

H-ZLaF51	805396
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nd =1.80450	vd =39.64	nF – nC =0.020298
ne =1.80932	ve =39.39	nF' – nc' =0.020549

Refractive Indices		
	λ (nm)	
n_r	706.5	1.79514
n_c	656.3	1.79849
$n_{c'}$	643.8	1.79943
n_{He-Ne}	632.8	1.80032
n_D	589.3	1.80433
n_d	587.6	1.80450
n_e	546.1	1.80932
n_F	486.1	1.81879
$n_{F'}$	480.0	1.81998
n_g	435.8	1.83038
n_h	404.7	1.84030
n_i	365.0	1.85788

Constants of Dispersion (Cauchy)	
A_0	3.1633746
A_1	$-1.3276280 \times 10^{-2}$
A_2	3.1133309×10^{-2}
A_3	8.3523380×10^{-4}
A_4	2.9980499×10^{-6}
A_5	2.5568853×10^{-6}

Relative Partial Dispersions			
$P_{d,c}$	0.2964	$P'_{d,c'}$	0.2467
$P_{e,d}$	0.2375	$P'_{e,d}$	0.2346
$P_{g,F}$	0.5710	$P'_{g,F'}$	0.5061

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0018
$\Delta P_{g,F}$	-0.0068

NHG	HOYA	OHARA	SCHOTT
H-ZLaF51	NBFD3	S-LAH63	

Chemical Properties	
	Group
RC(S)	1
RA(S)	3
DW	2
DA	5

Thermal Properties	
T_g (°C)	585
T_s (°C)	615
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	57
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	65

Mechanical Properties	
Hardness ($10^7 Pa$)	686
FA (Relative Abrasion)	1.25
Young's Modulus ($10^7 Pa$)	11530
Rigidity Modulus ($10^7 Pa$)	4460
Poisson's Ratio	0.292

Photoelastic Constant	
β ($10^{-12}/Pa$)	2.37

Color	
λ_{80}/λ_5	41/35

Specific Gravity	
ρ (g/cm^3)	4.39

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.75	0.56
2200	0.9	0.81
2000	0.96	0.922
1800	0.978	0.956
1600	0.99	0.98
1400	0.995	0.99
1200	0.998	0.997
1060	0.999	0.999
1000	0.999	0.999
950	0.999	0.999
900	0.999	0.999
850	0.999	0.999
800	0.999	0.999
700	0.999	0.997
650	0.999	0.997
600	0.999	0.997
550	0.999	0.997
500	0.999	0.997
480	0.996	0.993
460	0.996	0.993
440	0.991	0.982
420	0.985	0.97
400	0.971	0.943
390	0.96	0.91
380	0.93	0.86
370	0.86	0.75
360	0.73	0.53
350	0.45	0.2
340	0.14	0.02
330		
320		
310		
300		
290		
280		



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