

## N-ZK7A 508610.247

$n_d = 1.50805$	$v_d = 61.04$	$n_F - n_C = 0.008323$
$n_e = 1.51004$	$v_e = 60.84$	$n_{F'} - n_{C'} = 0.008384$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.48001
$n_{1970.1}$	1970.1	1.48582
$n_{1529.6}$	1529.6	1.49184
$n_{1060.0}$	1060.0	1.49768
$n_t$	1014.0	1.49831
$n_s$	852.1	1.50086
$n_r$	706.5	1.50403
$n_C$	656.3	1.50550
$n_{C'}$	643.8	1.50591
$n_{632.8}$	632.8	1.50629
$n_D$	589.3	1.50798
$n_d$	587.6	1.50805
$n_e$	546.1	1.51004
$n_F$	486.1	1.51382
$n_{F'}$	480.0	1.51429
$n_g$	435.8	1.51829
$n_h$	404.7	1.52198
$n_i$	365.0	1.52826
$n_{334.1}$	334.1	1.53500
$n_{312.6}$	312.6	1.54118
$n_{296.7}$	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	0.657	0.350
2325	0.847	0.660
1970	0.971	0.930
1530	0.990	0.976
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.992	0.981
405	0.991	0.977
400	0.990	0.975
390	0.987	0.969
380	0.982	0.956
370	0.976	0.940
365	0.971	0.930
350	0.941	0.860
334	0.852	0.670
320	0.686	0.390
310	0.492	0.170
300	0.221	0.030
290	0.032	
280		
270		
260		
250		

Relative Partial Dispersion	
$P_{s,t}$	0.3058
$P_{C,s}$	0.5576
$P_{d,C}$	0.3070
$P_{e,d}$	0.2386
$P_{g,F}$	0.5368
$P_{i,h}$	0.7540
$P'_{s,t}$	0.3036
$P'_{C',s}$	0.6024
$P'_{d,C'}$	0.2560
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4770
$P'_{i,h}$	0.7486

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

$\Delta P_{C,t}$	0.0289
$\Delta P_{C,s}$	0.0125
$\Delta P_{F,e}$	-0.0019
$\Delta P_{g,F}$	-0.0043
$\Delta P_{i,g}$	-0.0146

Constants of Dispersion Formula	
$B_1$	1.07509891
$B_2$	0.168895044
$B_3$	0.860503983
$C_1$	0.00676601657
$C_2$	0.0230642817
$C_3$	89.0498778

Constants of Dispersion $dn/dT$	
$D_0$	$1.09 \cdot 10^{-5}$
$D_1$	$1.98 \cdot 10^{-8}$
$D_2$	$-1.49 \cdot 10^{-11}$
$E_0$	$4.48 \cdot 10^{-7}$
$E_1$	$3.26 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.183

Color Code	
$\lambda_{80}/\lambda_5$	34/29
(* = $\lambda_{70}/\lambda_5$ )	

Remarks	

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	4.6
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	5.2
$T_g [^\circ C]$	519
$T_{10}^{13.0} [^\circ C]$	547
$T_{10}^{7.6} [^\circ C]$	729
$c_p [J/(g \cdot K)]$	0.770
$\lambda [W/(m \cdot K)]$	1.042
$\rho [g/cm^3]$	2.47
$E [10^3 N/mm^2]$	70
$\mu$	0.214
$K [10^{-6} mm^2/N]$	3.63
$HK_{0.1/20}$	530
<b>HG</b>	
<b>CR</b>	1
<b>FR</b>	0
<b>SR</b>	2
<b>AR</b>	1.2
<b>PR</b>	2.2

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	5.8	6.5	7.0	3.8	4.4	4.9
+20/ +40	6.1	6.8	7.4	4.9	5.5	6.1
+60/ +80	6.5	7.2	7.9	5.5	6.2	6.8