

H-LaF56	800422	$n_d = 1.79952$	$v_d = 42.24$	$n_F - n_C = 0.018928$
		$n_e = 1.80402$	$v_e = 41.98$	$n_{F'} - n_{C'} = 0.019154$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	
n_{1970}	1970.09	
n_{1530}	1529.58	
n_{1129}	1128.64	1.77750
n_{1064}	1064.00	1.77880
n_t	1013.98	1.77991
n_s	852.11	1.78443
$n_{A'}$	768.19	1.78769
n_r	706.52	1.79076
n_C	656.27	1.79389
$n_{C'}$	643.85	1.79478
n_{He-Ne}	632.80	1.79561
n_D	589.29	1.79935
n_d	587.56	1.79952
n_e	546.07	1.80402
n_F	486.13	1.81282
$n_{F'}$	479.99	1.81393
n_g	435.84	1.82356
n_h	404.66	1.83269
n_i	365.01	1.84872

Constants of Dispersion Formula	
A_0	3.14996339E+00
A_1	-1.12409199E-02
A_2	2.99099759E-02
A_3	5.96811598E-04
A_4	1.91751228E-05
A_5	9.69165865E-07

Density		Solarization	
ρ (g/cm ³)	4.60	$\Delta\lambda$ (%)	-0.8

Relative Partial Dispersion	
$P_{d,C}$	0.2974
$P_{e,d}$	0.2377
$P_{g,F}$	0.5674
$P'_{d,c'}$	0.2475
$P'_{e,d}$	0.2349
$P'_{g,F'}$	0.5028

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0020
$\Delta P_{g,F}$	-0.0060
$\Delta P_{C,t}$	-0.0062
$\Delta P_{C,s}$	-0.0020

Thermal Properties	
Tg (°C)	583
Ts (°C)	619
T ₁₀ ^{14.5} (°C)	537
T ₁₀ ¹³ (°C)	562
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	62
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	79
λ (W/(m·K))	0.93

Mechanical Properties	
HK (10 ⁷ Pa)	628
F _A	96
E (GPa)	111.7
G (GPa)	42.2
μ	0.322
σ_b (MPa)	141
B (10 ⁻¹² /Pa)	2.28

Chemical Properties (grade)	
RC (S)	1
RA (S)	2
D _W	1
D _A	3
R _{OH} (S)	1
RP (S)	2

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	52
-40/-30	55
-30/-20	58
-20/-10	59
-10/0	60
0/10	61
10/20	63
20/30	63
30/40	64
40/50	64
50/60	66
60/70	67
70/80	67
80/90	68
90/100	69
100/110	71
110/120	71
120/130	72
130/140	74
140/150	74
150/160	75

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.903	0.815
2200	0.975	0.952
2000	0.989	0.978
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	0.998	0.995
480	0.996	0.993
460	0.995	0.990
440	0.992	0.985
420	0.989	0.978
400	0.982	0.963
390	0.974	0.949
380	0.961	0.923
370	0.935	0.873
360	0.872	0.760
350	0.722	0.522
340	0.424	0.179
330	0.112	0.013
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	390/335
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	363/336

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 ⁻⁶ / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60~-40	7.5	8.2	9.2	9.4	9.6	10.0	10.5	11.2	11.3	12.0
-40~-20	7.7	8.4	9.3	9.6	9.8	10.1	10.7	11.2	11.4	12.0
-20~0	7.8	8.6	9.5	9.7	9.9	10.3	10.8	11.4	11.6	12.1
0~20	8.1	8.7	9.6	9.8	10.0	10.5	10.9	11.5	11.7	12.2
20~40	8.2	8.8	9.8	9.9	10.1	10.5	11.2	11.7	11.9	12.5
40~60	8.5	9.0	10.1	10.2	10.4	10.7	11.3	11.8	12.0	12.6
60~80	8.6	9.2	10.4	10.5	10.6	10.9	11.5	12.1	12.3	12.9
80~100	8.7	9.5	10.5	10.6	10.7	11.1	11.7	12.1	12.3	13.0
100~120	8.9	9.7	10.7	10.8	10.9	11.2	11.8	12.4	12.5	13.1
120~140	9.1	9.8	10.8	10.9	11.0	11.3	12.0	12.5	12.6	13.3
140~160	9.2	9.8	10.9	11.0	11.2	11.5	12.1	12.5	12.7	13.4

Constants of dn/dt		
D ₀	D ₁	D ₂
9.77E-06	1.76E-08	-2.54E-11
E ₀	E ₁	λ_{TK}
1.41E-06	-2.80E-10	4.92E-10