

## N-PK52A 497816.370

$n_d = 1.49700$	$v_d = 81.61$	$n_F - n_C = 0.006090$
$n_e = 1.49845$	$v_e = 81.21$	$n_{F'} - n_{C'} = 0.006138$

Refractive Indices		
	$\lambda$ [nm]	
$n_{2325.4}$	2325.4	1.47966
$n_{1970.1}$	1970.1	1.48279
$n_{1529.6}$	1529.6	1.48616
$n_{1060.0}$	1060.0	1.48971
$n_t$	1014.0	1.49012
$n_s$	852.1	1.49184
$n_r$	706.5	1.49408
$n_C$	656.3	1.49514
$n_{C'}$	643.8	1.49544
$n_{632.8}$	632.8	1.49571
$n_D$	589.3	1.49695
$n_d$	587.6	1.49700
$n_e$	546.1	1.49845
$n_F$	486.1	1.50123
$n_{F'}$	480.0	1.50157
$n_g$	435.8	1.50450
$n_h$	404.7	1.50720
$n_i$	365.0	1.51175
$n_{334.1}$	334.1	1.51658
$n_{312.6}$	312.6	1.52096
$n_{296.7}$	296.7	1.52489
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula	
$B_1$	1.029607
$B_2$	0.1880506
$B_3$	0.736488165
$C_1$	0.00516800155
$C_2$	0.0166658798
$C_3$	138.964129

Constants of Dispersion dn/dT	
$D_0$	$-1.97 \cdot 10^{-5}$
$D_1$	$-5.50 \cdot 10^{-9}$
$D_2$	$5.28 \cdot 10^{-12}$
$E_0$	$3.60 \cdot 10^{-7}$
$E_1$	$2.45 \cdot 10^{-10}$
$\lambda_{TK} [\mu m]$	0.172

Internal Transmittance $\tau_i$		
$\lambda$ [nm]	$\tau_i$ (10mm)	$\tau_i$ (25mm)
2500	0.987	0.967
2325	0.991	0.978
1970	0.996	0.990
1530	0.998	0.994
1060	0.998	0.994
700	0.997	0.993
660	0.997	0.993
620	0.998	0.995
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.997	0.992
436	0.996	0.990
420	0.996	0.990
405	0.997	0.992
400	0.997	0.992
390	0.997	0.992
380	0.996	0.989
370	0.992	0.980
365	0.988	0.970
350	0.950	0.880
334	0.831	0.630
320	0.618	0.300
310	0.428	0.120
300	0.250	0.040
290	0.120	0.010
280	0.044	
270	0.014	
260		
250		

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

Remarks
suitable for precision molding

Relative Partial Dispersion	
$P_{s,t}$	0.2819
$P_{C,s}$	0.5417
$P_{d,C}$	0.3055
$P_{e,d}$	0.2388
$P_{g,F}$	0.5377
$P_{i,h}$	0.7470
$P'_{s,t}$	0.2797
$P'_{C',s}$	0.5858
$P'_{d,C'}$	0.2548
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4774
$P'_{i,h}$	0.7412

Deviation of Relative Partial Dispersions $\Delta P$ from the "Normal Line"	
$\Delta P_{C,t}$	-0.1084
$\Delta P_{C,s}$	-0.0514
$\Delta P_{F,e}$	0.0103
$\Delta P_{g,F}$	0.0311
$\Delta P_{i,g}$	0.1497

Other Properties	
$\alpha_{-30/+70^\circ C} [10^{-6}/K]$	13.0
$\alpha_{+20/+300^\circ C} [10^{-6}/K]$	15.0
$T_g [^\circ C]$	467
$T_{10}^{13.0} [^\circ C]$	467
$T_{10}^{7.6} [^\circ C]$	538
$c_p [J/(g \cdot K)]$	0.670
$\lambda [W/(m \cdot K)]$	0.730
AT [°C]	520
$\rho [g/cm^3]$	3.70
$E [10^3 N/mm^2]$	71
$\mu$	0.298
$K [10^{-6} mm^2/N]$	0.67
HK <sub>0.1/20</sub>	355
HG	6
Abrasion Aa	526
CR	1
FR	0
SR	52.3
AR	3.3
PR	4.3
SR-J	4
WR-J	1

Temperature Coefficients of Refractive Index						
[°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	-5.7	-5.4	-5.1	-7.7	-7.4	-7.1
+20/ +40	-6.7	-6.4	-6.0	-8.0	-7.7	-7.4
+60/ +80	-7.1	-6.8	-6.4	-8.1	-7.8	-7.5