

<b>H-ZLaF52 806410</b>
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nd =1.80610	vd =40.95	nF - nC =0.019686
ne =1.81077	ve =40.69	nF' - nc' =0.019924

Refractive Indices		
	$\lambda$ ( nm )	
$n_r$	706.5	1.79699
$n_c$	656.3	1.80025
$n_{c'}$	643.8	1.80117
$n_{He-Ne}$	632.8	1.80204
$n_D$	589.3	1.80592
$n_d$	587.6	1.80610
$n_e$	546.1	1.81077
$n_F$	486.1	1.81994
$n_{F'}$	480.0	1.82110
$n_g$	435.8	1.83115
$n_h$	404.7	1.84073
$n_i$	365.0	1.85771

Constants of Dispersion (Cauchy)	
$A_0$	3.1735908
$A_1$	$-1.4865209 \times 10^{-2}$
$A_2$	$2.9540210 \times 10^{-2}$
$A_3$	$9.8366596 \times 10^{-4}$
$A_4$	$-2.2979104 \times 10^{-5}$
$A_5$	$3.8043975 \times 10^{-6}$

Relative Partial Dispersions			
$P_{d,c}$	0.2970	$P'_{d,c'}$	0.2474
$P_{e,d}$	0.2372	$P'_{e,d}$	0.2344
$P_{g,F}$	0.5694	$P'_{g,F'}$	0.5044

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0019
$\Delta P_{g,F}$	-0.0063

NHG	HOYA	OHARA	SCHOTT
H-ZLaF52	NBFD13	S-LAH53	N-LASF43

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

Thermal Properties	
$T_g$ ( °C )	629
$T_s$ ( °C )	664
$T_{10}^{14.5}$ ( °C )	
$T_{10}^{13}$ ( °C )	
$\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ )	58.01
$\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ )	64.8

Mechanical Properties	
Hardness ( $10^7 Pa$ )	640
FA (Relative Abrasion)	1.28
Young's Modulus ( $10^7 Pa$ )	11270
Rigidity Modulus ( $10^7 Pa$ )	4340
Poisson's Ratio	0.299

Photoelastic Constant	
$\beta$ ( $10^{-12}/Pa$ )	1.96

Color	
$\lambda_{80}/\lambda_5$	40/34

Specific Gravity	
$\rho$ ( $g/cm^3$ )	4.35

Internal Transmittance		
$\lambda$ ( nm )	$\tau_{5mm}$	$\tau_{10mm}$
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	0.996
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	0.998	0.997
700	0.998	0.997
650	0.998	0.996
600	0.997	0.995
550	0.997	0.995
500	0.995	0.991
480	0.993	0.986
460	0.99	0.98
440	0.985	0.971
420	0.979	0.958
400	0.961	0.923
390	0.938	0.88
380	0.9	0.81
370	0.84	0.7
360	0.72	0.52
350	0.53	0.28
340	0.24	0.06
330		
320		
310		
300		
290		
280		



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