

<b>H-LaF3B</b> <b>744449</b>	$n_d = 1.74400$	$v_d = 44.90$	$n_F - n_C = 0.016570$
	$n_e = 1.74794$	$v_e = 44.63$	$n_{F'} - n_{C'} = 0.016760$

Refractive Indices		
	$\lambda(\text{nm})$	$n_\lambda$
$n_{2325}$	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
$\mu$	0.290
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	1.620

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	
$\lambda\tau_{80}/\lambda\tau_5$	345/310