

H-LaK53 75523

nd =1.75500	vd =52.32	nF - nC =0.014430
ne =1.75844	ve =52.09	nF' - nc' =0.014561

Refractive Indices

	λ (nm)	
n_r	706.5	1.74815
n_c	656.3	1.75063
$n_{c'}$	643.8	1.75132
n_{He-Ne}	632.8	1.75197
n_D	589.3	1.75487
n_d	587.6	1.75500
n_e	546.1	1.75844
n_F	486.1	1.76506
$n_{F'}$	480.0	1.76588
n_g	435.8	1.77295
n_h	404.7	1.77953
n_i	365.0	1.79081

Constants of Dispersion (Cauchy)

A_0	3.0182184
A_1	$-1.5381633 \times 10^{-2}$
A_2	2.1520137×10^{-2}
A_3	6.4608303×10^{-4}
A_4	$-3.2355748 \times 10^{-5}$
A_5	2.0791593×10^{-6}

Relative Partial Dispersions

$P_{d,c}$	0.3028	$P'_{d,c'}$	0.2527
$P_{e,d}$	0.2384	$P'_{e,d}$	0.2363
$P_{g,F}$	0.5468	$P'_{g,F'}$	0.4856

Deviation of Relative Partial Dispersions

$\Delta P_{F,e}$	-0.0026
$\Delta P_{g,F}$	-0.0099

Chemical Properties

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

Thermal Properties

T_g (°C)	685
T_s (°C)	715
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	60
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	70

Mechanical Properties

Hardness ($10^7 Pa$)	784
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	12018
Rigidity Modulus ($10^7 Pa$)	4655
Poisson's Ratio	0.297

Photoelastic Constant

β ($10^{-12}/Pa$)	1.40
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Color

λ_{80}/λ_5	38/29
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Specific Gravity

ρ (g/cm^3)	4.27
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Internal Transmittance

λ (nm)	τ_{5mm}	τ_{10mm}
2400		
2200		
2000		
1800		
1600		
1400		
1200		
1060		
1000		
950		
900		
850		
800		
700	0.999	0.998
650	0.999	0.997
600	0.998	0.996
550	0.998	0.996
500	0.996	0.993
480	0.995	0.99
460	0.994	0.988
440	0.986	0.973
420	0.978	0.956
400	0.958	0.917
390	0.939	0.882
380	0.91	0.828
370	0.87	0.76
360	0.81	0.66
350	0.73	0.53
340	0.63	0.4
330	0.52	0.27
320	0.4	0.16
310	0.28	0.08
300	0.20	0.04
290	0.10	0.01
280		

NHG	HOYA	OHARA	SCHOTT
H-LaK53	TAC6	S-YGH51	N-LAK33



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