

H-ZF7L	805255
---------------	---------------

nd =1.80518	vd =25.46	nF - nC =0.03163
ne =1.81263	ve =25.25	nF' - nc' =0.03218

Refractive Indices		
	λ (nm)	
n_r	706.5	1.79118
n_c	656.3	1.79611
$n_{c'}$	643.8	1.79752
n_{He-Ne}	632.8	1.79885
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81263
n_F	486.1	1.82774
$n_{F'}$	480.0	1.82970
n_g	435.8	1.84721
n_h	404.7	1.86480
n_i	365.0	1.8983

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.97	0.941
2200	0.98	0.96
2000	0.99	0.98
1800	0.994	0.988
1600	0.998	0.996
1400	0.999	0.997
1200	0.999	0.997
1060	0.999	0.997
1000	0.999	0.997
950	0.999	0.997
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
700	0.995	0.991
650	0.991	0.983
600	0.992	0.984
550	0.993	0.987
500	0.988	0.976
480	0.984	0.969
460	0.98	0.96
440	0.971	0.942
420	0.95	0.91
400	0.91	0.82
390	0.84	0.71
380	0.71	0.5
370	0.4	0.16
360		
350		
340		
330		
320		
310		
300		
290		
280		

Thermal Properties	
T_g (°C)	600
T_s (°C)	636
$T_{10}^{14.5}$ (°C)	585
T_{10}^{13} (°C)	593
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	91.19
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	101.49

Constants of Dispersion (Cauchy)	
A_0	3.1171483
A_1	$-1.16162771 \times 10^{-2}$
A_2	$4.48649751 \times 10^{-2}$
A_3	$1.65884911 \times 10^{-3}$
A_4	$2.57168541 \times 10^{-5}$
A_5	$1.47576571 \times 10^{-5}$

Mechanical Properties	
Hardness ($10^7 Pa$)	550
FA (Relative Abrasion)	0.56
Young's Modulus ($10^7 Pa$)	9170
Rigidity Modulus ($10^7 Pa$)	3610
Poisson's Ratio	0.269

Relative Partial Dispersions			
$P_{d,c}$	0.2868	$P'_{d,c'}$	0.238
$P_{e,d}$	0.2355	$P'_{e,d}$	0.2315
$P_{g,F}$	0.6156	$P'_{g,F'}$	0.5441

Photoelastic Constant	
β ($10^{-12}/Pa$)	2.64

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0016
$\Delta P_{g,F}$	0.0142

Color	
λ_{80}/λ_5	44/37

Specific Gravity	
ρ (g/cm^3)	3.38

NHG	HOYA	OHARA	SCHOTT
H-ZF7L	FD60	S-TIH6	N-SF6



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