

H-LaF53 743492	$n_d = 1.74330$	$\nu_d = 49.22$	$n_F - n_C = 0.015101$
	$n_e = 1.74690$	$\nu_e = 48.99$	$n_{F'} - n_{C'} = 0.015246$

Refractive Indices		
	$\lambda(\text{nm})$	n_λ
n_{2325}	2325.42	1.70295
n_{1970}	1970.09	1.71000
n_{1530}	1529.58	1.71771
n_{1129}	1128.64	1.72456
n_t	1013.98	1.72685
n_s	852.11	1.73086
$n_{A'}$	768.19	1.73363
n_r	706.52	1.73617
n_C	656.27	1.73874
$n_{C'}$	643.85	1.73946
$n_{\text{He-Ne}}$	632.80	1.74014
n_D	589.29	1.74317
n_d	587.56	1.74330
n_e	546.07	1.74690
n_F	486.13	1.75384
$n_{F'}$	479.99	1.75471
n_g	435.84	1.76220
n_h	404.66	1.76917
n_i	365.01	1.78125

Constants of Dispersion Formula	
A_0	2.97586321E+00
A_1	-1.47400073E-02
A_2	2.08277634E-02
A_3	1.21060314E-03
A_4	-1.09105575E-04
A_5	6.47945304E-06

Relative Partial Dispersions			
$P_{d,C}$	0.3020	$P'_{d,C'}$	0.2518
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2361
$P_{g,F}$	0.5536	$P'_{g,F'}$	0.4911

Range of Temperature (°C)	Temperature Coefficients of Refractive Index						
	dn/dt relative ($10^{-6} / ^\circ\text{C}$)						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	7.3	8.0	8.0	8.2	8.5	9.0	9.6
-20 ~ 0	7.3	8.0	8.1	8.3	8.6	9.1	9.7
0 ~ 20	7.3	8.1	8.1	8.3	8.6	9.2	9.8
20 ~ 40	7.4	8.1	8.2	8.4	8.7	9.3	9.9
40 ~ 60	7.5	8.3	8.3	8.5	8.8	9.5	10.1
60 ~ 80	7.6	8.5	8.5	8.7	9.0	9.7	10.4

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

Thermal Properties	
T _g (°C)	593
T _s (°C)	627
T ₁₀ ^{14.5} (°C)	550
T ₁₀ ¹³ (°C)	578
$\alpha_{-50/80^\circ\text{C}}$ ($10^{-7}/\text{K}$)	50
$\alpha_{100/300^\circ\text{C}}$ ($10^{-7}/\text{K}$)	66

Mechanical Properties	
HK(10^7Pa)	661
F _A	83
E(10^7Pa)	11560
G(10^7Pa)	4420
μ	0.305
B(nm/cm/ 10^5Pa)	2.28

Density	
ρ (g/cm ³)	4.15

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0034
$\Delta P_{g,F}$	-0.0082
$\Delta P_{C,t}$	0.0088
$\Delta P_{C,s}$	0.0033

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_{5\text{mm}}$	$\tau_{10\text{mm}}$
2400	0.761	0.580
2200	0.914	0.835
2000	0.975	0.951
1800	0.993	0.986
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
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	0.999	0.998
460	0.998	0.996
440	0.997	0.994
420	0.996	0.992
400	0.992	0.987
390	0.987	0.980
380	0.981	0.970
370	0.970	0.950
360	0.951	0.914
350	0.924	0.862
340	0.880	0.786
330	0.815	0.673
320	0.705	0.508
310	0.505	0.263
300	0.187	0.039
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	370/300

Coloration of Internal Transmittance	
$\lambda\tau_{80}$	342
$\lambda\tau_5$	301