

H-ZBaF21 723380

$n_d = 1.72341$	$v_d = 37.99$	$n_F - n_C = 0.019041$
$n_e = 1.72793$	$v_e = 37.72$	$n_{F'} - n_{C'} = 0.019297$

Refractive Indices		
	λ (nm)	n _λ
n ₂₃₂₅	2325.42	1.68318
n ₁₉₇₀	1970.09	1.68884
n ₁₅₃₀	1529.58	1.69529
n ₁₁₂₉	1128.64	1.70170
n ₁₀₆₄	1064.00	1.70299
n _t	1013.98	1.70407
n _s	852.11	1.70850
n _{A'}	768.19	1.71169
n _r	706.52	1.71471
n _C	656.27	1.71781
n _{C'}	643.85	1.71869
n _{He-Ne}	632.80	1.71952
n _D	589.29	1.72325
n _d	587.56	1.72341
n _e	546.07	1.72793
n _F	486.13	1.73685
n _{F'}	479.99	1.73798
n _g	435.84	1.74793
n _h	404.66	1.75759
n _i	365.01	1.77526

Relative Partial Dispersion	
P _{d,C}	0.2941
P _{e,d}	0.2374
P _{g,F}	0.5819
P' _{d,c'}	0.2446
P' _{e,d}	0.2342
P' _{g,F'}	0.5156

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

Internal Transmittance		
λ (nm)	τ _{5mm}	τ _{10mm}
2400	0.949	0.901
2200	0.980	0.960
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	0.995	0.989
480	0.993	0.986
460	0.990	0.981
440	0.987	0.974
420	0.980	0.961
400	0.959	0.920
390	0.932	0.868
380	0.873	0.762
370	0.739	0.547
360	0.463	0.215
350	0.131	0.017
340		
330		
320		
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
ΔP _{F,e}	-0.0008
ΔP _{g,F}	0.0014
ΔP _{C,t}	-0.0026
ΔP _{C,s}	-0.0026

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	58
-40/-30	61
-30/-20	63
-20/-10	63
-10/0	65
0/10	65
10/20	66
20/30	67
30/40	68
40/50	68
50/60	69
60/70	69
70/80	70
80/90	71
90/100	71
100/110	72
110/120	73
120/130	75
130/140	76
140/150	77
150/160	78

Thermal Properties	
T _g (°C)	614
T _s (°C)	666
T ₁₀ ^{14.5} (°C)	558
T ₁₀ ¹³ (°C)	596
α _{50/80°C} (10 ⁻⁷ /K)	67
α _{100/300°C} (10 ⁻⁷ /K)	83
λ (W/(m·K))	0.98

Constants of Dispersion Formula	
A ₀	2.88881294E+00
A ₁	-1.12014238E-02
A ₂	2.61117044E-02
A ₃	1.31652955E-03
A ₄	-9.02985011E-05
A ₅	1.01643068E-05

Mechanical Properties	
HK (10 ⁷ Pa)	565
F _A	158
E (GPa)	100.6
G (GPa)	39.4
μ	0.276
σ _b (MPa)	89.9
B (10 ⁻¹² /Pa)	1.98

Density		Solarization	
ρ (g/cm ³)	3.61	Δλ (%)	-0.3

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	3.6	4.0	4.4	4.4	4.5	4.7	5.0	5.7	5.8	6.6
-40 ~ -20	3.7	4.1	4.4	4.4	4.5	4.7	5.1	5.7	5.8	6.6
-20 ~ 0	3.6	4.2	4.5	4.5	4.5	4.7	5.2	5.8	5.9	6.7
0 ~ 20	3.6	4.3	4.5	4.5	4.6	4.8	5.2	5.8	6.0	6.8
20 ~ 40	3.7	4.3	4.5	4.5	4.6	4.8	5.2	5.9	6.0	6.8
40 ~ 60	3.7	4.3	4.5	4.5	4.6	4.9	5.3	6.1	6.2	7.0
60 ~ 80	3.7	4.5	4.7	4.7	4.8	5.0	5.4	6.2	6.3	7.3
80 ~ 100	3.8	4.5	4.7	4.8	4.9	5.1	5.5	6.3	6.4	7.4
100 ~ 120	3.9	4.7	4.8	4.9	5.0	5.1	5.4	6.5	6.6	7.5
120 ~ 140	4.0	4.8	4.9	4.9	5.1	5.2	5.6	6.6	6.7	7.6
140 ~ 160	4.1	4.9	5.0	5.0	5.2	5.3	5.7	6.7	6.8	7.7

Coloration Code	
λ ₈₀ (λ ₇₀)/λ ₅	400/355
Coloration of Internal Transmittance	
λτ ₈₀ /λτ ₅	383/355

Constants of dn/dt		
D ₀	D ₁	D ₂
3.29E-06	1.22E-08	-2.04E-11
E ₀	E ₁	λ _{TK}
6.43E-07	3.41E-10	2.74E-01