

H-LaF50A	773496
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nd =1.77250	vd =49.60	nF - nC =0.015575
ne =1.77621	ve =49.36	nF' - nc' =0.015725

refractive indices		
	λ (nm)	
n _r	706.5	1.76514
n _c	656.3	1.76780
n _{c'}	643.8	1.76854
n _{He-Ne}	632.8	1.76924
n _D	589.3	1.77236
n _d	587.6	1.77250
n _e	546.1	1.77621
n _F	486.1	1.78337
n _{F'}	480.0	1.78427
n _g	435.8	1.79196
n _h	404.7	1.79915
n _i	365.0	1.81153

constants of Dispersion Formula	
A ₀	3.0731081
A ₁	-1.5043205×10 ⁻²
A ₂	2.3933518×10 ⁻²
A ₃	5.5696651×10 ⁻⁴
A ₄	-1.0082346×10 ⁻⁵
A ₅	1.1873265×10 ⁻⁶

Relative Partial Dispersion			
P _{d,c}	0.3019	P' _{d,c'}	0.2517
P _{e,d}	0.2383	P' _{e,d}	0.2359
P _{g,F}	0.5517	P' _{g,F'}	0.4889

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.003
$\Delta P_{g,F}$	-0.0095

NHG	HOYA	OHARA	SCHOTT
H-LaF50A	TaF1	S-LaH66	N-LaF34

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

Thermal Properties	
T _g (°C)	653
T _S (°C)	687
T ₁₀ ^{14.5} (°C)	651
T ₁₀ ¹³ (°C)	663
$\alpha_{20/120^\circ\text{C}}$ (10 ⁻⁷ /K)	60.43
$\alpha_{20/300^\circ\text{C}}$ (10 ⁻⁷ /K)	69.5

Mechanical Properties	
Hardness (10 ⁷ Pa)	770
FA (Relative Abrasion)	1.54
Young's Modulus (10 ⁷ Pa)	12190
Rigidity Modulus (10 ⁷ Pa)	4720
Poisson's Ratio	0.291

Photoelastic Constant	
β (10 ⁻¹² /Pa)	1.49

Coloration Code	
λ_{80}/λ_5	37/30

Other Properties	
ρ (g/cm ³)	4.51

Internal Transmittance		
λ (nm)	$\tau_{5\text{mm}}$	$\tau_{10\text{mm}}$
2400	0.750	0.560
2200	0.890	0.790
2000	0.970	0.941
1800	0.981	0.962
1600	0.995	0.990
1400	0.998	0.996
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	0.996
800	0.997	0.995
700	0.997	0.995
650	0.997	0.995
600	0.997	0.994
550	0.997	0.994
500	0.995	0.991
480	0.994	0.989
460	0.993	0.987
440	0.990	0.980
420	0.985	0.971
400	0.977	0.954
390	0.966	0.934
380	0.949	0.900
370	0.927	0.860
360	0.890	0.790
350	0.830	0.690
340	0.750	0.560
330	0.630	0.400
320	0.470	0.220
310	0.220	0.050
300		
290		
280		



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