

H-ZK50 607567

nd =1.60738	vd =56.65	nF - nC =0.010721
ne =1.60994	ve =56.38	nF' - nc' =0.010819

Refractive Indices		
	λ (nm)	
n_r	706.5	1.6023
n_c	656.3	1.60414
$n_{c'}$	643.8	1.60465
n_{He-Ne}	632.8	1.60513
n_D	589.3	1.60729
n_d	587.6	1.60738
n_e	546.1	1.60994
n_F	486.1	1.61486
$n_{F'}$	480.0	1.61547
n_g	435.8	1.62073
n_h	404.7	1.62562
n_i	365.0	1.63398

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	1
DA	5

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.934	0.873
2200	0.96	0.922
2000	0.986	0.973
1800	0.993	0.987
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	0.999	0.998
650	0.998	0.997
600	0.998	0.997
550	0.998	0.997
500	0.997	0.995
480	0.997	0.994
460	0.996	0.993
440	0.996	0.993
420	0.996	0.992
400	0.994	0.989
390	0.991	0.983
380	0.988	0.976
370	0.981	0.962
360	0.964	0.93
350	0.936	0.877
340	0.88	0.78
330	0.79	0.63
320	0.65	0.42
310	0.45	0.2
300	0.24	0.06
290	0.1	0.01
280		

Thermal Properties	
Tg (°C)	584
Ts (°C)	644
T ₁₀ ^{14.5} (°C)	602
T ₁₀ ¹³ (°C)	640
$\alpha_{20/120^\circ C}$ (10 ⁻⁷ /K)	76.64
$\alpha_{20/300^\circ C}$ (10 ⁻⁷ /K)	89.66

Constants of Dispersion (Cauchy)	
A ₀	2.5395065
A ₁	-8.80261031×10 ⁻³
A ₂	1.56912131×10 ⁻²
A ₃	1.85188951×10 ⁻⁴
A ₄	8.47965641×10 ⁻⁶
A ₅	-7.07107681×10 ⁻⁸

Mechanical Properties	
Hardness (10 ⁷ Pa)	511
FA (Relative Abrasion)	
Young's Modulus (10 ⁷ Pa)	7598
Rigidity Modulus (10 ⁷ Pa)	3000
Poisson's Ratio	0.266

Relative Partial Dispersions			
P _{d,c}	0.3022	P' _{d,c'}	0.2523
P _{e,d}	0.2388	P' _{e,d}	0.2366
P _{g,F}	0.5476	P' _{g,F'}	0.4861

Photoelastic Constant	
β (10 ⁻¹² /Pa)	

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0019

Color	
λ_{80}/λ_5	35/30

Specific Gravity	
ρ (g/cm ³)	3.49

NHG	HOYA	OHARA	SCHOTT
H-ZK50	BaCD2	BSM2	SK2



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