

<b>D-LaF743</b>	<b>743493</b>	$n_d = 1.74330$	$v_d = 49.33$	$n_F - n_C = 0.015069$
		$n_e = 1.74689$	$v_e = 49.07$	$n_{F'} - n_{C'} = 0.015221$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.70399
$n_{1970}$	1970.09	1.71066
$n_{1530}$	1529.58	1.71800
$n_{1129}$	1128.64	1.72467
$n_{1064}$	1064.00	1.72590
$n_t$	1013.98	1.72692
$n_s$	852.11	1.73091
$n_{A'}$	768.19	1.73366
$n_r$	706.52	1.73621
$n_C$	656.27	1.73876
$n_{C'}$	643.85	1.73948
$n_{He-Ne}$	632.80	1.74016
$n_D$	589.29	1.74317
$n_d$	587.56	1.74330
$n_e$	546.07	1.74689
$n_F$	486.13	1.75383
$n_{F'}$	479.99	1.75470
$n_g$	435.84	1.76215
$n_h$	404.66	1.76911
$n_i$	365.01	1.78110

Constants of Dispersion Formula	
$A_0$	2.97441605E+00
$A_1$	-1.38572738E-02
$A_2$	2.19649180E-02
$A_3$	8.10197466E-04
$A_4$	-4.79702937E-05
$A_5$	3.00170973E-06

Density	Solarization
$\rho$ (g/cm <sup>3</sup> )	$\Delta\lambda$ (%)
4.23	-3.5

Relative Partial Dispersion	
$P_{d,C}$	0.3013
$P_{e,d}$	0.2382
$P_{g,F}$	0.5521
$P'_{d,c'}$	0.2510
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4895

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0095
$\Delta P_{C,t}$	0.0066
$\Delta P_{C,s}$	0.0021

Thermal Properties	
T <sub>g</sub> (°C)	571
T <sub>s</sub> (°C)	603
T <sub>10</sub> <sup>14.5</sup> (°C)	531
T <sub>10</sub> <sup>13</sup> (°C)	555
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	57
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	74
$\lambda$ (W/(m·K))	0.88
$\beta_d$	135

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	679
F <sub>A</sub>	113
E (GPa)	111.3
G (GPa)	42.6
$\mu$	0.308
$\sigma_b$ (MPa)	87.3
B (10 <sup>-12</sup> /Pa)	2.17

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D <sub>W</sub>	1
D <sub>A</sub>	3
R <sub>OH</sub> (S)	1
RP (S)	1

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	50
-40/-30	53
-30/-20	54
-20/-10	55
-10/0	56
0/10	57
10/20	58
20/30	58
30/40	59
40/50	59
50/60	60
60/70	60
70/80	61
80/90	61
90/100	62
100/110	63
110/120	64
120/130	65
130/140	66
140/150	68
150/160	68

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.830	0.689
2200	0.955	0.912
2000	0.982	0.965
1800	0.994	0.989
1600	0.998	0.996
1400	0.998	0.996
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	0.998	0.997
460	0.997	0.995
440	0.997	0.994
420	0.996	0.992
400	0.994	0.988
390	0.992	0.984
380	0.988	0.977
370	0.982	0.965
360	0.973	0.946
350	0.954	0.911
340	0.930	0.865
330	0.892	0.795
320	0.843	0.710
310	0.723	0.523
300	0.701	0.492
290	0.628	0.394
280	0.490	0.240

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	365/280
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	331/262

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 <sup>-6</sup> / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	7.3	7.6	8.0	8.0	8.1	8.1	8.3	8.9	9.0	9.4
-40 ~ -20	7.3	7.6	8.1	8.1	8.2	8.2	8.5	9.1	9.2	9.5
-20 ~ 0	7.4	7.7	8.1	8.1	8.2	8.3	8.5	9.2	9.3	9.7
0 ~ 20	7.5	7.8	8.1	8.1	8.2	8.4	8.5	9.3	9.4	9.8
20 ~ 40	7.6	7.8	8.1	8.2	8.2	8.5	8.7	9.3	9.5	9.9
40 ~ 60	7.6	7.9	8.2	8.2	8.3	8.6	8.7	9.4	9.6	10.0
60 ~ 80	7.7	7.9	8.3	8.4	8.4	8.8	8.9	9.6	9.7	10.2
80 ~ 100	7.8	8.1	8.4	8.5	8.5	8.9	9.1	9.7	9.8	10.4
100 ~ 120	7.9	8.2	8.4	8.5	8.6	9.1	9.3	9.9	10.0	10.6
120 ~ 140	8.0	8.4	8.5	8.6	8.7	9.3	9.5	10.0	10.1	10.8
140 ~ 160	8.1	8.5	8.6	8.7	8.8	9.4	9.6	10.2	10.2	10.9

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
9.72E-06	1.25E-08	-2.05E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
5.62E-07	5.06E-10	2.24E-01