

H-LaK3 747510

nd =1.74693	vd =50.95	nF – nC =0.01466
ne =1.75042	ve =50.72	nF' - nc' =0.014794

Refractive Indices		
	λ (nm)	
n_r	706.5	1.73998
n_c	656.3	1.7425
$n_{c'}$	643.8	1.7432
n_{He-Ne}	632.8	1.74386
n_D	589.3	1.7468
n_d	587.6	1.74693
n_e	546.1	1.75042
n_F	486.1	1.75716
$n_{F'}$	480.0	1.75799
n_g	435.8	1.7652
n_h	404.7	1.77193
n_i	365.0	1.78356

Constants of Dispersion (Cauchy)	
A_0	2.9883142
A_1	$-1.45132381 \times 10^{-2}$
A_2	$2.20738021 \times 10^{-2}$
A_3	$6.20815021 \times 10^{-4}$
A_4	$-3.71344771 \times 10^{-5}$
A_5	$3.10076061 \times 10^{-6}$

Relative Partial Dispersions			
$P_{d,c}$	0.3022	$P'_{d,c'}$	0.2522
$P_{e,d}$	0.2381	$P'_{e,d}$	0.236
$P_{g,F}$	0.5484	$P'_{g,F'}$	0.4875

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0023
$\Delta P_{g,F}$	-0.0105

NHG	HOYA	OHARA	SCHOTT
H-LaK3			

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

Thermal Properties	
T_g (°C)	663
T_s (°C)	689
$T_{10}^{14.5}$ (°C)	603
T_{10}^{13} (°C)	634
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	61
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	70

Mechanical Properties	
Hardness ($10^7 Pa$)	672
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	11471
Rigidity Modulus ($10^7 Pa$)	4589
Poisson's Ratio	0.25

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

Color	
λ_{80}/λ_5	38/32

Specific Gravity	
ρ (g/cm^3)	4.10

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.82	0.67
2200	0.951	0.905
2000	0.983	0.966
1800	0.996	0.992
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	0.998	0.997
700	0.997	0.995
650	0.997	0.995
600	0.997	0.995
550	0.997	0.994
500	0.994	0.988
480	0.991	0.983
460	0.988	0.977
440	0.985	0.971
420	0.982	0.965
400	0.977	0.954
390	0.971	0.942
380	0.959	0.92
370	0.939	0.881
360	0.9	0.81
350	0.84	0.7
340	0.72	0.52
330	0.51	0.26
320	0.22	0.05
310	0.03	
300		
290		
280		



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