NHG

D-LaF50A	776495

n_d = 1.77672	υ_d = 49.50	$n_F - n_C$ = 0.015693
n_e = 1.78045	υ_e = 49.21	$n_{F'} - n_{C'}$ = 0.015858

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.73953
n_{1970}	1970.09	1.74510
n_{1530}	1529.58	1.75144
n_{1129}	1128.64	1.75763
n_{1064}	1064.00	1.75883
n_t	1013.98	1.75984
n_s	852.11	1.76388
$n_{A'}$	768.19	1.76672
n_r	706.52	1.76936
n_C	656.27	1.77201
$n_{C'}$	643.85	1.77275
n_{He-Ne}	632.80	1.77345
n_D	589.29	1.77658
n_d	587.56	1.77672
n_e	546.07	1.78045
n_F	486.13	1.78770
$n_{F'}$	479.99	1.78861
n_g	435.84	1.79646
n_h	404.66	1.80381
n_i	365.01	1.81637

Relative Partial Dispersion	
$P_{d,C}$	0.3001
$P_{e,d}$	0.2378
$P_{g,F}$	0.5580
$P'_{d,c'}$	0.2501
$P'_{e,d}$	0.2354
$P'_{g,F'}$	0.4949

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

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.888	0.788
2200	0.973	0.947
2000	0.987	0.975
1800	0.997	0.995
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	0.998	0.997
650	0.998	0.997
600	0.998	0.997
550	0.998	0.997
500	0.998	0.996
480	0.997	0.995
460	0.997	0.994
440	0.995	0.991
420	0.994	0.988
400	0.990	0.980
390	0.985	0.971
380	0.978	0.956
370	0.963	0.927
360	0.933	0.871
350	0.885	0.784
340	0.811	0.657
330	0.708	0.501
320	0.579	0.335
310	0.373	0.139
300	0.285	0.081
290		
280		

Deviation of Relative Partial Dispersions	
$P_{F,e}$	-0.0009
$P_{g,F}$	-0.0034
$P_{C,t}$	-0.0048
$P_{C,s}$	-0.0012

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	65
-40/-30	65
-30/-20	66
-20/-10	67
-10/0	67
0/10	69
10/20	70
20/30	71
30/40	73
40/50	73
50/60	74
60/70	74
70/80	75
80/90	77
90/100	78
100/110	78
110/120	79
120/130	80
130/140	81
140/150	83
150/160	87

Thermal Properties	
Tg (℃)	575
Ts (℃)	624
$T_{10}^{14.5}$ (℃)	525
T_{10}^{13} (℃)	559
$\alpha_{-50/80℃}$ (10^{-7}/K)	70
$\alpha_{100/300℃}$ (10^{-7}/K)	87
λ (W/(m·K))	0.91
β_d	142

Mechanical Properties	
HK (10^7Pa)	633
F_A	170
E (GPa)	121.7
G (GPa)	46.4
μ	0.312
σ_b (MPa)	125
B (10^{-12}/Pa)	1.36

Constants of Dispersion Formula	
A_0	3.08280752E+00
A_1	-1.14328917E-02
A_2	2.69890896E-02
A_3	-4.02628550E-04
A_4	1.49403074E-04
A_5	-7.92664529E-06

Density	
ρ (g/cm^3)	4.84

Solarization	
△λ (%)	-1.6

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative (×10^{-6} / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.1	2.3	2.9	2.9	3.0	3.2	3.5	4.0	4.1	4.6
-40 ~ -20	2.1	2.4	2.9	2.9	3.0	3.2	3.5	4.0	4.1	4.7
-20 ~ 0	2.2	2.4	3.0	3.0	3.1	3.3	3.6	4.1	4.2	4.8
0 ~ 20	2.3	2.5	3.1	3.1	3.2	3.4	3.7	4.3	4.3	4.9
20 ~ 40	2.4	2.6	3.2	3.3	3.3	3.6	3.8	4.4	4.5	5.1
40 ~ 60	2.5	2.7	3.3	3.4	3.4	3.7	4.0	4.5	4.6	5.2
60 ~ 80	2.5	2.8	3.4	3.5	3.5	3.8	4.1	4.7	4.8	5.4
80 ~ 100	2.6	2.9	3.5	3.6	3.6	3.9	4.2	4.8	4.9	5.5
100 ~ 120	2.7	2.9	3.6	3.6	3.7	4.0	4.3	4.9	4.9	5.6
120 ~ 140	2.7	3.0	3.6	3.7	3.7	4.0	4.3	4.9	5.0	5.7
140 ~ 160	2.7	3.0	3.6	3.7	3.7	4.0	4.3	5.0	5.0	5.7

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	370/280
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	353/296

Constants of dn/dt		
D_0	D_1	D_2
2.20E-07	1.31E-08	-2.91E-11
E_0	E_1	λ_{TK}
9.69E-07	4.85E-10	6.61E-10