

<b>H-ZLaF50B</b>	<b>804465</b>
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nd =1.80400	vd =46.58	nF - nC =0.017262
ne =1.80811	ve =46.33	nF' - nc' =0.017443

Refractive Indices		
	$\lambda$ ( nm )	
$n_r$	706.5	1.79590
$n_c$	656.3	1.79882
$n_{c'}$	643.8	1.79964
$n_{He-Ne}$	632.8	1.80041
$n_D$	589.3	1.80385
$n_d$	587.6	1.80400
$n_e$	546.1	1.80811
$n_F$	486.1	1.81608
$n_{F'}$	480.0	1.81708
$n_g$	435.8	1.82569
$n_h$	404.7	1.83379
$n_i$	365.0	1.84784

Constants of Dispersion (Cauchy)	
$A_0$	3.1767027
$A_1$	$-1.5350032 \times 10^{-2}$
$A_2$	$2.6690666 \times 10^{-2}$
$A_3$	$7.0784089 \times 10^{-4}$
$A_4$	$-1.5485093 \times 10^{-5}$
$A_5$	$1.9530666 \times 10^{-6}$

Relative Partial Dispersions			
$P_{d,c}$	0.3001	$P'_{d,c'}$	0.25
$P_{e,d}$	0.2381	$P'_{e,d}$	0.2357
$P_{g,F}$	0.5568	$P'_{g,F'}$	0.4937

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0027
$\Delta P_{g,F}$	-0.0095

NHG	HOYA	OHARA	SCHOTT
H-ZLaF50B	TAF3	S-LAH65	N-LASF44

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

Thermal Properties	
$T_g$ ( °C )	672
$T_s$ ( °C )	702
$T_{10}^{14.5}$ ( °C )	671
$T_{10}^{13}$ ( °C )	683
$\alpha_{20/120^\circ C}$ ( $10^{-7}/K$ )	61.26
$\alpha_{20/300^\circ C}$ ( $10^{-7}/K$ )	71.29

Mechanical Properties	
Hardness ( $10^7 Pa$ )	820
FA (Relative Abrasion)	1.75
Young's Modulus ( $10^7 Pa$ )	12586
Rigidity Modulus ( $10^7 Pa$ )	4870
Poisson's Ratio	0.292

Photoelastic Constant	
$\beta$ ( $10^{-12}/Pa$ )	1.37

Color	
$\lambda_{80}/\lambda_5$	40/31

Specific Gravity	
$\rho$ ( $g/cm^3$ )	4.74

Internal Transmittance		
$\lambda$ ( nm )	$\tau_{5mm}$	$\tau_{10mm}$
2400	0.84	0.7
2200	0.962	0.926
2000	0.987	0.974
1800	0.998	0.997
1600	0.999	0.998
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.999	0.998
850	0.998	0.997
800	0.997	0.995
700	0.997	0.994
650	0.996	0.992
600	0.996	0.992
550	0.995	0.99
500	0.993	0.986
480	0.991	0.982
460	0.988	0.976
440	0.984	0.969
420	0.978	0.956
400	0.961	0.923
390	0.942	0.888
380	0.912	0.831
370	0.86	0.74
360	0.78	0.61
350	0.68	0.46
340	0.54	0.29
330	0.37	0.14
320	0.2	0.04
310		
300		
290		
280		



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