

## 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

$B_1$	1.029607000
$B_2$	0.188050600
$B_3$	0.736488165
$C_1$	0.005168002
$C_2$	0.0166658798
$C_3$	138.96412900

### Constants of Formula for $dn/dT$

$D_0$	-1.97E-05
$D_1$	-5.50E-09
$D_2$	5.28E-12
$E_0$	3.60E-07
$E_1$	2.45E-10
$\lambda_{TK}$ [ $\mu\text{m}$ ]	0.172

### Temperature Coefficients of the 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

### 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	0.88
334	0.83	0.63
320	0.62	0.30
310	0.43	0.12
300	0.25	0.04
290	0.12	0.01
280	0.04	
270	0.01	
260		
250		

### Color Code

$\lambda_{80} / \lambda_{5}$  34/28

### Remarks

suitable for precision molding

### Relative Partial Dispersion P

$P_{s,t}$	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

### Relative Partial Dispersion P'

$P'_{s,t}$	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 Rel. Partial Disp.

#### $\Delta P$ 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

### Chemical Properties

CR	1
FR	0
SR	52.3
AR	3.3
PR	4.3
SR-J	4
WR-J	1

### Other Properties

$\alpha_{-30/+70^\circ\text{C}}$ [ $10^{-6}/K$ ]	13.0
$\alpha_{+20/+300^\circ\text{C}}$ [ $10^{-6}/K$ ]	15.0
$T_g$ [°C]	467
$T_{10}^{13}$ [°C]	467
$T_{10}^{7.6}$ [°C]	538
$c_p$ [J/(g·K)]	0.670
$\lambda$ [W/(m·K)]	0.730
AT [°C]	520
$\rho$ [g/cm <sup>3</sup> ]	3.70
E [ $10^3$ N/mm <sup>2</sup> ]	71
$\mu$	0.298
K [ $10^{-6}$ mm <sup>2</sup> /N]	0.65
HK <sub>0.1/20</sub>	355
HG	6
Abrasion Aa	526