

<b>H-ZLaF75      950294</b>	$n_d = 1.95000$	$v_d = 29.37$	$n_F - n_C = 0.032350$
	$n_e = 1.95764$	$v_e = 29.15$	$n_{F'} - n_{C'} = 0.032852$

Refractive Indices		
	$\lambda$ (nm)	$n_\lambda$
$n_{2325}$	2325.42	1.88995
$n_{1970}$	1970.09	1.89709
$n_{1530}$	1529.58	1.90559
$n_{1129}$	1128.64	1.91477
$n_{1064}$	1064.00	1.91670
$n_t$	1013.98	1.91837
$n_s$	852.11	1.92534
$n_{A'}$	768.19	1.93052
$n_r$	706.52	1.93550
$n_C$	656.27	1.94063
$n_{C'}$	643.85	1.94209
$n_{He-Ne}$	632.80	1.94347
$n_D$	589.29	1.94973
$n_d$	587.56	1.95000
$n_e$	546.07	1.95764
$n_F$	486.13	1.97298
$n_{F'}$	479.99	1.97494
$n_g$	435.84	1.99236
$n_h$	404.66	2.00958
$n_i$	365.01	2.04179

Constants of Dispersion Formula	
$A_0$	3.64549592E+00
$A_1$	-1.53200140E-02
$A_2$	4.96183427E-02
$A_3$	2.32042227E-03
$A_4$	-9.17626876E-05
$A_5$	1.92554151E-05

Density	
$\rho$ (g/cm <sup>3</sup> )	4.77

Solarization	
$\Delta\lambda$ (%)	-2.4

Relative Partial Dispersion	
$P_{d,C}$	0.2896
$P_{e,d}$	0.2362
$P_{g,F}$	0.5991
$P'_{d,c'}$	0.2408
$P'_{e,d}$	0.2326
$P'_{g,F'}$	0.5303

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0002
$\Delta P_{g,F}$	0.0043
$\Delta P_{C,t}$	0.0057
$\Delta P_{C,s}$	0.0018

Thermal Properties	
T <sub>g</sub> (°C)	677
T <sub>s</sub> (°C)	714
T <sub>10</sub> <sup>14.5</sup> (°C)	617
T <sub>10</sub> <sup>13</sup> (°C)	653
$\alpha_{50/80^\circ C}$ (10 <sup>-7</sup> /K)	68
$\alpha_{100/300^\circ C}$ (10 <sup>-7</sup> /K)	83
$\lambda$ (W/(m·K))	1.05

Mechanical Properties	
HK (10 <sup>7</sup> Pa)	625
F <sub>A</sub>	66
E (GPa)	120.0
G (GPa)	45.7
$\mu$	0.314
$\sigma_b$ (MPa)	61.1
B (10 <sup>-12</sup> /Pa)	1.25

Chemical Properties (grade)	
RC (S)	1
RA (S)	1
D <sub>W</sub>	1
D <sub>A</sub>	1
R <sub>OH</sub> (S)	1
RP (S)	1

Expansion Coefficient $\alpha$ (×10 <sup>-7</sup> /K)	
°C	$\alpha$
-50/-40	61
-40/-30	64
-30/-20	65
-20/-10	66
-10/0	67
0/10	68
10/20	69
20/30	69
30/40	70
40/50	71
50/60	71
60/70	72
70/80	72
80/90	73
90/100	74
100/110	75
110/120	76
120/130	77
130/140	78
140/150	79
150/160	80

Internal Transmittance		
$\lambda$ (nm)	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.926	0.857
2200	0.976	0.953
2000	0.983	0.966
1800	0.996	0.992
1600	0.996	0.992
1400	0.996	0.992
1200	0.996	0.992
1060	0.996	0.992
1000	0.996	0.992
950	0.996	0.992
900	0.996	0.992
850	0.996	0.992
800	0.996	0.992
750	0.996	0.992
700	0.996	0.992
650	0.996	0.992
600	0.996	0.992
550	0.991	0.982
500	0.981	0.962
480	0.968	0.937
460	0.953	0.908
440	0.929	0.863
420	0.870	0.757
400	0.730	0.533
390	0.604	0.365
380	0.426	0.181
370	0.212	0.045
360	0.165	0.027
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	(430)/370
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	426/370

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 <sup>-6</sup> / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	4.6	5.2	5.6	5.6	5.7	6.0	6.6	7.7	7.8	9.1
-40 ~ -20	4.6	5.2	5.6	5.7	5.8	6.1	6.7	7.9	8.0	9.2
-20 ~ 0	4.6	5.3	5.7	5.8	5.9	6.2	6.8	8.1	8.2	9.3
0 ~ 20	4.6	5.3	5.8	5.9	5.9	6.2	6.9	8.2	8.3	9.5
20 ~ 40	4.7	5.4	5.9	6.0	6.0	6.3	7.0	8.3	8.4	9.7
40 ~ 60	4.7	5.5	5.9	6.0	6.0	6.3	7.1	8.4	8.5	9.8
60 ~ 80	4.7	5.6	5.9	6.0	6.1	6.4	7.1	8.5	8.6	10.1
80 ~ 100	4.8	5.7	6.1	6.2	6.2	6.5	7.2	8.6	8.7	10.2
100 ~ 120	4.8	5.7	6.2	6.3	6.3	6.6	7.3	8.7	8.8	10.4
120 ~ 140	4.9	5.8	6.3	6.4	6.4	6.7	7.4	8.8	8.9	10.5
140 ~ 160	4.9	5.9	6.3	6.4	6.5	6.8	7.5	8.9	9.0	10.7

Constants of dn/dt		
D <sub>0</sub>	D <sub>1</sub>	D <sub>2</sub>
3.47E-06	1.08E-08	-2.35E-11
E <sub>0</sub>	E <sub>1</sub>	$\lambda_{TK}$
7.66E-07	4.26E-10	2.84E-01