

H-ZBaF5	671473
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nd =1.67103	vd =47.29	nF - nC =0.014190
ne =1.67440	ve =46.99	nF' - nc' =0.014353

Refractive Indices		
	λ (nm)	
n_f	706.5	1.66441
n_c	656.3	1.66679
$n_{c'}$	643.8	1.66745
n_{He-Ne}	632.8	1.66808
n_D	589.3	1.6709
n_d	587.6	1.67103
n_e	546.1	1.6744
n_F	486.1	1.68098
$n_{F'}$	480.0	1.68181
n_g	435.8	1.68897
n_h	404.7	1.69576
n_i	365.0	1.70771

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	1
DA	2

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.943	0.889
2200	0.971	0.942
2000	0.986	0.972
1800	0.992	0.984
1600	0.998	0.997
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	0.998	0.997
850	0.998	0.996
800	0.995	0.991
700	0.995	0.99
650	0.995	0.99
600	0.994	0.989
550	0.994	0.989
500	0.992	0.985
480	0.991	0.983
460	0.99	0.98
440	0.988	0.976
420	0.985	0.971
400	0.976	0.953
390	0.964	0.93
380	0.941	0.886
370	0.89	0.8
360	0.79	0.63
350	0.58	0.34
340	0.23	0.06
330		
320		
310		
300		
290		
280		

Thermal Properties	
Tg (°C)	583
Ts (°C)	652
T ₁₀ ^{14.5} (°C)	540
T ₁₀ ¹³ (°C)	580
$\alpha_{20/120^\circ C}$ (10 ⁻⁷ /K)	73
$\alpha_{20/300^\circ C}$ (10 ⁻⁷ /K)	85

Constants of Dispersion (Cauchy)	
A ₀	2.7316187
A ₁	-9.5729254×10 ⁻³
A ₂	2.0749141×10 ⁻²
A ₃	4.6899105×10 ⁻⁴
A ₄	-7.830578×10 ⁻⁶
A ₅	2.2593351×10 ⁻⁶

Mechanical Properties	
Hardness (10 ⁷ Pa)	626
FA (Relative Abrasion)	
Young's Modulus (10 ⁷ Pa)	9696
Rigidity Modulus (10 ⁷ Pa)	3807
Poisson's Ratio	0.273

Relative Partial Dispersions			
P _{d,c}	0.2998	P' _{d,c'}	0.2493
P _{e,d}	0.2375	P' _{e,d'}	0.2347
P _{g,F}	0.5631	P' _{g,F'}	0.4986

Photoelastic Constant	
β (10 ⁻¹² /Pa)	

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	-0.002

Color	
λ_{80}/λ_5	38/34

Specific Gravity	
ρ (g/cm ³)	3.58

NHG	HOYA	OHARA	SCHOTT
H - ZBaF5		S - BAH10	



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