

## N-FK51A 487845.368

$n_d = 1.48656$	$v_d = 84.47$	$n_F - n_C = 0.005760$
$n_e = 1.48794$	$v_e = 84.07$	$n_{F'} - n_{C'} = 0.005804$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.46958
$n_{1970.1}$	1970.1	1.47271
$n_{1529.6}$	1529.6	1.47608
$n_{1060.0}$	1060.0	1.47959
$n_t$	1014.0	1.47999
$n_s$	852.1	1.48165
$n_r$	706.5	1.48379
$n_C$	656.3	1.48480
$n_{C'}$	643.8	1.48508
$n_{632.8}$	632.8	1.48534
$n_D$	589.3	1.48651
$n_d$	587.6	1.48656
$n_e$	546.1	1.48794
$n_F$	486.1	1.49056
$n_{F'}$	480.0	1.49088
$n_g$	435.8	1.49364
$n_h$	404.7	1.49618
$n_i$	365.0	1.50046
$n_{334.1}$	334.1	1.50501
$n_{312.6}$	312.6	1.50911
$n_{296.7}$	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	0.891	0.750
2325	0.933	0.840
1970	0.976	0.940
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.995
660	0.998	0.995
620	0.998	0.996
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.997	0.993
436	0.997	0.992
420	0.997	0.992
405	0.997	0.993
400	0.997	0.993
390	0.997	0.992
380	0.995	0.988
370	0.990	0.976
365	0.985	0.963
350	0.948	0.875
334	0.831	0.630
320	0.618	0.300
310	0.428	0.120
300	0.262	0.035
290	0.137	0.010
280	0.058	
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2879
$P_{C,s}$	0.5465
$P_{d,C}$	0.3062
$P_{e,d}$	0.2388
$P_{g,F}$	0.5359
$P_{i,h}$	0.7429
$P'_{s,t}$	0.2858
$P'_{C',s}$	0.5909
$P'_{d,C'}$	0.2554
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4759
$P'_{i,h}$	0.7373

### Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"

$\Delta P_{C,t}$	-0.1112
$\Delta P_{C,s}$	-0.0533
$\Delta P_{F,e}$	0.0110
$\Delta P_{g,F}$	0.0342
$\Delta P_{i,g}$	0.1675

Constants of Dispersion Formula	
$B_1$	0.971247817
$B_2$	0.216901417
$B_3$	0.904651666
$C_1$	0.00472301995
$C_2$	0.0153575612
$C_3$	168.68133

Constants of Dispersion $dn/dT$	
$D_0$	$-1.83 \cdot 10^{-5}$
$D_1$	$-7.89 \cdot 10^{-9}$
$D_2$	$-1.63 \cdot 10^{-12}$
$E_0$	$3.74 \cdot 10^{-7}$
$E_1$	$3.46 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.15

Color Code	
$\lambda_{80}/\lambda_5$	34/28
(*= $\lambda_{70}/\lambda_5$ )	

Remarks
suitable for precision molding, step 0.5 available

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	12.7
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	14.8
$T_g [^\circ C]$	464
$T_{10}^{13.0} [^\circ C]$	463
$T_{10}^{7.6} [^\circ C]$	527
$c_p [J/(g \cdot K)]$	0.690
$\lambda [W/(m \cdot K)]$	0.760
$AT [^\circ C]$	503
$\rho [g/cm^3]$	3.68
$E [10^3 N/mm^2]$	73
$\mu$	0.302
$K [10^{-6} mm^2/N]$	0.70
$HK_{0.1/20}$	345
$HG$	6
<b>Abrasion Aa</b>	528
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	52.3
<b>AR</b>	2.2
<b>PR</b>	4.3
<b>SR-J</b>	3
<b>WR-J</b>	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	-4.9	-4.6	-4.3	-6.9	-6.6	-6.4
+20/ +40	-6.0	-5.7	-5.3	-7.3	-7.0	-6.7
+60/ +80	-6.5	-6.2	-5.8	-7.5	-7.2	-6.9