

<b>H-LaF72</b>	<b>720460</b>	$n_d = 1.72000$	$v_d = 46.02$	$n_F - n_C = 0.015645$
		$n_e = 1.72372$	$v_e = 45.77$	$n_{F'} - n_{C'} = 0.015811$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.68194
$n_{1970}$	1970.09	1.68799
$n_{1530}$	1529.58	1.69476
$n_{1129}$	1128.64	1.70111
$n_{1064}$	1064.00	1.70232
$n_t$	1013.98	1.70333
$n_s$	852.11	1.70732
$n_{A'}$	768.19	1.71011
$n_r$	706.52	1.71271
$n_C$	656.27	1.71533
$n_{C'}$	643.85	1.71607
$n_{He-Ne}$	632.80	1.71676
$n_D$	589.29	1.71987
$n_d$	587.56	1.72000
$n_e$	546.07	1.72372
$n_F$	486.13	1.73097
$n_{F'}$	479.99	1.73188
$n_g$	435.84	1.73981
$n_h$	404.66	1.74732
$n_i$	365.01	1.76051

Constants of Dispersion Formula	
$A_0$	2.89068995E+00
$A_1$	-1.22258397E-02
$A_2$	2.34463603E-02
$A_3$	3.98991928E-04
$A_4$	2.73296394E-05
$A_5$	1.01579894E-07

Density	
$\rho$ (g/cm <sup>3</sup> )	3.88

Solarization	
$\Delta\lambda$ (%)	-1.2

Relative Partial Dispersion	
$P_{d,C}$	0.2985
$P_{e,d}$	0.2378
$P_{g,F}$	0.5650
$P'_{d,c'}$	0.2486
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.5015

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0014
$\Delta P_{g,F}$	-0.0021
$\Delta P_{C,t}$	0.0039
$\Delta P_{C,s}$	0.0011

Thermal Properties	
Tg (°C)	660
Ts (°C)	692
T <sub>10</sub> <sup>14.5</sup> (°C)	584
T <sub>10</sub> <sup>13</sup> (°C)	628
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	67
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	82
$\lambda$ (W/(m·K))	0.98

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	585
F <sub>A</sub>	128
E (GPa)	98.1
G (GPa)	38.4
$\mu$	0.277
$\sigma_b$ (MPa)	70.2
B (10 <sup>-12</sup> /Pa)	1.77

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	60
-40/-30	63
-30/-20	64
-20/-10	65
-10/0	66
0/10	67
10/20	68
20/30	70
30/40	70
40/50	71
50/60	71
60/70	72
70/80	72
80/90	73
90/100	74
100/110	75
110/120	76
120/130	77
130/140	78
140/150	79
150/160	80

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.902	0.806
2200	0.982	0.949
2000	0.993	0.986
1800	0.998	0.996
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996
1060	0.998	0.996
1000	0.998	0.996
950	0.998	0.996
900	0.998	0.996
850	0.998	0.996
800	0.998	0.996
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.998	0.996
480	0.997	0.994
460	0.995	0.992
440	0.993	0.987
420	0.988	0.982
400	0.978	0.964
390	0.967	0.946
380	0.948	0.910
370	0.908	0.839
360	0.826	0.698
350	0.638	0.423
340	0.303	0.098
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/340
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	366/337

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	2.9	3.2	3.2	3.3	3.5	3.6	4.2	4.3	4.7
-40 ~ -20	2.7	3.0	3.2	3.3	3.3	3.5	3.6	4.2	4.3	4.8
-20 ~ 0	2.7	3.0	3.2	3.3	3.4	3.6	3.8	4.2	4.3	4.9
0 ~ 20	2.7	3.0	3.2	3.3	3.4	3.6	3.8	4.2	4.3	5.0
20 ~ 40	2.7	3.1	3.3	3.3	3.4	3.6	3.9	4.3	4.4	5.1
40 ~ 60	2.7	3.1	3.4	3.4	3.5	3.7	4.1	4.3	4.4	5.2
60 ~ 80	2.8	3.2	3.5	3.5	3.6	3.8	4.1	4.5	4.6	5.3
80 ~ 100	2.9	3.2	3.6	3.6	3.7	3.9	4.1	4.7	4.8	5.4
100 ~ 120	2.9	3.3	3.7	3.7	3.8	4.0	4.3	4.9	5.0	5.5
120 ~ 140	2.9	3.4	3.8	3.8	3.9	4.1	4.5	5.1	5.2	5.7
140 ~ 160	3.0	3.5	3.9	4.0	4.0	4.3	4.6	5.2	5.3	5.8

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
1.36E-06	1.16E-08	-1.71E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
6.48E-07	4.94E-10	1.99E-01