H-ZLaF82 001291

n_d = 2.00100	υ_d = 29.14	$n_F - n_C$ = 0.034352
n_e = 2.00912	υ_e = 28.92	$n_{F'} - n_{C'}$ = 0.034895

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.93864
n_{1970}	1970.09	1.94582
n_{1530}	1529.58	1.95440
n_{1129}	1128.64	1.96381
n_{1064}	1064.00	1.96583
n_t	1013.98	1.96756
n_s	852.11	1.97488
$n_{A'}$	768.19	1.98035
n_r	706.52	1.98561
n_C	656.27	1.99105
$n_{C'}$	643.85	1.99260
n_{He-Ne}	632.80	1.99406
n_D	589.29	2.00070
n_d	587.56	2.00100
n_e	546.07	2.00912
n_F	486.13	2.02540
$n_{F'}$	479.99	2.02749
n_g	435.84	2.04600
n_h	404.66	2.06424
n_i	365.01	2.09830

Constants of Dispersion Formula	
A_0	3.83282270E+00
A_1	-1.56183327E-02
A_2	5.35172772E-02
A_3	2.75764007E-03
A_4	-1.28130130E-04
A_5	2.18199756E-05

Density	
ρ (g/cm^3)	5.02

Solarization	
△λ (%)	-2.5

Relative Partial Dispersion	
$P_{d,C}$	0.2896
$P_{e,d}$	0.2364
$P_{g,F}$	0.5997
$P'_{d,c'}$	0.2407
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5304

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0002
$\Delta P_{g,F}$	0.0045
$\Delta P_{C,t}$	0.0025
$\Delta P_{C,s}$	0.0004

Thermal Properties	
Tg (℃)	725
Ts (℃)	761
$T_{10}^{14.5}$ (℃)	682
T_{10}^{13} (℃)	718
$\alpha_{-50/80℃}$ (10^{-7}/K)	70
$\alpha_{100/300℃}$ (10^{-7}/K)	88
λ (W/(m·K))	1.10
β_d	150

Mechanical Properties	
HK (10^7Pa)	720
F_A	61
E (GPa)	133.7
G (GPa)	50.0
μ	0.338
σ_b (MPa)	80.9
B (10^{-12}/Pa)	0.74

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

Expansion Coefficient α ($\times 10^{-7}$/K)	
℃	α
-50/-40	61
-40/-30	64
-30/-20	65
-20/-10	67
-10/0	68
0/10	70
10/20	71
20/30	72
30/40	74
40/50	75
50/60	75
60/70	76
70/80	76
80/90	77
90/100	78
100/110	79
110/120	80
120/130	82
130/140	83
140/150	84
150/160	85

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.935	0.875
2200	0.979	0.959
2000	0.990	0.981
1800	0.996	0.993
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	0.997	0.995
500	0.992	0.984
480	0.988	0.976
460	0.982	0.964
440	0.972	0.945
420	0.951	0.904
400	0.906	0.820
390	0.848	0.719
380	0.739	0.546
370	0.515	0.265
360	0.205	0.042
350		
340		
330		
320		
310		
300		
290		
280		

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	2.2	2.9	3.4	3.4	3.5	3.8	4.5	5.8	5.9	7.3
-40 ~ -20	2.2	2.9	3.4	3.4	3.5	3.9	4.5	5.9	5.9	7.4
-20 ~ 0	2.3	3.0	3.5	3.5	3.6	4.0	4.6	6.1	6.1	7.7
0 ~ 20	2.2	3.0	3.6	3.7	3.7	4.2	4.8	6.3	6.4	8.1
20 ~ 40	2.3	3.0	3.7	3.7	3.8	4.3	4.9	6.6	6.6	8.3
40 ~ 60	2.3	3.1	3.8	3.8	3.9	4.5	5.0	6.8	6.8	8.6
60 ~ 80	2.4	3.2	4.0	4.1	4.2	4.7	5.4	7.0	7.1	9.0
80 ~ 100	2.5	3.3	4.3	4.3	4.4	4.9	5.7	7.2	7.3	9.3
100 ~ 120	2.6	3.5	4.5	4.5	4.6	5.1	5.9	7.4	7.5	9.5
120 ~ 140	2.6	3.6	4.6	4.6	4.7	5.2	6.0	7.6	7.7	9.7
140 ~ 160	2.7	3.7	4.7	4.8	4.8	5.3	6.1	7.7	7.8	9.9

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(415)/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	397/361

Constants of dn/dt		
D_0	D_1	D_2
-2.90E-07	1.09E-08	-1.93E-11
E_0	E_1	λ_{TK}
9.83E-07	8.75E-10	2.67E-01