

H-ZK3	589613
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nd =1.58913	vd =61.25	nF - nC =0.009618
ne =1.59142	ve =61.01	nF' - nc' =0.009694

Refractive Indices		
	λ (nm)	
n_r	706.5	1.5845
n_c	656.3	1.58619
n_c'	643.8	1.58666
n_{He-Ne}	632.8	1.5871
n_D	589.3	1.58904
n_d	587.6	1.58913
n_e	546.1	1.59142
n_F	486.1	1.59581
$n_{F'}$	480.0	1.59635
n_g	435.8	1.601
n_h	404.7	1.60531
n_i	365.0	1.61262

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.88	0.77
2200	0.93	0.865
2000	0.978	0.956
1800	0.984	0.968
1600	0.99	0.98
1400	0.998	0.997
1200	0.999	0.998
1060	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
700	0.999	0.999
650	0.999	0.998
600	0.999	0.999
550	0.999	0.999
500	0.998	0.997
480	0.998	0.996
460	0.997	0.995
440	0.997	0.994
420	0.996	0.993
400	0.996	0.992
390	0.994	0.988
380	0.992	0.985
370	0.986	0.972
360	0.978	0.957
350	0.958	0.918
340	0.93	0.86
330	0.87	0.75
320	0.76	0.58
310	0.6	0.36
300	0.37	0.14
290	0.14	0.02
280		

Thermal Properties	
Tg (°C)	615
Ts (°C)	671
T ₁₀ ^{14.5} (°C)	569
T ₁₀ ¹³ (°C)	606
$\alpha_{20/120^\circ C}$ (10 ⁻⁷ /K)	56.83
$\alpha_{20/300^\circ C}$ (10 ⁻⁷ /K)	67.86

Constants of Dispersion (Cauchy)	
A ₀	2.4861499
A ₁	-9.56848451×10 ⁻³
A ₂	1.46850591×10 ⁻²
A ₃	-1.12164871×10 ⁻⁴
A ₄	4.19787771×10 ⁻⁵
A ₅	-1.88561901×10 ⁻⁶

Mechanical Properties	
Hardness (10 ⁷ Pa)	615
FA (Relative Abrasion)	1.00
Young's Modulus (10 ⁷ Pa)	8495
Rigidity Modulus (10 ⁷ Pa)	3392
Poisson's Ratio	0.252

Relative Partial Dispersions			
P _{d,c}	0.3056	P' _{d,c'}	0.2549
P _{e,d}	0.238	P' _{e,d'}	0.2363
P _{g,F}	0.5395	P' _{g,F'}	0.4799

Photoelastic Constant	
β (10 ⁻¹² /Pa)	

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0024

Color	
λ_{80}/λ_5	35/30

Specific Gravity	
ρ (g/cm ³)	3.26

NHG	HOYA	OHARA	SCHOTT
H-ZK3	BaCD5	S-BaL35	N-SK5



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