

H-LaF3B 744449	$n_d = 1.74400$	$\nu_d = 44.90$	$n_F - n_C = 0.016570$
	$n_e = 1.74794$	$\nu_e = 44.63$	$n_{F'} - n_{C'} = 0.016760$

Refractive Indices		
	$\lambda(\text{nm})$	n_λ
n_{2325}	2325.42	1.70713
n_{1970}	1970.09	1.71244
n_{1530}	1529.58	1.71852
n_{1129}	1128.64	1.72451
n_t	1013.98	1.72667
n_s	852.11	1.73070
$n_{A'}$	768.19	1.73359
n_r	706.52	1.73630
n_C	656.27	1.73906
$n_{C'}$	643.85	1.73984
$n_{\text{He-Ne}}$	632.80	1.74057
n_D	589.29	1.74386
n_d	587.56	1.74400
n_e	546.07	1.74794
n_F	486.13	1.75563
$n_{F'}$	479.99	1.75660
n_g	435.84	1.76496
n_h	404.66	1.77285
n_i	365.01	1.78666

Constants of Dispersion Formula	
A_0	2.96773191E+00
A_1	-1.07334025E-02
A_2	2.46639798E-02
A_3	7.96273827E-04
A_4	-3.49870097E-05
A_5	3.36130613E-06

Relative Partial Dispersions			
$P_{d,C}$	0.2981	$P'_{d,C'}$	0.2482
$P_{e,d}$	0.2378	$P'_{e,d}$	0.2351
$P_{g,F}$	0.5631	$P'_{g,F'}$	0.4988

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	2.0	2.7	2.7	2.9	3.2	3.8	4.4
-20 ~ 0	2.0	2.7	2.7	2.9	3.2	3.8	4.4
0 ~ 20	2.0	2.7	2.7	2.9	3.2	3.9	4.5
20 ~ 40	1.9	2.7	2.7	2.9	3.2	3.9	4.5
40 ~ 60	2.0	2.7	2.8	3.0	3.3	4.0	4.6
60 ~ 80	2.0	2.9	2.9	3.1	3.4	4.1	4.8

Chemical Properties (grade)	
RC(S)	1
RA(S)	3
D_W	1
D_A	3
$R_{OH}(S)$	1
RP(S)	1

Thermal Properties	
$T_g(^\circ\text{C})$	611
$T_s(^\circ\text{C})$	679
$T_{10}^{14.5}(^\circ\text{C})$	557
$T_{10}^{13}(^\circ\text{C})$	602
$\alpha_{-50/80^\circ\text{C}}(10^{-7}/\text{K})$	74
$\alpha_{100/300^\circ\text{C}}(10^{-7}/\text{K})$	89

Mechanical Properties	
$HK(10^7\text{Pa})$	551
F_A	149
$E(10^7\text{Pa})$	8783
$G(10^7\text{Pa})$	3404
μ	0.290
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	

Density	
$\rho(\text{g}/\text{cm}^3)$	4.32

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0013
$\Delta P_{g,F}$	-0.0060
$\Delta P_{C,t}$	-0.0099
$\Delta P_{C,s}$	-0.0036

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_{5\text{mm}}$	$\tau_{10\text{mm}}$
2400	0.914	0.835
2200	0.960	0.922
2000	0.983	0.966
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
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	0.999	0.998
440	0.999	0.998
420	0.997	0.995
400	0.994	0.990
390	0.990	0.984
380	0.987	0.974
370	0.977	0.954
360	0.954	0.911
350	0.922	0.849
340	0.864	0.745
330	0.759	0.575
320	0.556	0.310
310	0.212	0.048
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	365/310

Coloration of Internal Transmittance	
$\lambda\tau_{80}$	345
$\lambda\tau_5$	310