ZLaF58 803314

n_d = 1.80336	υ_d = 31.43	$n_F - n_C$ = 0.025560
n_e = 1.80941	υ_e = 31.21	$n_{F'} - n_{C'}$ = 0.025932

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.75659
n_{1970}	1970.09	1.76193
n_{1530}	1529.58	1.76837
n_{1129}	1128.64	1.77547
n_{1064}	1064.00	1.77699
n_t	1013.98	1.77830
n_s	852.11	1.78382
$n_{A'}$	768.19	1.78792
n_r	706.52	1.79186
n_C	656.27	1.79592
$n_{C'}$	643.85	1.79709
n_{He-Ne}	632.80	1.79818
n_D	589.29	1.80314
n_d	587.56	1.80336
n_e	546.07	1.80941
n_F	486.13	1.82148
$n_{F'}$	479.99	1.82302
n_g	435.84	1.83666
n_h	404.66	1.85000
n_i	365.01	1.87451

Constants of Dispersion Formula	
A_0	3.13543652E+00
A_1	-1.05061656E-02
A_2	3.74554959E-02
A_3	1.36611172E-03
A_4	-9.45470495E-06
A_5	8.08479475E-06

Density	
ρ (g/cm^3)	4.86

Solarization	
△λ (%)	-1.4

Relative Partial Dispersion	
$P_{d,C}$	0.2911
$P_{e,d}$	0.2367
$P_{g,F}$	0.5939
$P'_{d,c'}$	0.2418
$P'_{e,d}$	0.2333
$P'_{g,F'}$	0.5260

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0006
$\Delta P_{g,F}$	0.0025
$\Delta P_{C,t}$	-0.0031
$\Delta P_{C,s}$	-0.0024

Thermal Properties	
Tg (℃)	567
Ts (℃)	617
$T_{10}^{14.5}$ (℃)	526
T_{10}^{13} (℃)	542
$\alpha_{-50/80℃}$ (10^{-7}/K)	54
$\alpha_{100/300℃}$ (10^{-7}/K)	68
λ (W/(m·K))	0.75

Mechanical Properties	
HK (10^7Pa)	510
F_A	184
E (GPa)	56.8
G (GPa)	22.8
μ	0.245
σ_b (MPa)	
B (10^{-12}/Pa)	1.44

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

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	47
-40/-30	50
-30/-20	51
-20/-10	52
-10/0	53
0/10	54
10/20	55
20/30	55
30/40	56
40/50	57
50/60	58
60/70	59
70/80	59
80/90	60
90/100	61
100/110	61
110/120	63
120/130	64
130/140	65
140/150	66
150/160	67

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.968	0.937
2200	0.995	0.990
2000	0.998	0.996
1800	0.998	0.996
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996
1060	0.998	0.996
1000	0.998	0.996
950	0.998	0.996
900	0.998	0.996
850	0.998	0.996
800	0.998	0.996
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.996	0.992
480	0.993	0.989
460	0.987	0.980
440	0.978	0.963
420	0.957	0.924
400	0.905	0.830
390	0.853	0.739
380	0.767	0.602
370	0.619	0.398
360	0.372	0.149
350	0.094	0.014
340		
330		
320		
310		
300		
290		
280		

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	10.0	10.6	10.7	10.8	11.1	11.8	12.0	12.3	12.5	14.3
-40 ~ -20	10.2	10.6	10.8	10.8	11.2	11.8	12.2	12.6	12.7	14.4
-20 ~ 0	10.2	10.6	10.8	10.9	11.2	11.9	12.2	12.8	12.9	14.8
0 ~ 20	10.3	10.7	10.9	11.0	11.2	11.9	12.4	13.0	13.1	15.4
20 ~ 40	10.2	10.8	11.0	11.1	11.3	11.9	12.5	13.0	13.2	15.6
40 ~ 60	10.3	10.8	11.1	11.1	11.3	12.1	12.6	13.3	13.3	15.7
60 ~ 80	10.5	10.8	11.2	11.2	11.3	12.1	12.7	13.3	13.4	15.9
80 ~ 100	10.5	10.9	11.3	11.4	11.5	12.2	12.9	13.5	13.5	16.1
100 ~ 120	10.5	11.0	11.4	11.5	11.7	12.2	13.0	13.5	13.6	16.4
120 ~ 140	10.5	11.1	11.5	11.6	11.7	12.4	13.2	13.7	13.8	16.6
140 ~ 160	10.6	11.3	11.6	11.7	11.8	12.5	13.2	13.9	13.9	16.7

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	430/355
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	398/354

Constants of dn/dt		
D_0	D_1	D_2
1.39E-05	1.17E-08	-2.49E-11
E_0	E_1	λ_{TK}
4.39E-07	4.87E-10	3.56E-01