

H-LaK52 729547

nd =1.72916	vd =54.67	nF – nC =0.013337
ne =1.73234	ve =54.44	nF' - nc' =0.013451

Refractive Indices		
	λ (nm)	
n_r	706.5	1.72279
n_c	656.3	1.72510
$n_{c'}$	643.8	1.72575
n_{He-Ne}	632.8	1.72635
n_D	589.3	1.72904
n_d	587.6	1.72916
n_e	546.1	1.73234
n_F	486.1	1.73844
$n_{F'}$	480.0	1.73920
n_g	435.8	1.74571
n_h	404.7	1.75176
n_i	365.0	1.76205

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.84	0.7
2200	0.948	0.898
2000	0.981	0.962
1800	0.992	0.985
1600	0.998	0.996
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	0.997
600	0.997	0.995
550	0.997	0.995
500	0.997	0.994
480	0.997	0.994
460	0.995	0.991
440	0.994	0.988
420	0.992	0.984
400	0.988	0.977
390	0.984	0.969
380	0.983	0.966
370	0.966	0.933
360	0.95	0.9
350	0.91	0.83
340	0.86	0.74
330	0.78	0.61
320	0.69	0.47
310	0.57	0.33
300	0.48	0.23
290	0.39	0.15
280	0.26	0.07

Thermal Properties	
T_g (°C)	679
T_s (°C)	703
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	60.66
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	70.07

Constants of Dispersion (Cauchy)	
A_0	2.9324178
A_1	$-1.4603156 \times 10^{-2}$
A_2	2.1121636×10^{-2}
A_3	4.8240144×10^{-5}
A_4	4.9669475×10^{-5}
A_5	$-2.4904491 \times 10^{-6}$

Mechanical Properties	
Hardness ($10^7 Pa$)	765
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	11761
Rigidity Modulus ($10^7 Pa$)	4554
Poisson's Ratio	0.273

Relative Partial Dispersions			
$P_{d,c}$	0.3043	$P'_{d,c'}$	0.2535
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2364
$P_{g,F}$	0.545	$P'_{g,F'}$	0.4840

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

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0028
$\Delta P_{g,F}$	-0.0078

Color	
λ_{80}/λ_5	37/29

Specific Gravity	
ρ (g/cm^3)	4.05

NHG	HOYA	OHARA	SCHOTT
H-LaK52	TAC8	S-LAL18	N-LAK34



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