

<b>H-PK60A</b>	<b>593670</b>	$n_d = 1.59349$	$v_d = 67.00$	$n_F - n_C = 0.008858$
		$n_e = 1.59561$	$v_e = 66.74$	$n_F - n_C = 0.008924$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	
$n_{1970}$	1970.09	
$n_{1530}$	1529.58	
$n_{1129}$	1128.64	1.58173
$n_{1064}$	1064.00	1.58257
$n_t$	1013.98	1.58326
$n_s$	852.11	1.58588
$n_{A'}$	768.19	1.58763
$n_f$	706.52	1.58921
$n_C$	656.27	1.59078
$n_{C'}$	643.85	1.59121
$n_{He-Ne}$	632.80	1.59162
$n_D$	589.29	1.59341
$n_d$	587.56	1.59349
$n_e$	546.07	1.59561
$n_F$	486.13	1.59964
$n_{F'}$	479.99	1.60014
$n_g$	435.84	1.60440
$n_h$	404.66	1.60833
$n_i$	365.01	1.61496

Relative Partial Dispersion	
$P_{d,C}$	0.3059
$P_{e,d}$	0.2393
$P_{g,F}$	0.5374
$P'_{d,c'}$	0.2555
$P'_{e,d}$	0.2376
$P'_{g,F'}$	0.4774

Chemical Properties (grade)	
RC (S)	2
RA (S)	2
D <sub>w</sub>	1
D <sub>A</sub>	4
R <sub>OH</sub> (S)	1
RP (S)	2
CR	1

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.958	0.917
2200	0.978	0.956
2000	0.991	0.983
1800	0.996	0.991
1600	0.999	0.997
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
750	0.999	0.998
700	0.999	0.998
650	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.999	0.998
480	0.999	0.997
460	0.998	0.996
440	0.997	0.995
420	0.997	0.994
400	0.996	0.993
390	0.995	0.990
380	0.993	0.986
370	0.989	0.979
360	0.983	0.965
350	0.968	0.938
340	0.944	0.891
330	0.902	0.814
320	0.838	0.703
310	0.750	0.563
300	0.649	0.421
290	0.538	0.289
280	0.424	0.180

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0051
$\Delta P_{C,t}$	-0.0158
$\Delta P_{C,s}$	-0.0080

Expansion Coefficient $\alpha$ ( $\times 10^{-7}/K$ )	
$^{\circ}C$	$\alpha$
-50/-40	82
-40/-30	86
-30/-20	88
-20/-10	89
-10/0	90
0/10	91
10/20	93
20/30	94
30/40	96
40/50	97
50/60	98
60/70	99
70/80	100
80/90	102
90/100	103
100/110	104
110/120	105
120/130	107
130/140	109
140/150	112
150/160	115

Thermal Properties	
T <sub>g</sub> ( $^{\circ}C$ )	511
T <sub>s</sub> ( $^{\circ}C$ )	541
T <sub>10</sub> <sup>14.5</sup> ( $^{\circ}C$ )	483
T <sub>10</sub> <sup>13</sup> ( $^{\circ}C$ )	505
$\alpha_{-50/80^{\circ}C}$ ( $10^{-7}/K$ )	92
$\alpha_{100/300^{\circ}C}$ ( $10^{-7}/K$ )	117
$\lambda$ (W/(m K))	0.85

Constants of Dispersion Formula	
A <sub>0</sub>	2.50316750E+00
A <sub>1</sub>	-9.41524451E-03
A <sub>2</sub>	1.37151213E-02
A <sub>3</sub>	-1.71470005E-04
A <sub>4</sub>	4.91628159E-05
A <sub>5</sub>	-2.48523874E-06

Mechanical Properties	
HK ( $10^7$ Pa)	466
F <sub>A</sub>	250
E (GPa)	88.2
G (GPa)	34.5
$\mu$	0.278
$\sigma_b$ (MPa)	
B ( $10^{-12}$ /Pa)	1.38

Density	Solarization
$\rho$ (g/cm <sup>3</sup> )	$\Delta\lambda$ (%)
3.16	-1.9

Range of Temperature ( $^{\circ}C$ )	Temperature Coefficients of Refractive Index									
	dn/dt relative ( $\times 10^{-6} / ^{\circ}C$ )									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	-2.8	-2.6	-2.4	-2.3	-2.3	-2.1	-1.9	-1.7	-1.6	-1.2
-40 ~ -20	-2.5	-2.4	-2.2	-2.2	-2.2	-2.0	-1.8	-1.6	-1.4	-1.0
-20 ~ 0	-2.4	-2.4	-2.1	-2.1	-2.1	-1.9	-1.6	-1.4	-1.3	-0.9
0 ~ 20	-2.2	-2.2	-2.0	-2.0	-2.0	-1.8	-1.5	-1.3	-1.2	-0.8
20 ~ 40	-2.2	-2.1	-1.9	-1.9	-1.9	-1.7	-1.4	-1.2	-1.0	-0.7
40 ~ 60	-2.0	-1.9	-1.7	-1.6	-1.6	-1.5	-1.4	-1.1	-0.9	-0.6
60 ~ 80	-1.9	-1.8	-1.6	-1.5	-1.5	-1.4	-1.3	-1.0	-0.8	-0.5
80 ~ 100	-1.8	-1.7	-1.5	-1.5	-1.5	-1.3	-1.1	-0.9	-0.8	-0.4
100 ~ 120	-1.8	-1.6	-1.4	-1.3	-1.3	-1.2	-1.1	-0.8	-0.7	-0.3
120 ~ 140	-1.7	-1.5	-1.3	-1.3	-1.3	-1.2	-1.1	-0.8	-0.7	-0.2
140 ~ 160	-1.6	-1.5	-1.3	-1.3	-1.3	-1.1	-1.0	-0.7	-0.5	-0.1

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	340/270
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	328/267

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
-8.44E-06	1.49E-08	-2.04E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
7.08E-07	-1.08E-10	6.42E-13