

H-ZBaF3	657511	$n_d = 1.65691$	$v_d = 51.12$	$n_F - n_C = 0.012850$
		$n_e = 1.65996$	$v_e = 50.88$	$n_{F'} - n_{C'} = 0.012970$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.62663
n_{1970}	1970.09	1.63127
n_{1530}	1529.58	1.63649
n_{1129}	1128.64	1.64148
n_{1064}	1064.00	1.64245
n_t	1013.98	1.64326
n_s	852.11	1.64648
$n_{A'}$	768.19	1.64877
n_r	706.52	1.65091
n_C	656.27	1.65306
$n_{C'}$	643.85	1.65368
n_{He-Ne}	632.80	1.65424
n_D	589.29	1.65680
n_d	587.56	1.65691
n_e	546.07	1.65996
n_F	486.13	1.66591
$n_{F'}$	479.99	1.66665
n_g	435.84	1.67306
n_h	404.66	1.67907
n_i	365.01	1.68947

Constants of Dispersion Formula	
A_0	2.69121166E+00
A_1	-9.00413519E-03
A_2	1.83609733E-02
A_3	5.31180896E-04
A_4	-2.10926709E-05
A_5	1.72686254E-06

Density	
ρ (g/cm ³)	3.89

Solarization	
$\Delta\lambda$ (%)	-0.2

Relative Partial Dispersion	
$P_{d,C}$	0.2996
$P_{e,d}$	0.2374
$P_{g,F}$	0.5564
$P'_{d,c'}$	0.2490
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4942

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0011
$\Delta P_{g,F}$	-0.0023
$\Delta P_{C,t}$	-0.0252
$\Delta P_{C,s}$	-0.0110

Thermal Properties	
T _g (°C)	657
T _s (°C)	696
T ₁₀ ^{14.5} (°C)	590
T ₁₀ ¹³ (°C)	631
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	74
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	88
λ (W/(m·K))	0.82

Mechanical Properties	
HK (10 ⁷ Pa)	520
F _A	139
E (GPa)	80.4
G (GPa)	31.1
μ	0.292
σ_b (MPa)	77.3
B (10 ⁻¹² /Pa)	1.83

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D _W	1
D _A	3
R _{OH} (S)	2
RP (S)	2

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	67
-40/-30	70
-30/-20	71
-20/-10	72
-10/0	74
0/10	75
10/20	76
20/30	76
30/40	77
40/50	78
50/60	78
60/70	79
70/80	80
80/90	81
90/100	82
100/110	83
110/120	83
120/130	84
130/140	85
140/150	86
150/160	87

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.938	0.880
2200	0.973	0.947
2000	0.990	0.980
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	0.999	0.998
460	0.999	0.998
440	0.997	0.994
420	0.994	0.988
400	0.991	0.981
390	0.987	0.968
380	0.976	0.945
370	0.952	0.899
360	0.894	0.798
350	0.782	0.611
340	0.555	0.308
330	0.217	0.050
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	375/335
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	360/330

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 ⁻⁶ / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	2.2	2.5	2.8	2.8	2.8	3.0	3.2	3.6	3.6	4.2
-40 ~ -20	2.2	2.5	2.8	2.8	2.8	2.9	3.2	3.6	3.6	4.2
-20 ~ 0	2.3	2.6	2.8	2.8	2.9	3.1	3.2	3.7	3.7	4.3
0 ~ 20	2.3	2.6	2.8	2.8	2.9	3.1	3.3	3.7	3.7	4.4
20 ~ 40	2.3	2.6	2.9	2.9	2.9	3.1	3.3	3.7	3.7	4.4
40 ~ 60	2.4	2.7	2.9	2.9	3.0	3.2	3.5	3.9	3.9	4.5
60 ~ 80	2.4	2.7	2.9	3.0	3.1	3.3	3.5	4.1	4.1	4.7
80 ~ 100	2.6	2.8	3.0	3.1	3.2	3.4	3.6	4.2	4.2	4.8
100 ~ 120	2.7	2.9	3.1	3.2	3.3	3.4	3.6	4.4	4.4	5.1
120 ~ 140	2.7	2.9	3.2	3.3	3.4	3.6	3.7	4.5	4.5	5.2
140 ~ 160	2.9	3.0	3.3	3.4	3.5	3.8	3.9	4.8	4.9	5.5

Constants of dn/dt		
D ₀	D ₁	D ₂
1.08E-06	1.18E-08	-1.50E-11
E ₀	E ₁	λ_{TK}
4.84E-07	5.39E-10	2.70E-01