

H-LaF54	800423	$n_d = 1.79950$	$v_d = 42.34$	$n_F - n_C = 0.018883$
		$n_e = 1.80399$	$v_e = 42.09$	$n_{F'} - n_{C'} = 0.019101$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.75473
n_{1970}	1970.09	1.76179
n_{1530}	1529.58	1.76966
n_{1129}	1128.64	1.77705
n_{1064}	1064.00	1.77846
n_t	1013.98	1.77963
n_s	852.11	1.78432
$n_{A'}$	768.19	1.78763
n_r	706.52	1.79073
n_C	656.27	1.79388
$n_{C'}$	643.85	1.79476
n_{He-Ne}	632.80	1.79559
n_D	589.29	1.79934
n_d	587.56	1.79950
n_e	546.07	1.80399
n_F	486.13	1.81276
$n_{F'}$	479.99	1.81386
n_g	435.84	1.82345
n_h	404.66	1.83254
n_i	365.01	1.84858

Constants of Dispersion Formula	
A_0	3.15463077E+00
A_1	-1.49142692E-02
A_2	2.73983671E-02
A_3	1.30082902E-03
A_4	-8.39080192E-05
A_5	6.66808513E-06

Density	Solarization
ρ (g/cm ³)	$\Delta\lambda$ (%)
4.40	-1.7

Relative Partial Dispersion	
$P_{d,C}$	0.2976
$P_{e,d}$	0.2378
$P_{g,F}$	0.5661
$P'_{d,c'}$	0.2482
$P'_{e,d}$	0.2351
$P'_{g,F'}$	0.5021

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0072
$\Delta P_{C,t}$	0.0094
$\Delta P_{C,s}$	0.0043

Thermal Properties	
T _g (°C)	598
T _s (°C)	637
T ₁₀ ^{14.5} (°C)	539
T ₁₀ ¹³ (°C)	580
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	53
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	68
λ (W/(m·K))	1.30

Mechanical Properties	
HK (10 ⁷ Pa)	630
F _A	84
E (GPa)	114.4
G (GPa)	42.7
μ	0.340
σ_b (MPa)	73.6
B (10 ⁻¹² /Pa)	2.07

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

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	47
-40/-30	49
-30/-20	51
-20/-10	53
-10/0	53
0/10	54
10/20	55
20/30	56
30/40	57
40/50	57
50/60	58
60/70	58
70/80	59
80/90	60
90/100	61
100/110	62
110/120	63
120/130	64
130/140	65
140/150	66
150/160	66

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.811	0.658
2200	0.944	0.891
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	0.997	0.996
460	0.995	0.994
440	0.993	0.992
420	0.991	0.986
400	0.984	0.973
390	0.978	0.960
380	0.966	0.935
370	0.941	0.890
360	0.900	0.811
350	0.815	0.665
340	0.638	0.408
330	0.316	0.102
320	0.048	0.011
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	390/330
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	358/327

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	6.4	6.9	7.2	7.3	7.3	7.6	7.8	8.5	8.6	9.1
-40 ~ -20	6.6	7.0	7.4	7.4	7.5	7.6	8.1	8.7	8.8	9.4
-20 ~ 0	6.8	7.1	7.7	7.7	7.8	7.8	8.3	9.0	9.1	9.9
0 ~ 20	7.0	7.3	7.8	7.9	8.0	8.1	8.6	9.2	9.3	10.0
20 ~ 40	7.0	7.3	7.9	8.0	8.0	8.2	8.6	9.3	9.4	10.3
40 ~ 60	7.0	7.4	7.9	8.0	8.0	8.3	8.8	9.5	9.5	10.4
60 ~ 80	7.2	7.5	8.0	8.0	8.1	8.6	9.0	9.7	9.8	10.6
80 ~ 100	7.4	7.7	8.1	8.2	8.2	8.8	9.1	10.1	10.1	10.9
100 ~ 120	7.6	7.8	8.2	8.3	8.4	9.0	9.3	10.3	10.3	11.0
120 ~ 140	7.7	8.0	8.4	8.5	8.6	9.2	9.5	10.5	10.5	11.4
140 ~ 160	7.8	8.1	8.5	8.6	8.7	9.3	9.6	10.7	10.8	11.6

Constants of dn/dt		
D ₀	D ₁	D ₂
7.96E-06	1.37E-08	-2.59E-11
E ₀	E ₁	λ_{TK}
7.10E-07	8.49E-10	2.31E-01