

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		
	λ [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 τ_i		
λ [nm]	τ_i (10mm)	τ_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	
λ_{80}/λ_5	34/28
(*= λ_{70}/λ_5)	

Remarks
suitable for precision molding

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

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 ΔP 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
μ	0.298
$K [10^{-6} mm^2/N]$	0.67
HK _{0.1/20}	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