

<b>H-LaK3</b>	<b>747510</b>	$n_d = 1.74693$	$v_d = 50.95$	$n_F - n_C = 0.014660$
		$n_e = 1.75042$	$v_e = 50.72$	$n_{F'} - n_{C'} = 0.014794$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.70600
$n_{1970}$	1970.09	1.71332
$n_{1530}$	1529.58	1.72133
$n_{1129}$	1128.64	1.72838
$n_{1064}$	1064.00	1.72965
$n_t$	1013.98	1.73069
$n_s$	852.11	1.73471
$n_{A'}$	768.19	1.73747
$n_r$	706.52	1.73998
$n_C$	656.27	1.74250
$n_{C'}$	643.85	1.74320
$n_{He-Ne}$	632.80	1.74386
$n_D$	589.29	1.74680
$n_d$	587.56	1.74693
$n_e$	546.07	1.75042
$n_F$	486.13	1.75716
$n_{F'}$	479.99	1.75799
$n_g$	435.84	1.76523
$n_h$	404.66	1.77195
$n_i$	365.01	1.78350

Constants of Dispersion Formula	
$A_0$	2.98964410E+00
$A_1$	-1.53853950E-02
$A_2$	2.14098946E-02
$A_3$	7.35181833E-04
$A_4$	-3.80789614E-05
$A_5$	2.29046629E-06

Density		Solarization	
$\rho$ (g/cm <sup>3</sup> )	4.10	$\Delta\lambda$ (%)	-0.4

Relative Partial Dispersion	
$P_{d,C}$	0.3022
$P_{e,d}$	0.2381
$P_{g,F}$	0.5505
$P'_{d,c'}$	0.2521
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4894

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0023
$\Delta P_{g,F}$	-0.0085
$\Delta P_{C,t}$	0.0186
$\Delta P_{C,s}$	0.0087

Thermal Properties	
T <sub>g</sub> (°C)	674
T <sub>s</sub> (°C)	695
T <sub>10</sub> <sup>14.5</sup> (°C)	603
T <sub>10</sub> <sup>13</sup> (°C)	641
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	53
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	66
$\lambda$ (W/(m·K))	0.80

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	769
F <sub>A</sub>	50
E (GPa)	120.3
G (GPa)	45.3
$\mu$	0.328
$\sigma_b$ (MPa)	96.2
B (10 <sup>-12</sup> /Pa)	1.56

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D <sub>W</sub>	1
D <sub>A</sub>	3
R <sub>OH</sub> (S)	1
RP (S)	2

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	49
-40/-30	51
-30/-20	53
-20/-10	54
-10/0	54
0/10	54
10/20	55
20/30	56
30/40	56
40/50	56
50/60	57
60/70	57
70/80	57
80/90	58
90/100	58
100/110	59
110/120	59
120/130	60
130/140	61
140/150	62
150/160	63

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.779	0.612
2200	0.931	0.868
2000	0.986	0.963
1800	0.997	0.994
1600	0.999	0.998
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	0.998
460	0.999	0.997
440	0.997	0.994
420	0.994	0.990
400	0.990	0.981
390	0.987	0.974
380	0.980	0.959
370	0.968	0.935
360	0.946	0.891
350	0.907	0.817
340	0.850	0.724
330	0.767	0.589
320	0.640	0.410
310	0.420	0.180
300	0.155	0.034
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	370/300
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	332/264

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 <sup>-6</sup> / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	1.8	2.1	2.3	2.3	2.4	2.6	3.1	3.4	3.4	3.8
-40 ~ -20	2.2	2.4	2.7	2.7	2.8	3.0	3.4	3.8	3.9	4.3
-20 ~ 0	2.9	3.1	3.2	3.2	3.3	3.4	4.0	4.4	4.5	4.7
0 ~ 20	3.1	3.5	3.7	3.7	3.8	4.0	4.7	4.9	5.0	5.4
20 ~ 40	3.7	4.0	4.3	4.3	4.4	4.5	4.7	5.1	5.1	5.8
40 ~ 60	4.0	4.2	4.5	4.5	4.6	4.8	5.3	5.5	5.5	6.1
60 ~ 80	4.5	4.7	4.8	4.8	4.9	5.1	5.3	5.8	5.9	6.4
80 ~ 100	4.7	4.8	5.1	5.2	5.3	5.5	5.8	6.3	6.4	6.7
100 ~ 120	5.0	5.1	5.2	5.3	5.4	5.6	6.0	6.5	6.5	7.0
120 ~ 140	5.1	5.3	5.5	5.6	5.7	5.9	6.3	6.7	6.7	7.2
140 ~ 160	5.3	5.5	5.6	5.8	6.0	6.3	6.6	6.8	6.9	7.5

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
2.62E-06	2.82E-08	-5.41E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
5.36E-07	-4.51E-11	2.24E-01