

**N-FK58**  
**456909.365**

$n_d = 1.45600$	$v_d = 90.90$	$n_F - n_C = 0.005017$
$n_e = 1.45720$	$v_e = 90.47$	$n_{F'} - n_{C'} = 0.005053$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.44114
$n_{1970.1}$	1970.1	1.44388
$n_{1529.6}$	1529.6	1.44683
$n_{1060.0}$	1060.0	1.44991
$n_t$	1014.0	1.45026
$n_s$	852.1	1.45171
$n_r$	706.5	1.45358
$n_C$	656.3	1.45446
$n_{C'}$	643.8	1.45471
$n_{632.8}$	632.8	1.45494
$n_D$	589.3	1.45596
$n_d$	587.6	1.45600
$n_e$	546.1	1.45720
$n_F$	486.1	1.45948
$n_{F'}$	480.0	1.45976
$n_g$	435.8	1.46216
$n_h$	404.7	1.46436
$n_i$	365.0	1.46807
$n_{334.1}$	334.1	1.47199
$n_{312.6}$	312.6	0.00000
$n_{296.7}$	296.7	0.00000
$n_{280.4}$	280.4	0.00000
$n_{248.3}$	248.3	0.00000

Constants of Dispersion Formula	
$B_1$	0.738042712
$B_2$	0.363371967
$B_3$	0.989296264
$C_1$	0.00339065607
$C_2$	0.0117551189
$C_3$	212.842145

Constants of Dispersion $dn/dT$	
$D_0$	$-2.05 \cdot 10^{-5}$
$D_1$	$-6.33 \cdot 10^{-9}$
$D_2$	$4.13 \cdot 10^{-11}$
$E_0$	$3.84 \cdot 10^{-7}$
$E_1$	$1.63 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.073

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.997	0.993
2325	0.998	0.996
1970	0.999	0.998
1530	0.999	0.998
1060	0.998	0.995
700	0.997	0.993
660	0.997	0.993
620	0.997	0.994
580	0.998	0.994
546	0.998	0.995
500	0.998	0.994
460	0.997	0.992
436	0.996	0.991
420	0.996	0.991
405	0.996	0.991
400	0.996	0.991
390	0.996	0.990
380	0.995	0.987
370	0.992	0.980
365	0.990	0.975
350	0.976	0.940
334	0.928	0.830
320	0.821	0.610
310	0.693	0.400
300	0.525	0.200
290	0.364	0.080
280	0.239	0.028
270	0.152	0.010
260	0.109	0.005
250	0.090	

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

Remarks
XLD glass

Relative Partial Dispersion	
$P_{s,t}$	0.2894
$P_{C,s}$	0.5481
$P_{d,C}$	0.3066
$P_{e,d}$	0.2388
$P_{g,F}$	0.5347
$P_{i,h}$	0.7387
$P'_{s,t}$	0.2873
$P'_{C',s}$	0.5927
$P'_{d,C'}$	0.2557
$P'_{e,d}$	0.2371
$P'_{g,F'}$	0.4749
$P'_{i,h}$	0.7334

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.1386
$\Delta P_{C,s}$	-0.0667
$\Delta P_{F,e}$	0.0140
$\Delta P_{g,F}$	0.0438
$\Delta P_{i,g}$	0.2157

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	13.7
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	15.7
$T_g [^\circ C]$	445
$T_{10}^{13.0} [^\circ C]$	448
$T_{10}^{7.6} [^\circ C]$	508
$c_p [J/(g \cdot K)]$	0.710
$\lambda [W/(m \cdot K)]$	0.760
$AT [^\circ C]$	475
$\rho [g/cm^3]$	3.65
$E [10^3 N/mm^2]$	70
$\mu$	0.300
$K [10^{-6} mm^2/N]$	0.54
$HK_{0.1/20}$	372
$HG$	
$CR$	1
$FR$	1
$SR$	52.3
$AR$	3.3
$PR$	4.3
$SR-J$	4
$WR-J$	1

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	-5.4	-5.1	-4.8	-7.3	-7.1	-6.8
+20/ +40	-6.5	-6.2	-5.9	-7.7	-7.4	-7.2
+60/ +80	-6.8	-6.5	-6.2	-7.8	-7.5	-7.3