H-ZLaF70B 904313

$n_d = 1.90366$	$\upsilon_d = 31.32$	$n_F - n_C = 0.028857$
$n_e = 1.91048$	$\upsilon_e = 31.08$	$n_{F'} - n_{C'} = 0.029295$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	
n_{1970}	1970.09	
n_{1530}	1529.58	
n_{1129}	1128.64	1.87171
n_{1064}	1064.00	1.87351
n_t	1013.98	1.87507
n_s	852.11	1.88146
$n_{A'}$	768.19	1.88615
n_r	706.52	1.89064
n_C	656.27	1.89526
$n_{C'}$	643.85	1.89657
n_{He-Ne}	632.80	1.89779
n_D	589.29	1.90340
n_d	587.56	1.90366
n_e	546.07	1.91048
n_F	486.13	1.92412
$n_{F'}$	479.99	1.92587
n_g	435.84	1.94134
n_h	404.66	1.95653
n_i	365.01	1.98473

Relative Partial Dispersion	
$P_{d,C}$	0.2911
$P_{e,d}$	0.2363
$P_{g,F}$	0.5967
$P'_{d,c'}$	0.2420
$P'_{e,d}$	0.2328
$P'_{g,F'}$	0.5281

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0002
$\Delta P_{g,F}$	0.0052
$\Delta P_{C,t}$	0.0078
$\Delta P_{C,s}$	0.0027

Thermal Properties	
Tg (℃)	684
Ts (℃)	708
$T_{10}^{14.5}$ (℃)	560
T_{10}^{13} (℃)	648
$\alpha_{-50/80℃}$ (10^{-7}/K)	68
$\alpha_{100/300℃}$ (10^{-7}/K)	85
λ (W/(m·K))	0.91

Mechanical Properties	
HK (10^7Pa)	690
F_A	131
E (GPa)	121.8
G (GPa)	46.7
μ	0.302
σ_b (MPa)	99.4
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	62
-40/-30	63
-30/-20	64
-20/-10	65
-10/0	67
0/10	68
10/20	68
20/30	70
30/40	70
40/50	71
50/60	73
60/70	73
70/80	74
80/90	75
90/100	76
100/110	76
110/120	79
120/130	79
130/140	80
140/150	81
150/160	83

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.889	0.791
2200	0.967	0.936
2000	0.986	0.971
1800	0.996	0.991
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	0.998	0.996
550	0.996	0.992
500	0.989	0.978
480	0.983	0.966
460	0.974	0.949
440	0.959	0.919
420	0.929	0.863
400	0.860	0.739
390	0.786	0.619
380	0.657	0.432
370	0.426	0.181
360		
350		
340		
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula	
A_0	3.48732094E+00
A_1	-1.53300569E-02
A_2	4.38552114E-02
A_3	1.76295737E-03
A_4	-3.48293322E-05
A_5	1.26414315E-05

Density	
ρ (g/cm^3)	4.53

Solarization	
△λ (%)	-0.9

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	1.0	1.2	1.6	1.7	1.8	1.9	2.3	2.5	2.6	5.2
-40 ~ -20	1.0	1.3	1.7	1.8	1.9	2.2	2.6	2.9	2.9	5.4
-20 ~ 0	1.2	1.4	1.8	1.9	2.0	2.4	2.7	3.0	3.1	5.5
0 ~ 20	1.2	1.6	2.0	2.1	2.2	2.5	2.9	3.1	3.2	5.8
20 ~ 40	1.2	1.7	2.1	2.2	2.3	2.7	3.1	3.3	3.4	6.0
40 ~ 60	1.3	1.8	2.1	2.2	2.4	2.8	3.3	3.5	3.6	6.1
60 ~ 80	1.5	2.0	2.4	2.5	2.6	3.0	3.5	3.8	3.9	6.5
80 ~ 100	1.6	2.1	2.4	2.6	2.7	3.2	3.6	3.9	4.0	6.7
100 ~ 120	1.7	2.2	2.5	2.6	2.7	3.4	3.7	4.0	4.1	6.9
120 ~ 140	1.8	2.4	2.7	2.7	2.9	3.4	3.8	4.1	4.2	7.1
140 ~ 160	1.9	2.6	2.9	3.0	3.2	3.6	4.0	4.3	4.4	7.4

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(420)/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	408/364

Constants of dn/dt		
D_0	D_1	D_2
-5.63E-07	1.42E-08	-2.54E-11
E_0	E_1	λ_{TK}
2.54E-07	1.45E-10	3.85E-01