

LaF5	754377	$n_d = 1.75364$	$v_d = 37.66$	$n_F - n_C = 0.020012$
		$n_e = 1.75839$	$v_e = 37.41$	$n_{F'} - n_{C'} = 0.020270$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.71279
n_{1970}	1970.09	1.71821
n_{1530}	1529.58	1.72451
n_{1129}	1128.64	1.73097
n_{1064}	1064.00	1.73228
n_t	1013.98	1.73340
n_s	852.11	1.73798
$n_{A'}$	768.19	1.74133
n_r	706.52	1.74450
n_C	656.27	1.74775
$n_{C'}$	643.85	1.74868
n_{He-Ne}	632.80	1.74955
n_D	589.29	1.75347
n_d	587.56	1.75364
n_e	546.07	1.75839
n_F	486.13	1.76776
$n_{F'}$	479.99	1.76895
n_g	435.84	1.77937
n_h	404.66	1.78942
n_i	365.01	1.80754

Relative Partial Dispersion	
$P_{d,C}$	0.2943
$P_{e,d}$	0.2374
$P_{g,F}$	0.5802
$P'_{d,c'}$	0.2447
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5141

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D_W	1
D_A	3
R_{OH} (S)	1
RP (S)	2

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.934	0.872
2200	0.984	0.968
2000	0.995	0.990
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	0.996	0.993
500	0.994	0.988
480	0.988	0.979
460	0.982	0.965
440	0.972	0.946
420	0.956	0.915
400	0.920	0.847
390	0.883	0.781
380	0.823	0.677
370	0.718	0.516
360	0.527	0.282
350	0.250	0.065
340		
330		
320		
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0012
$\Delta P_{g,F}$	-0.0009
$\Delta P_{C,t}$	-0.0055
$\Delta P_{C,s}$	-0.0026

Expansion Coefficient α ($\times 10^{-7}/K$)	
$^{\circ}C$	α
-50/-40	60
-40/-30	62
-30/-20	64
-20/-10	65
-10/0	66
0/10	67
10/20	68
20/30	68
30/40	69
40/50	70
50/60	71
60/70	71
70/80	72
80/90	72
90/100	73
100/110	74
110/120	75
120/130	77
130/140	78
140/150	79
150/160	80

Thermal Properties	
T_g ($^{\circ}C$)	657
T_s ($^{\circ}C$)	699
$T_{10}^{14.5}$ ($^{\circ}C$)	595
T_{10}^{13} ($^{\circ}C$)	606
$\alpha_{50/80^{\circ}C}$ ($10^{-7}/K$)	67
$\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$)	82
λ (W/(m·K))	0.73

Mechanical Properties	
HK (10^7 Pa)	535
F_A	157
E (GPa)	91.9
G (GPa)	35.3
μ	0.303
σ_b (MPa)	53.4
B (10^{-12} /Pa)	1.57

Constants of Dispersion Formula	
A_0	2.98667829E+00
A_1	-1.08050950E-02
A_2	2.88888082E-02
A_3	1.07502295E-03
A_4	-3.31886033E-05
A_5	5.86224298E-06

Density		Solarization	
ρ (g/cm ³)	4.16	$\Delta\lambda$ (%)	-1.3

Range of Temperature ($^{\circ}C$)	Temperature Coefficients of Refractive Index									
	dn/dt relative ($\times 10^{-6} / ^{\circ}C$)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	4.4	4.9	5.2	5.3	5.3	5.5	5.9	6.6	6.7	7.5
-40 ~ -20	4.5	4.8	5.2	5.2	5.3	5.5	6.0	6.6	6.7	7.5
-20 ~ 0	4.4	4.8	5.2	5.2	5.3	5.6	6.0	6.7	6.9	7.7
0 ~ 20	4.3	4.8	5.1	5.1	5.2	5.6	5.9	6.8	6.9	7.7
20 ~ 40	4.2	4.8	5.2	5.2	5.3	5.6	6.0	6.9	6.9	7.9
40 ~ 60	4.2	4.8	5.2	5.2	5.4	5.7	6.2	7.0	7.0	8.0
60 ~ 80	4.4	4.9	5.3	5.3	5.4	5.7	6.2	7.1	7.1	8.2
80 ~ 100	4.5	5.0	5.5	5.5	5.6	5.8	6.3	7.2	7.2	8.3
100 ~ 120	4.7	5.2	5.5	5.6	5.7	6.0	6.5	7.3	7.4	8.4
120 ~ 140	4.7	5.3	5.7	5.7	5.8	6.2	6.7	7.4	7.5	8.6
140 ~ 160	4.8	5.3	5.7	5.8	5.8	6.2	6.8	7.5	7.6	8.7

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	437/350
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	379/346

Constants of dn/dt		
D_0	D_1	D_2
4.10E-06	1.07E-08	-1.44E-11
E_0	E_1	λ_{TK}
7.17E-07	4.50E-10	2.63E-01