

## N-LAK33A 754523.422

$n_d = 1.75393$	$v_d = 52.27$	$n_F - n_C = 0.014424$
$n_e = 1.75737$	$v_e = 52.04$	$n_{F'} - n_{C'} = 0.014554$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.71278
$n_{1970.1}$	1970.1	1.72047
$n_{1529.6}$	1529.6	1.72855
$n_{1060.0}$	1060.0	1.73690
$n_t$	1014.0	1.73786
$n_s$	852.1	1.74186
$n_r$	706.5	1.74707
$n_C$	656.3	1.74956
$n_{C'}$	643.8	1.75025
$n_{632.8}$	632.8	1.75090
$n_D$	589.3	1.75380
$n_d$	587.6	1.75393
$n_e$	546.1	1.75737
$n_F$	486.1	1.76398
$n_{F'}$	480.0	1.76481
$n_g$	435.8	1.77187
$n_h$	404.7	1.77845
$n_i$	365.0	1.78972
$n_{334.1}$	334.1	1.80195
$n_{312.6}$	312.6	1.81325
$n_{296.7}$	296.7	1.82361
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.398	0.100
2325	0.686	0.390
1970	0.937	0.850
1530	0.990	0.975
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.995
546	0.998	0.996
500	0.998	0.994
460	0.994	0.986
436	0.991	0.978
420	0.988	0.970
405	0.981	0.953
400	0.976	0.940
390	0.967	0.920
380	0.950	0.880
370	0.924	0.820
365	0.905	0.780
350	0.804	0.580
334	0.601	0.280
320	0.336	0.060
310	0.160	
300	0.053	
290		
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.2770
$P_{C,s}$	0.5338
$P_{d,C}$	0.3032
$P_{e,d}$	0.2383
$P_{g,F}$	0.5473
$P_{i,h}$	0.7814
$P'_{s,t}$	0.2746
$P'_{C',s}$	0.5769
$P'_{d,C'}$	0.2527
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4857
$P'_{i,h}$	0.7744

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

$\Delta P_{C,t}$	0.0180
$\Delta P_{C,s}$	0.0091
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0086
$\Delta P_{i,g}$	-0.0484

Constants of Dispersion Formula	
$B_1$	1.44116999
$B_2$	0.571749501
$B_3$	1.16605226
$C_1$	0.00680933877
$C_2$	0.0222291824
$C_3$	80.9379555

Constants of Dispersion $dn/dT$	
$D_0$	$2.63 \cdot 10^{-6}$
$D_1$	$1.11 \cdot 10^{-8}$
$D_2$	$-3.92 \cdot 10^{-12}$
$E_0$	$5.02 \cdot 10^{-7}$
$E_1$	$5.08 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.188

Color Code	
$\lambda_{80}/\lambda_5$	38/30
(* = $\lambda_{70}/\lambda_5$ )	

**Remarks**  
will become inquiry glass as of Jan 2015, not recommended for new design

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	5.8
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	7.0
$T_g [^\circ C]$	669
$T_{10}^{13.0} [^\circ C]$	667
$T_{10}^{7.6} [^\circ C]$	744
$c_p [J/(g \cdot K)]$	0.550
$\lambda [W/(m \cdot K)]$	0.810
$\rho [g/cm^3]$	4.22
$E [10^3 N/mm^2]$	121
$\mu$	0.292
$K [10^{-6} mm^2/N]$	1.49
$HK_{0.1/20}$	740
<b>HG</b>	2
<b>CR</b>	1
<b>FR</b>	1
<b>SR</b>	51
<b>AR</b>	1
<b>PR</b>	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	3.4	4.3	5.1	1.1	1.9	2.7
+20/ +40	3.4	4.4	5.3	1.9	2.9	3.7
+60/ +80	3.6	4.7	5.6	2.4	3.5	4.4