

BK7 517642

$$n_d = 1.51680 \quad v_d = 64.17$$

$$n_e = 1.51872 \quad v_e = 63.96$$

$$n_F - n_C = 0.008054$$

$$n_F - n_C = 0.008110$$

Refractive Indices		
	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.5486 ₂
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula	
B_1	1.03961212
B_2	$2.31792344 \cdot 10^{-1}$
B_3	1.01046945
C_1	$6.00069867 \cdot 10^{-3}$
C_2	$2.00179144 \cdot 10^{-2}$
C_3	$1.03560653 \cdot 10^2$

Constants of Formula for dn/dT	
D_0	$1.86 \cdot 10^{-6}$
D_1	$1.31 \cdot 10^{-8}$
D_2	$-1.37 \cdot 10^{-11}$
E_0	$4.34 \cdot 10^{-7}$
E_1	$6.27 \cdot 10^{-10}$
λ_{TK} [μm]	0.170

Temperature Coefficients of Refractive Index						
[$^{\circ}\text{C}$]	$\Delta n_{rel} / \Delta T$ [$10^{-6}/\text{K}$]			$\Delta n_{abs} / \Delta T$ [$10^{-6}/\text{K}$]		
	1060.0	e	g	1060.0	e	g
-40/-20	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Internal Transmittance τ_l		
λ [nm]	τ_l (5 mm)	τ_l (25 mm)
2500.0		
2325.4	0.89	0.57
1970.1	0.968	0.85
1529.6	0.997	0.985
1060.0	0.999	0.998
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.999	0.996
546.1	0.999	0.996
500	0.999	0.996
460	0.999	0.994
435.8	0.999	0.994
420	0.998	0.993
404.7	0.998	0.993
400	0.998	0.991
390	0.998	0.989
380	0.996	0.980
370	0.995	0.974
365.0	0.994	0.969
350	0.986	0.93
334.1	0.950	0.77
320	0.81	0.35
310	0.59	0.07
300	0.26	
290		
280		
270		
260		
250		

Color Code	
λ_{90}/λ_5	33/30

Remarks	

Relative Partial Dispersion	
$P_{s,l}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483
$P'_{s,l}$	0.3076
$P'_{C,s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

Deviation of Relative Partial Dispersions ΔP from the "Normal Line"	
$\Delta P_{C,s}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0036

Other Properties	
$\alpha_{-30/+70^{\circ}\text{C}}$ [$10^{-6}/\text{K}$]	7.1
$\alpha_{20/300^{\circ}\text{C}}$ [$10^{-6}/\text{K}$]	8.3
T_g [$^{\circ}\text{C}$]	557
$T_{10/3.0}$ [$^{\circ}\text{C}$]	557
$T_{10/7.6}$ [$^{\circ}\text{C}$]	719
c_p [J/(g·K)]	0.858
λ [W/(m·K)]	1.114
ρ [g/cm ³]	2.51
E [10^3 N/mm ²]	82
μ	0.206
K [10^{-6} mm ² /N]	2.77
$HK_{0.1/20}$	610
B	0
CR	2
FR	0
SR	1
AR	2.0
PR	2.3