

H-BaK1	530605
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nd =1.53028	vd =60.47	nF - nC =0.00877
ne =1.53237	ve =60.17	nF' - nc' =0.008847

Refractive Indices		
	λ (nm)	
n_r	706.5	1.52608
n_c	656.3	1.52761
$n_{c'}$	643.8	1.52803
n_{He-Ne}	632.8	1.52843
n_D	589.3	1.5302
n_d	587.6	1.53028
n_e	546.1	1.53237
n_F	486.1	1.53638
$n_{F'}$	480.0	1.53688
n_g	435.8	1.54113
n_h	404.7	1.54508
n_i	365.0	1.5518

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

Internal Transmission		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.900	0.820
2200	0.926	0.858
2000	0.968	0.937
1800	0.986	0.972
1600	0.997	0.995
1400	0.997	0.995
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	0.998	0.997
700	0.998	0.996
650	0.997	0.995
600	0.997	0.995
550	0.997	0.995
500	0.996	0.993
480	0.996	0.992
460	0.995	0.991
440	0.995	0.991
420	0.995	0.991
400	0.995	0.991
390	0.995	0.990
380	0.993	0.986
370	0.993	0.986
360	0.990	0.981
350	0.986	0.972
340	0.974	0.949
330	0.949	0.900
320	0.89	0.79
310	0.77	0.59
300	0.54	0.29
290	0.26	0.07
280	0.07	

Thermal Properties	
T_g (°C)	564
T_s (°C)	645
$T_{10}^{14.5}$ (°C)	506
T_{10}^{13} (°C)	553
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	74
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	84

Constants of Dispersion (Cauchy)	
A_0	2.3069229
A_1	$-7.73439301 \times 10^{-3}$
A_2	$1.29929521 \times 10^{-2}$
A_3	$-1.16419651 \times 10^{-4}$
A_4	$4.03061081 \times 10^{-5}$
A_5	$-1.83406761 \times 10^{-6}$

Mechanical Properties	
Hardness ($10^7 Pa$)	486
FA (Relative Abrasion)	1.09
Young's Modulus ($10^7 Pa$)	7095
Rigidity Modulus ($10^7 Pa$)	2900
Poisson's Ratio	0.223

Relative Partial Dispersions			
$P_{d,c}$	0.3044	$P'_{d,c}$	0.2542
$P_{e,d}$	0.2383	$P'_{e,d}$	0.2362
$P_{g,F}$	0.5416	$P'_{g,F'}$	0.4802

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

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	-0.0015

Color	
λ_{80}/λ_5	33/29

Specific Gravity	
ρ (g/cm^3)	2.74

NHG	HOYA	OHARA	SCHOTT
H-BaK1			



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