

**K10**  
**501564.252**

$n_d = 1.50137$	$v_d = 56.41$	$n_F - n_C = 0.008888$
$n_e = 1.50349$	$v_e = 56.15$	$n_{F'} - n_{C'} = 0.008967$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.47507
$n_{1970.1}$	1970.1	1.48008
$n_{1529.6}$	1529.6	1.48536
$n_{1060.0}$	1060.0	1.49076
$n_t$	1014.0	1.49137
$n_s$	852.1	1.49389
$n_r$	706.5	1.49713
$n_C$	656.3	1.49867
$n_{C'}$	643.8	1.49910
$n_{632.8}$	632.8	1.49950
$n_D$	589.3	1.50129
$n_d$	587.6	1.50137
$n_e$	546.1	1.50349
$n_F$	486.1	1.50756
$n_{F'}$	480.0	1.50807
$n_g$	435.8	1.51243
$n_h$	404.7	1.51649
$n_i$	365.0	1.52350
$n_{334.1}$	334.1	1.53120
$n_{312.6}$	312.6	1.53844
$n_{296.7}$	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	0.770	0.520
2325	0.831	0.630
1970	0.937	0.850
1530	0.993	0.983
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.994
620	0.997	0.993
580	0.997	0.993
546	0.997	0.992
500	0.996	0.991
460	0.996	0.990
436	0.995	0.988
420	0.995	0.988
405	0.995	0.987
400	0.994	0.986
390	0.993	0.982
380	0.989	0.973
370	0.986	0.966
365	0.983	0.958
350	0.963	0.910
334	0.877	0.720
320	0.626	0.310
310	0.370	0.130
300	0.140	0.020
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2835
$P_{C,s}$	0.5385
$P_{d,C}$	0.3037
$P_{e,d}$	0.2382
$P_{g,F}$	0.5475
$P_{i,h}$	0.7888
$P'_{s,t}$	0.2810
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2531
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7819

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	0.0094
$\Delta P_{C,s}$	0.0041
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0015
$\Delta P_{i,g}$	-0.0048

Constants of Dispersion Formula	
$B_1$	1.15687082
$B_2$	0.0642625444
$B_3$	0.872376139
$C_1$	0.00809424251
$C_2$	0.0386051284
$C_3$	104.74773

Constants of Dispersion $dn/dT$	
$D_0$	$4.86 \cdot 10^{-6}$
$D_1$	$1.72 \cdot 10^{-8}$
$D_2$	$-3.02 \cdot 10^{-11}$
$E_0$	$3.82 \cdot 10^{-7}$
$E_1$	$4.53 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.26

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

Remarks	
lead containing glass type	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	6.5
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.4
$T_g [^\circ C]$	459
$T_{10}^{13.0} [^\circ C]$	453
$T_{10}^{7.6} [^\circ C]$	691
$c_p [J/(g \cdot K)]$	0.770
$\lambda [W/(m \cdot K)]$	1.120
$\rho [g/cm^3]$	2.52
$E [10^3 N/mm^2]$	65
$\mu$	0.190
$K [10^{-6} mm^2/N]$	3.12
$HK_{0.1/20}$	470
<b>HG</b>	4
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	1
<b>AR</b>	1
<b>PR</b>	1.2

Temperature Coefficients of Refractive Index						
[ $^\circ C$ ]	$\Delta n_{rel}/\Delta T [10^{-6}/K]$			$\Delta n_{abs}/\Delta T [10^{-6}/K]$		
	1060.0	e	g	1060.0	e	g
-40/ -20	3.3	3.9	4.5	1.3	1.8	2.4
+20/ +40	3.6	4.2	4.9	2.3	2.9	3.6
+60/ +80	3.8	4.5	5.2	2.8	3.4	4.2