H-ZLaF78 901371

$n_d = 1.90069$	$\upsilon_d = 37.10$	$n_F - n_C = 0.024280$
$n_e = 1.90645$	$\upsilon_e = 36.88$	$n_{F'} - n_{C'} = 0.024580$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.85201
n_{1970}	1970.09	1.85828
n_{1530}	1529.58	1.86561
n_{1129}	1128.64	1.87323
n_{1064}	1064.00	1.87480
n_t	1013.98	1.87614
n_s	852.11	1.88167
$n_{A'}$	768.19	1.88573
n_r	706.52	1.88958
n_C	656.27	1.89352
$n_{C'}$	643.85	1.89465
n_{He-Ne}	632.80	1.89571
n_D	589.29	1.90048
n_d	587.56	1.90069
n_e	546.07	1.90645
n_F	486.13	1.91780
$n_{F'}$	479.99	1.91923
n_g	435.84	1.93177
n_h	404.66	1.94382
n_i	365.01	1.96535

Relative Partial Dispersion	
$P_{d,C}$	0.2953
$P_{e,d}$	0.2372
$P_{g,F}$	0.5754
$P'_{d,c'}$	0.2457
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5102

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0023
$\Delta P_{g,F}$	-0.0066
$\Delta P_{C,t}$	-0.0041
$\Delta P_{C,s}$	-0.0014

Thermal Properties	
Tg (℃)	690
Ts (℃)	732
$T_{10}^{14.5}$ (℃)	625
T_{10}^{13} (℃)	663
$\alpha_{-50/80℃}$ (10^{-7}/K)	65
$\alpha_{100/300℃}$ (10^{-7}/K)	84
λ (W/(m·K))	0.75

Mechanical Properties	
HK (10^7Pa)	670
F_A	72
E (GPa)	121.8
G (GPa)	46.7
μ	0.303
σ_b (MPa)	94.2
B (10^{-12}/Pa)	1.20

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

Expansion Coefficient α ($\times 10^{-7}$/K)	
℃	α
-50/-40	58
-40/-30	60
-30/-20	61
-20/-10	63
-10/0	64
0/10	65
10/20	66
20/30	67
30/40	68
40/50	68
50/60	69
60/70	69
70/80	70
80/90	71
90/100	72
100/110	73
110/120	74
120/130	75
130/140	76
140/150	77
150/160	78

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.943	0.890
2200	0.987	0.974
2000	0.998	0.996
1800	0.998	0.997
1600	0.998	0.997
1400	0.998	0.997
1200	0.998	0.997
1060	0.998	0.997
1000	0.998	0.997
950	0.998	0.997
900	0.998	0.997
850	0.998	0.997
800	0.998	0.997
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.995	0.992
500	0.991	0.984
480	0.987	0.975
460	0.980	0.962
440	0.970	0.948
420	0.958	0.917
400	0.927	0.860
390	0.898	0.806
380	0.845	0.723
370	0.775	0.611
360	0.652	0.439
350	0.429	0.194
340	0.133	0.030
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	3.49532543E+00
A_1	-1.33990335E-02
A_2	3.79713413E-02
A_3	1.56188624E-03
A_4	-7.42686015E-05
A_5	8.65884802E-06

Density	
ρ (g/cm^3)	5.05

Solarization	
△λ (%)	-1.3

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative ($\times 10^{-6}$ / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	4.8	5.0	5.2	5.3	5.5	5.7	6.2	6.9	7.0	8.2
-40 ~ -20	4.9	5.1	5.4	5.5	5.8	6.0	6.3	7.1	7.3	8.4
-20 ~ 0	4.9	5.2	5.5	5.7	5.9	6.2	6.4	7.4	7.4	8.7
0 ~ 20	5.0	5.4	5.7	5.9	6.0	6.4	6.4	7.6	7.6	8.9
20 ~ 40	5.0	5.5	5.9	5.9	6.1	6.4	6.5	7.8	7.8	9.1
40 ~ 60	5.0	5.6	6.1	6.1	6.2	6.5	6.8	8.0	8.0	9.2
60 ~ 80	5.1	5.7	6.2	6.2	6.3	6.6	7.0	8.3	8.3	9.4
80 ~ 100	5.1	5.8	6.2	6.3	6.5	6.8	7.2	8.4	8.4	9.7
100 ~ 120	5.2	5.9	6.3	6.4	6.7	6.8	7.3	8.5	8.5	9.8
120 ~ 140	5.3	6.0	6.4	6.5	6.8	6.9	7.4	8.6	8.6	10.0
140 ~ 160	5.4	6.0	6.4	6.5	6.8	7.0	7.5	8.7	8.7	10.2

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(390)/345
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	389/343

Constants of dn/dt		
D_0	D_1	D_2
4.25E-06	1.31E-08	-2.92E-11
E_0	E_1	λ_{TK}
6.05E-07	4.73E-10	2.92E-01