

H-LaK7 713539

nd =1.71300	vd =53.94	nF - nC =0.013219
ne =1.71615	ve =53.72	nF' - nc' =0.013332

Refractive Indices		
	λ (nm)	
n_r	706.5	1.70669
n_c	656.3	1.70898
$n_{c'}$	643.8	1.70962
n_{He-Ne}	632.8	1.71022
n_D	589.3	1.71288
n_d	587.6	1.71300
n_e	546.1	1.71615
n_F	486.1	1.72220
$n_{F'}$	480.0	1.72295
n_g	435.8	1.72939
n_h	404.7	1.73537
n_i	365.0	1.74559

Constants of Dispersion (Cauchy)	
A_0	2.8778537
A_1	$-1.3832906 \times 10^{-2}$
A_2	2.0301185×10^{-2}
A_3	2.7759871×10^{-4}
A_4	5.9059830×10^{-6}
A_5	1.7747647×10^{-7}

Relative Partial Dispersions			
$P_{d,c}$	0.3041	$P'_{d,c'}$	0.2536
$P_{e,d}$	0.2383	$P'_{e,d}$	0.2363
$P_{g,F}$	0.5439	$P'_{g,F'}$	0.4831

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0028
$\Delta P_{g,F}$	-0.0101

NHG	HOYA	OHARA	SCHOTT
H-LaK7	LaC8	S-LaL8	N-LaK8

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	1
DA	4

Thermal Properties	
T_g (°C)	643
T_s (°C)	675
$T_{10}^{14.5}$ (°C)	612
T_{10}^{13} (°C)	628
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	57.28
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	62.64

Mechanical Properties	
Hardness ($10^7 Pa$)	620
FA (Relative Abrasion)	1.3
Young's Modulus ($10^7 Pa$)	11370
Rigidity Modulus ($10^7 Pa$)	4420
Poisson's Ratio	0.296

Photoelastic Constant	
β ($10^{-12}/Pa$)	1.84

Color	
λ_{80}/λ_5	36/28

Specific Gravity	
ρ (g/cm^3)	3.86

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.8	0.64
2200	0.89	0.8
2000	0.98	0.96
1800	0.988	0.976
1600	0.995	0.991
1400	0.998	0.996
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	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.998	0.997
480	0.997	0.994
460	0.995	0.991
440	0.993	0.986
420	0.989	0.978
400	0.981	0.962
390	0.975	0.95
380	0.965	0.932
370	0.949	0.9
360	0.92	0.847
350	0.88	0.77
340	0.81	0.65
330	0.71	0.51
320	0.6	0.36
310	0.47	0.22
300	0.35	0.12
290	0.22	0.05
280	0.14	0.02



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