

<b>H-ZBaF21</b>	<b>723380</b>
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nd =1.72341	vd =37.99	nF - nC =0.019041
ne =1.72793	ve =37.72	nF' - nc' =0.019297

Refractive Indices		
	$\lambda$ ( nm )	
$n_r$	706.5	1.71471
$n_c$	656.3	1.71781
$n_{c'}$	643.8	1.71869
$n_{He-Ne}$	632.8	1.71952
$n_D$	589.3	1.72325
$n_d$	587.6	1.72341
$n_e$	546.1	1.72793
$n_F$	486.1	1.73685
$n_{F'}$	480.0	1.73798
$n_g$	435.8	1.74793
$n_h$	404.7	1.75759
$n_i$	365.0	1.77526

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

Internal Transmittance		
$\lambda$ ( nm )	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.96	0.922
2200	0.983	0.966
2000	0.993	0.987
1800	0.998	0.996
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
700	0.998	0.997
650	0.998	0.996
600	0.997	0.995
550	0.996	0.993
500	0.991	0.983
480	0.988	0.976
460	0.983	0.967
440	0.977	0.954
420	0.962	0.925
400	0.922	0.851
390	0.88	0.78
380	0.81	0.65
370	0.66	0.43
360	0.37	0.14
350		
340		
330		
320		
310		
300		
290		
280		

Thermal Properties	
$T_g$ ( °C )	609
$T_s$ ( °C )	670
$T_{10}^{14.5}$ ( °C )	557
$T_{10}^{13}$ ( °C )	591
$\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ )	69.21
$\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ )	79.15

Constants of Dispersion (Cauchy)	
$A_0$	2.8863236
$A_1$	$-9.8027240 \times 10^{-3}$
$A_2$	$2.7654255 \times 10^{-2}$
$A_3$	$8.9006367 \times 10^{-4}$
$A_4$	$-3.6309109 \times 10^{-5}$
$A_5$	$7.6181062 \times 10^{-6}$

Mechanical Properties	
Hardness ( $10^7 Pa$ )	585
FA (Relative Abrasion)	
Young's Modulus ( $10^7 Pa$ )	10053
Rigidity Modulus ( $10^7 Pa$ )	3973
Poisson's Ratio	0.266

Relative Partial Dispersions			
$P_{d,c}$	0.2944	$P'_{d,c'}$	0.2449
$P_{e,d}$	0.2371	$P'_{e,d}$	0.2339
$P_{g,F}$	0.5819	$P'_{g,F'}$	0.5153

Photoelastic Constant	
$\beta$ ( $10^{-12}/Pa$ )	

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	0.0009

Color	
$\lambda_{80}/\lambda_5$	41/36

Specific Gravity	
$\rho$ ( $g/cm^3$ )	3.61

NHG	HOYA	OHARA	SCHOTT
H-ZBaF21	BaFD8	S-BAH28	N-BASF51



Naked Optics Corp.  
 16 Mt. Bethel Rd. #374  
 Warren, NJ 07059  
 908-685-0352 (ph) . 908-325-0250 (fax)