

**K7**  
**511604.253**

$n_d = 1.51112$	$v_d = 60.41$	$n_F - n_C = 0.008461$
$n_e = 1.51314$	$v_e = 60.15$	$n_{F'} - n_{C'} = 0.008531$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.48553
$n_{1970.1}$	1970.1	1.49046
$n_{1529.6}$	1529.6	1.49565
$n_{1060.0}$	1060.0	1.50091
$n_t$	1014.0	1.50150
$n_s$	852.1	1.50394
$n_r$	706.5	1.50707
$n_C$	656.3	1.50854
$n_{C'}$	643.8	1.50895
$n_{632.8}$	632.8	1.50934
$n_D$	589.3	1.51105
$n_d$	587.6	1.51112
$n_e$	546.1	1.51314
$n_F$	486.1	1.51700
$n_{F'}$	480.0	1.51748
$n_g$	435.8	1.52159
$n_h$	404.7	1.52540
$n_i$	365.0	1.53189
$n_{334.1}$	334.1	1.53891
$n_{312.6}$	312.6	1.54537
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.650	0.340
2325	0.758	0.500
1970	0.910	0.790
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.994
546	0.998	0.994
500	0.997	0.993
460	0.996	0.990
436	0.996	0.990
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.990	0.976
365	0.988	0.971
350	0.976	0.940
334	0.905	0.780
320	0.707	0.420
310	0.398	0.100
300	0.090	
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2880
$P_{C,s}$	0.5436
$P_{d,C}$	0.3049
$P_{e,d}$	0.2385
$P_{g,F}$	0.5422
$P_{i,h}$	0.7677
$P'_{s,t}$	0.2857
$P'_{C',s}$	0.5874
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4814
$P'_{i,h}$	0.7614

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	0.0001
$\Delta P_{C,s}$	-0.0001
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0000
$\Delta P_{i,g}$	-0.0001

Constants of Dispersion Formula	
$B_1$	1.1273555
$B_2$	0.124412303
$B_3$	0.827100531
$C_1$	0.00720341707
$C_2$	0.0269835916
$C_3$	100.384588

Color Code	
$\lambda_{80}/\lambda_5$	33/30
(*= $\lambda_{70}/\lambda_5$ )	

Remarks	

Constants of Dispersion $dn/dT$	
$D_0$	$-1.67 \cdot 10^{-6}$
$D_1$	$8.80 \cdot 10^{-9}$
$D_2$	$-2.86 \cdot 10^{-11}$
$E_0$	$5.42 \cdot 10^{-7}$
$E_1$	$7.81 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.172

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	8.4
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	9.7
$T_g [^\circ C]$	513
$T_{10}^{13.0} [^\circ C]$	0
$T_{10}^{7.6} [^\circ C]$	712
$c_p [J/(g \cdot K)]$	
$\lambda [W/(m \cdot K)]$	
$\rho [g/cm^3]$	2.53
$E [10^3 N/mm^2]$	69
$\mu$	0.214
$K [10^{-6} mm^2/N]$	2.95
$HK_{0.1/20}$	520
<b>HG</b>	3
<b>CR</b>	3
<b>FR</b>	0
<b>SR</b>	2
<b>AR</b>	1
<b>PR</b>	2.3

Temperature Coefficients of Refractive Index						
[°C]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	1.0	1.6	2.1	-1.0	-0.4	0.1
+20/ +40	0.9	1.6	2.2	-0.4	0.2	0.9
+60/ +80	0.8	1.6	2.3	-0.2	0.6	1.2