           | 0.972           |
| <b>380</b>                      | 0.979           | 0.950           |
| <b>370</b>                      | 0.959           | 0.900           |
| <b>365</b>                      | 0.940           | 0.860           |
| <b>350</b>                      | 0.810           | 0.600           |
| <b>334</b>                      | 0.390           | 0.100           |
| <b>320</b>                      | 0.020           | 0.000           |
| <b>310</b>                      | 0.000           |                 |
| <b>300</b>                      |                 |                 |
| <b>290</b>                      |                 |                 |
| <b>280</b>                      |                 |                 |
| <b>270</b>                      |                 |                 |
| <b>260</b>                      |                 |                 |
| <b>250</b>                      |                 |                 |

| Color Code                 |       |
|----------------------------|-------|
| $\lambda_{80} / \lambda_5$ | 36/32 |

| Remarks |
|---------|
|         |

| Relative Partial Dispersion |        |
|-----------------------------|--------|
| $P_{s,t}$                   | 0.2749 |
| $P_{C,s}$                   | 0.5321 |
| $P_{d,C}$                   | 0.3029 |
| $P_{e,d}$                   | 0.2383 |
| $P_{g,F}$                   | 0.5487 |
| $P_{i,h}$                   | 0.7879 |
|                             |        |
| $P'_{s,t}$                  | 0.2724 |
| $P'_{C,s}$                  | 0.5750 |
| $P'_{d,C'}$                 | 0.2524 |
| $P'_{e,d}$                  | 0.2361 |
| $P'_{g,F'}$                 | 0.4869 |
| $P'_{i,h}$                  | 0.7807 |

| Deviation of Relative Partial Dispersion<br>$\Delta P$ from the normal line |         |
|---|---------|
| $\Delta P_{C,t}$  | -0.0034 |
| $\Delta P_{C,s}$  | -0.0013 |
| $\Delta P_{F,e}$  | -0.0001 |
| $\Delta P_{g,F}$  | -0.0010 |
| $\Delta P_{i,g}$  | -0.0087 |

| Other Properties                             |       |
|--|-------|
| $\alpha_{-30/+70^{\circ}C}$ [ $10^{-6}/K$ ]  | 7.0   |
| $\alpha_{+20/+300^{\circ}C}$ [ $10^{-6}/K$ ] | 7.9   |
| $T_g$ [ $^{\circ}C$ ]                        | 581   |
| $T_{10}^{13}$ [ $^{\circ}C$ ]                | 569   |
| $T_{10}^{7.6}$ [ $^{\circ}C$ ]               | 725   |
| $c_p$ [J/(g $\cdot$ K)]                      | 0.680 |
| $\lambda$ [W/(m $\cdot$ K)]                  | 0.880 |
|  |       |
| $\rho$ [g/cm $^3$ ]                          | 3.05  |
| $E$ [ $10^3$ N/mm $^2$ ]                     | 77    |
| $\mu$  | 0.240 |
| $K$ [ $10^{-6}$ mm $^2$ /N]                  | 2.90  |
| $HK_{0.1/20}$                                | 550   |
| <b>HG</b>                                    | 2     |
|  |       |
|  |       |
|  |       |
|  |       |
|  |       |
| <b>CR</b>                                    | 1     |
| <b>FR</b>                                    | 0     |
| <b>SR</b>                                    | 1.2   |
| <b>AR</b>                                    | 1     |
| <b>PR</b>                                    | 1     |