

<b>H-LaK51</b>	<b>697555</b>
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nd =1.69680	vd =55.46	nF - nC =0.012564
ne =1.69980	ve =55.25	nF' - nc' =0.012667

Refractive Indices		
	$\lambda$ ( nm )	
$n_r$	706.5	1.69078
$n_c$	656.3	1.69297
$n_{c'}$	643.8	1.69358
$n_{He-Ne}$	632.8	1.69415
$n_D$	589.3	1.69669
$n_d$	587.6	1.69680
$n_e$	546.1	1.69980
$n_F$	486.1	1.70553
$n_{F'}$	480.0	1.70625
$n_g$	435.8	1.71235
$n_h$	404.7	1.71801
$n_i$	365.0	1.72765

Constants of Dispersion (Cauchy)	
$A_0$	2.8255229
$A_1$	$-1.3632902 \times 10^{-2}$
$A_2$	$1.9791402 \times 10^{-2}$
$A_3$	$1.5032564 \times 10^{-5}$
$A_4$	$4.0761368 \times 10^{-5}$
$A_5$	$-1.7527267 \times 10^{-6}$

Relative Partial Dispersions			
$P_{d,c}$	0.3049	$P'_{d,c'}$	0.2541
$P_{e,d}$	0.2389	$P'_{e,d}$	0.2368
$P_{g,F}$	0.543	$P'_{g,F'}$	0.4815

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0034
$\Delta P_{g,F}$	-0.0085

NHG	HOYA	OHARA	SCHOTT
H-LaK51	LaC14	S-LaL14	N-LaK14

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

Thermal Properties	
$T_g$ ( °C )	640
$T_s$ ( °C )	674
$T_{10}^{14.5}$ ( °C )	637
$T_{10}^{13}$ ( °C )	647
$\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ )	59.34
$\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ )	69.53

Mechanical Properties	
Hardness ( $10^7 Pa$ )	761
FA (Relative Abrasion)	1.25
Young's Modulus ( $10^7 Pa$ )	11080
Rigidity Modulus ( $10^7 Pa$ )	4290
Poisson's Ratio	0.293

Photoelastic Constant	
$\beta$ ( $10^{-12}/Pa$ )	1.81

Color	
$\lambda_{80}/\lambda_5$	37/28

Specific Gravity	
$\rho$ ( $g/cm^3$ )	3.66

Internal Transmittance		
$\lambda$ ( nm )	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.79	0.62
2200	0.89	0.8
2000	0.979	0.958
1800	0.987	0.974
1600	0.994	0.988
1400	0.996	0.992
1200	0.998	0.996
1060	0.998	0.997
1000	0.997	0.995
950	0.997	0.995
900	0.997	0.995
850	0.996	0.998
800	0.99	0.98
700	0.99	0.98
650	0.989	0.979
600	0.989	0.978
550	0.988	0.977
500	0.988	0.976
480	0.986	0.973
460	0.985	0.97
440	0.982	0.965
420	0.98	0.961
400	0.976	0.953
390	0.97	0.94
380	0.964	0.93
370	0.94	0.89
360	0.93	0.87
350	0.87	0.75
340	0.8	0.64
330	0.7	0.49
320	0.58	0.34
310	0.46	0.21
300	0.35	0.12
290	0.24	0.06
280	0.17	0.03



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