

H-ZLaF54	816466
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nd =1.81600	vd =46.6	nF - nC =0.01750
ne =1.82017	ve =46.37	nF' - nc' =0.017688

Refractive Indices		
	λ (nm)	
n_r	706.5	1.80780
n_c	656.3	1.81075
$n_{c'}$	643.8	1.81158
n_{He-Ne}	632.8	1.81236
n_D	589.3	1.81585
n_d	587.6	1.81600
n_e	546.1	1.82017
n_F	486.1	1.82825
$n_{F'}$	480.0	1.82927
n_g	435.8	1.83800
n_h	404.7	1.84619
n_i	365.0	1.86034

Constants of Dispersion (Cauchy)	
A_0	3.155561209
A_1	3.1074045×10^{-2}
A_2	6.0054998×10^{-2}
A_3	$-7.5366471 \times 10^{-3}$
A_4	9.8909853×10^{-4}
A_5	$-4.5364809 \times 10^{-5}$

Relative Partial Dispersions			
$P_{d,c}$	0.3	$P'_{d,c'}$	0.2499
$P_{e,d}$	0.2383	$P'_{e,d}$	0.2357
$P_{g,F}$	0.5571	$P'_{g,F'}$	0.4935

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0028
$\Delta P_{g,F}$	-0.0091

NHG	HOYA	OHARA	SCHOTT
H - ZLaF54	TAF5	S - LaH59	

Chemical Properties	
	Group
RC(S)	
RA(S)	
DW	1
DA	2

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

Mechanical Properties	
Hardness ($10^7 Pa$)	750
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	12500
Rigidity Modulus ($10^7 Pa$)	4820
Poisson's Ratio	0.298

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

Color	
λ_{80}/λ_5	39/30

Specific Gravity	
ρ (g/cm^3)	5.07

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400		0.76
2200		0.938
2000		0.973
1800		0.989
1600		0.994
1400		0.995
1200		0.995
1060		0.995
1000		0.995
950		0.995
900		0.995
850		0.995
800		0.996
700		0.996
650		0.996
600		0.996
550		0.997
500		0.994
480		0.989
460		0.984
440		0.979
420		0.973
400		0.958
390		0.943
380		0.921
370		0.88
360		0.81
350		0.71
340		0.58
330		0.43
320		0.28
310		0.09
300		0.06
290		0.02
280		



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