D-LaF050	768492	n_d = 1.76802	υ_d = 49.24	$n_F - n_C$ = 0.015597
		n_e = 1.77173	υ_e = 49.00	$n_F - n_{C'}$ = 0.015749

Refractive Indices

	λ (nm)	n_λ
n_{2325}	2325.42	1.72707
n_{1970}	1970.09	1.73403
n_{1530}	1529.58	1.74170
n_{1129}	1128.64	1.74866
n_{1064}	1064.00	1.74994
n_t	1013.98	1.75101
n_s	852.11	1.75515
$n_{A'}$	768.19	1.75802
n_r	706.52	1.76066
n_C	656.27	1.76331
$n_{C'}$	643.85	1.76406
n_{He-Ne}	632.80	1.76475
n_D	589.29	1.76787
n_d	587.56	1.76802
n_e	546.07	1.77173
n_F	486.13	1.77891
$n_{F'}$	479.99	1.77980
n_g	435.84	1.78753
n_h	404.66	1.79475
n_i	365.01	1.80718

Relative Partial Dispersion

$P_{d,C}$	0.3020
$P_{e,d}$	0.2379
$P_{g,F}$	0.5527
$P'_{d,c'}$	0.2514
$P'_{e,d}$	0.2356
$P'_{g,F'}$	0.4908

Deviation of Relative Partial Dispersions

$\triangle P_{F,e}$	-0.0027
$\triangle P_{g,F}$	-0.0091
$\triangle P_{C,t}$	0.0099
$\triangle P_{C,s}$	0.0046

Thermal Properties

Tg (℃)	615
Ts (℃)	640
$T_{10}^{14.5}$ (℃)	512
T_{10}^{13} (℃)	549
$\alpha_{-50/80℃}$ (10^{-7}/K)	62
$\alpha_{100/300℃}$ (10^{-7}/K)	75
λ (W/(m K))	0.79
β_d	147

Chemical Properties (grade)

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

Expansion Coefficient α (×10⁻⁷/K)

℃	α
-50/-40	58
-40/-30	59
-30/-20	60
-20/-10	61
-10/0	62
0/10	62
10/20	62
20/30	63
30/40	63
40/50	63
50/60	64
60/70	64
70/80	65
80/90	66
90/100	66
100/110	67
110/120	68
120/130	69
130/140	71
140/150	72
150/160	73

Mechanical Properties

HK (10^7Pa)	578
F_A	72
E (GPa)	112.7
G (GPa)	43.1
μ	0.306
σ_b (MPa)	92
B (10^{-12}/Pa)	1.81

Constants of Dispersion Formula

A_0	3.05764396E+00
A_1	-1.46517743E-02
A_2	2.34463123E-02
A_3	7.01742420E-04
A_4	-2.73402326E-05
A_5	1.97166425E-06

Density

ρ (g/cm³)	4.56

Solarization

$\triangle\lambda$ (%)	-2.8

Internal Transmittance

λ (nm)	τ5mm	τ10mm
2400	0.820	0.672
2200	0.952	0.906
2000	0.978	0.956
1800	0.989	0.978
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	0.999	0.998
500	0.999	0.998
480	0.998	0.996
460	0.997	0.994
440	0.996	0.992
420	0.994	0.989
400	0.992	0.984
390	0.989	0.978
380	0.984	0.968
370	0.975	0.951
360	0.960	0.922
350	0.938	0.879
340	0.904	0.818
330	0.858	0.736
320	0.796	0.634
310	0.629	0.396
300	0.632	0.400
290	0.552	0.305
280	0.381	0.145

Coloration Code

$\lambda_{80}(\lambda_{70})/\lambda_5$	360/280

Coloration of Internal Transmittance

$\lambda\tau_{80}/\lambda\tau_5$	340/277

Temperature Coefficients of Refractive Index — dn/dt relative (×10⁻⁶ / ℃)

Range of Temperature (℃)	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.9	3.2	3.3	3.4	3.5	3.7	4.0	4.3	4.3	4.5
-40 ~ -20	3.0	3.2	3.3	3.4	3.5	3.8	4.1	4.4	4.4	4.8
-20 ~ 0	3.0	3.2	3.4	3.5	3.6	3.9	4.3	4.5	4.6	4.8
0 ~ 20	3.0	3.3	3.5	3.6	3.7	4.1	4.4	4.6	4.7	4.9
20 ~ 40	3.0	3.3	3.5	3.7	3.8	4.2	4.5	4.7	4.8	5.1
40 ~ 60	3.1	3.4	3.6	3.8	4.0	4.3	4.7	4.9	5.0	5.3
60 ~ 80	3.2	3.6	3.7	3.8	4.0	4.4	4.8	5.2	5.2	5.6
80 ~ 100	3.2	3.7	3.8	3.9	4.1	4.6	4.9	5.4	5.4	5.8
100 ~ 120	3.2	3.8	3.9	4.0	4.2	4.7	5.1	5.6	5.6	6.0
120 ~ 140	3.2	3.9	4.0	4.0	4.3	4.8	5.3	5.7	5.7	6.2
140 ~ 160	3.2	4.0	4.1	4.1	4.5	4.9	5.4	5.8	5.8	6.4

Constants of dn/dt

D_0	D_1	D_2
1.61E-06	1.06E-08	-2.28E-11
E_0	E_1	λ_{TK}
7.75E-07	1.44E-09	3.04E-08

NHG