

<b>H-LaF52</b>	<b>786442</b>	$n_d = 1.78590$	$v_d = 44.19$	$n_F - n_C = 0.017786$
		$n_e = 1.79013$	$v_e = 43.93$	$n_F - n_C = 0.017988$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.74308
$n_{1970}$	1970.09	1.74989
$n_{1530}$	1529.58	1.75749
$n_{1129}$	1128.64	1.76459
$n_{1064}$	1064.00	1.76594
$n_t$	1013.98	1.76706
$n_s$	852.11	1.77153
$n_{A'}$	768.19	1.77468
$n_f$	706.52	1.77761
$n_C$	656.27	1.78059
$n_{C'}$	643.85	1.78142
$n_{He-Ne}$	632.80	1.78221
$n_D$	589.29	1.78574
$n_d$	587.56	1.78590
$n_e$	546.07	1.79013
$n_F$	486.13	1.79837
$n_{F'}$	479.99	1.79941
$n_g$	435.84	1.80839
$n_h$	404.66	1.81685
$n_i$	365.01	1.83170

Relative Partial Dispersion	
$P_{d,C}$	0.2985
$P_{e,d}$	0.2378
$P_{g,F}$	0.5634
$P'_{d,c'}$	0.2491
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4992

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

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.830	0.689
2200	0.958	0.918
2000	0.990	0.980
1800	0.999	0.998
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	0.998	0.996
460	0.996	0.993
440	0.994	0.990
420	0.988	0.985
400	0.982	0.975
390	0.975	0.963
380	0.966	0.945
370	0.949	0.913
360	0.920	0.858
350	0.873	0.774
340	0.793	0.639
330	0.639	0.418
320	0.349	0.127
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0025
$\Delta P_{g,F}$	-0.0068
$\Delta P_{C,t}$	0.0065
$\Delta P_{C,s}$	0.0029

Expansion Coefficient $\alpha$ ( $\times 10^{-7}/K$ )	
$^{\circ}C$	$\alpha$
-50/-40	50
-40/-30	53
-30/-20	54
-20/-10	55
-10/0	56
0/10	57
10/20	58
20/30	59
30/40	59
40/50	60
50/60	60
60/70	61
70/80	61
80/90	62
90/100	63
100/110	64
110/120	65
120/130	66
130/140	67
140/150	68
150/160	68

Thermal Properties	
T <sub>g</sub> ( $^{\circ}C$ )	606
T <sub>s</sub> ( $^{\circ}C$ )	638
T <sub>10</sub> <sup>14.5</sup> ( $^{\circ}C$ )	548
T <sub>10</sub> <sup>13</sup> ( $^{\circ}C$ )	574
$\alpha_{-50/80^{\circ}C}$ ( $10^{-7}/K$ )	56
$\alpha_{100/300^{\circ}C}$ ( $10^{-7}/K$ )	72
$\lambda$ (W/(m K))	0.85

Constants of Dispersion Formula	
A <sub>0</sub>	3.11096434E+00
A <sub>1</sub>	-1.43300745E-02
A <sub>2</sub>	2.60159962E-02
A <sub>3</sub>	1.10002413E-03
A <sub>4</sub>	-6.28685795E-05
A <sub>5</sub>	4.85754790E-06

Mechanical Properties	
HK ( $10^7$ Pa)	649
F <sub>A</sub>	76
E (GPa)	112.5
G (GPa)	41.8
$\mu$	0.346
$\sigma_b$ (MPa)	90
B ( $10^{-12}$ /Pa)	2.06

Density	Solarization
$\rho$ (g/cm <sup>3</sup> )	$\Delta\lambda$ (%)
4.38	-0.4

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	7.3	7.7	8.0	8.0	8.1	8.4	8.7	9.4	9.4	10.2
-40 ~ -20	7.3	7.7	8.0	8.0	8.1	8.4	8.7	9.5	9.5	10.2
-20 ~ 0	7.3	7.7	8.1	8.1	8.2	8.5	8.9	9.6	9.6	10.3
0 ~ 20	7.4	7.8	8.2	8.2	8.2	8.5	8.9	9.6	9.6	10.4
20 ~ 40	7.4	7.8	8.2	8.2	8.3	8.6	8.9	9.7	9.7	10.5
40 ~ 60	7.5	7.9	8.3	8.4	8.4	8.6	9.0	9.7	9.9	10.6
60 ~ 80	7.7	8.2	8.4	8.5	8.6	8.8	9.2	10.1	10.2	10.8
80 ~ 100	7.8	8.3	8.6	8.7	8.7	8.8	9.4	10.3	10.4	11.0
100 ~ 120	8.1	8.4	8.7	8.8	8.8	9.0	9.0	10.5	10.6	11.3
120 ~ 140	8.0	8.6	8.9	9.0	9.0	9.3	9.3	10.8	10.8	11.5
140 ~ 160	8.2	8.7	9.0	9.1	9.2	9.4	9.4	11.0	11.1	11.8

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/320
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	350/316

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
9.08E-06	1.24E-08	-1.32E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
5.76E-07	4.15E-10	2.72E-01