H-ZLaF52 806410

n_d = 1.80610	υ_d = 40.95	$n_F - n_C$ = 0.019686	
n_e = 1.81077	υ_e = 40.69	$n_F - n_{C'}$ = 0.019924	

Refractive Indices

	λ (nm)	n_λ
n_{2325}	2325.42	1.75948
n_{1970}	1970.09	1.76685
n_{1530}	1529.58	1.77506
n_{1129}	1128.64	1.78274
n_{1064}	1064.00	1.78421
n_t	1013.98	1.78543
n_s	852.11	1.79030
$n_{A'}$	768.19	1.79376
n_r	706.52	1.79699
n_C	656.27	1.80025
$n_{C'}$	643.85	1.80117
n_{He-Ne}	632.80	1.80204
n_D	589.29	1.80592
n_d	587.56	1.80610
n_e	546.07	1.81077
n_F	486.13	1.81994
$n_{F'}$	479.99	1.82110
n_g	435.84	1.83112
n_h	404.66	1.84069
n_i	365.01	1.85767

Relative Partial Dispersion

$P_{d,C}$	0.2972
$P_{e,d}$	0.2372
$P_{g,F}$	0.5679
$P'_{d,c'}$	0.2474
$P'_{e,d}$	0.2344
$P'_{g,F'}$	0.5029

Deviation of Relative Partial Dispersions

$\triangle P_{F,e}$	-0.0018
$\triangle P_{g,F}$	-0.0077
$\triangle P_{C,t}$	0.0143
$\triangle P_{C,s}$	0.0068

Thermal Properties

Tg (℃)	637
Ts (℃)	663
$T_{10}^{14.5}$ (℃)	590
T_{10}^{13} (℃)	613
$\alpha_{-50/80℃}$ $(10^{-7}/K)$	54
$\alpha_{100/300℃}$ $(10^{-7}/K)$	64
λ (W/(m K))	0.90

Chemical Properties (grade)

RC (S)	1
RA (S)	3
D_W	1
D_A	3
R_{OH} (S)	1
RP (S)	2
CR	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	54
20/30	55
30/40	56
40/50	56
50/60	56
60/70	57
70/80	57
80/90	58
90/100	58
100/110	59
110/120	60
120/130	60
130/140	61
140/150	62
150/160	62

Internal Transmittance

λ (nm)	τ5mm	τ10mm
2400	0.800	0.640
2200	0.930	0.865
2000	0.992	0.984
1800	0.999	0.998
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	0.997	0.995
460	0.995	0.992
440	0.992	0.985
420	0.986	0.976
400	0.981	0.953
390	0.975	0.928
380	0.953	0.885
370	0.910	0.804
360	0.817	0.644
350	0.616	0.364
340	0.270	0.071
330		
320		
310		
300		
290		
280		

Constants of Dispersion Formula

A_0	3.17490239E+00
A_1	-1.56120621E-02
A_2	2.84801080E-02
A_3	1.38932793E-03
A_4	-9.12625910E-05
A_5	7.77598184E-06

Mechanical Properties

HK $(10^7 Pa)$	651
F_A	76
E (GPa)	113.9
G (GPa)	43.7
μ	0.303
σ_b (MPa)	92
B $(10^{-12}/Pa)$	1.80

Density

ρ (g/cm³)	4.35

Solarization

$\triangle\lambda$ (%)	-0.5

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	5.1	5.5	5.7	5.8	5.9	6.0	6.3	7.1	7.3	7.8
-40 ~ -20	5.1	5.7	5.8	5.9	5.9	6.1	6.5	7.2	7.3	8.0
-20 ~ 0	5.1	5.8	5.9	6.0	6.0	6.2	6.5	7.3	7.4	8.1
0 ~ 20	5.2	5.9	5.9	6.0	6.1	6.3	6.6	7.3	7.4	8.1
20 ~ 40	5.3	6.0	6.0	6.1	6.2	6.4	6.7	7.4	7.5	8.2
40 ~ 60	5.3	6.0	6.1	6.2	6.3	6.5	6.9	7.5	7.6	8.4
60 ~ 80	5.4	6.1	6.2	6.3	6.4	6.7	7.0	7.7	7.8	8.7
80 ~ 100	5.6	6.2	6.3	6.4	6.6	6.9	7.3	8.0	8.0	8.9
100 ~ 120	5.7	6.3	6.5	6.5	6.7	7.1	7.5	8.2	8.2	9.2
120 ~ 140	5.8	6.4	6.6	6.7	6.9	7.2	7.6	8.4	8.4	9.4
140 ~ 160	6.0	6.6	6.8	6.9	7.1	7.4	7.8	8.6	8.7	9.6

Coloration Code

$\lambda_{80}(\lambda_{70})/\lambda_5$	400/340

Coloration of Internal Transmittance

$\lambda\tau_{80}/\lambda\tau_5$	368/339

Constants of dn/dt

D_0	D_1	D_2
5.38E-06	1.23E-08	-1.43E-11
E_0	E_1	λ_{TK}
5.75E-07	4.96E-10	2.63E-01

NHG