

<b>H-LaK9</b>	<b>699511</b>	$n_d = 1.69930$	$v_d = 51.11$	$n_F - n_C = 0.013682$
		$n_e = 1.70256$	$v_e = 50.82$	$n_{F'} - n_{C'} = 0.013825$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.66716
$n_{1970}$	1970.09	1.67189
$n_{1530}$	1529.58	1.67730
$n_{1129}$	1128.64	1.68265
$n_{1064}$	1064.00	1.68370
$n_t$	1013.98	1.68458
$n_s$	852.11	1.68810
$n_{A'}$	768.19	1.69058
$n_r$	706.52	1.69288
$n_C$	656.27	1.69520
$n_{C'}$	643.85	1.69585
$n_{He-Ne}$	632.80	1.69646
$n_D$	589.29	1.69918
$n_d$	587.56	1.69930
$n_e$	546.07	1.70256
$n_F$	486.13	1.70888
$n_{F'}$	479.99	1.70967
$n_g$	435.84	1.71650
$n_h$	404.66	1.72288
$n_i$	365.01	1.73368

Constants of Dispersion Formula	
$A_0$	2.82518848E+00
$A_1$	-9.25237822E-03
$A_2$	2.31572298E-02
$A_3$	-5.65059188E-04
$A_4$	1.62553405E-04
$A_5$	-9.14469356E-06

Density	
$\rho$ (g/cm <sup>3</sup> )	4.26

Solarization	
$\Delta\lambda$ (%)	-0.4

Relative Partial Dispersion	
$P_{d,C}$	0.2997
$P_{e,d}$	0.2383
$P_{g,F}$	0.5569
$P'_{d,c'}$	0.2495
$P'_{e,d}$	0.2358
$P'_{g,F'}$	0.4940

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0018
$\Delta P_{C,t}$	-0.0116
$\Delta P_{C,s}$	-0.0041

Thermal Properties	
T <sub>g</sub> (°C)	654
T <sub>s</sub> (°C)	695
T <sub>10</sub> <sup>14.5</sup> (°C)	618
T <sub>10</sub> <sup>13</sup> (°C)	645
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	85
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	95
$\lambda$ (W/(m·K))	0.66

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	511
F <sub>A</sub>	253
E (GPa)	84.5
G (GPa)	32.3
$\mu$	0.309
$\sigma_b$ (MPa)	81.0
B (10 <sup>-12</sup> /Pa)	1.37

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

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	79
-40/-30	80
-30/-20	81
-20/-10	82
-10/0	83
0/10	85
10/20	85
20/30	87
30/40	88
40/50	88
50/60	90
60/70	91
70/80	91
80/90	91
90/100	93
100/110	94
110/120	94
120/130	96
130/140	96
140/150	96
150/160	98

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.916	0.838
2200	0.969	0.939
2000	0.987	0.974
1800	0.994	0.988
1600	0.998	0.995
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	0.996	0.992
480	0.994	0.988
460	0.991	0.983
440	0.989	0.978
420	0.987	0.974
400	0.982	0.964
390	0.976	0.953
380	0.966	0.934
370	0.948	0.899
360	0.918	0.842
350	0.868	0.754
340	0.792	0.627
330	0.685	0.469
320	0.540	0.292
310	0.366	0.134
300	0.200	0.040
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	370/310
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	355/304

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	-2.7	-2.5	-2.3	-2.3	-2.2	-2.0	-1.7	-1.6	-1.6	-1.4
-40 ~ -20	-2.7	-2.5	-2.2	-2.1	-2.0	-1.8	-1.7	-1.5	-1.5	-1.4
-20 ~ 0	-2.6	-2.4	-2.0	-2.0	-1.9	-1.7	-1.5	-1.4	-1.3	-1.2
0 ~ 20	-2.5	-2.3	-1.8	-1.8	-1.8	-1.5	-1.4	-1.3	-1.2	-1.0
20 ~ 40	-2.5	-2.2	-1.7	-1.7	-1.6	-1.5	-1.4	-1.3	-1.1	-0.9
40 ~ 60	-2.5	-2.2	-1.7	-1.6	-1.6	-1.4	-1.3	-1.1	-1.0	-0.8
60 ~ 80	-2.4	-2.1	-1.5	-1.5	-1.4	-1.2	-1.1	-0.9	-0.8	-0.6
80 ~ 100	-2.3	-1.8	-1.4	-1.4	-1.4	-1.0	-1.0	-0.8	-0.7	-0.4
100 ~ 120	-2.3	-1.8	-1.2	-1.2	-1.2	-1.0	-0.9	-0.6	-0.6	-0.4
120 ~ 140	-2.1	-1.7	-1.2	-1.2	-1.2	-0.8	-0.8	-0.7	-0.5	-0.1
140 ~ 160	-2.1	-1.6	-1.1	-1.1	-1.0	-0.7	-0.5	-0.3	-0.2	0.1

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
-7.86E-06	1.43E-08	-2.55E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
6.68E-07	5.75E-10	2.86E-16