

H-LaF10L 788475

nd =1.78800	vd =47.49	nF - nC =0.016592
ne =1.79195	ve =47.26	nF' - nc' =0.016758

Refractive Indices

	λ (nm)	
n_r	706.5	1.78018
n_c	656.3	1.78300
$n_{c'}$	643.8	1.78379
n_{He-Ne}	632.8	1.78453
n_D	589.3	1.78785
n_d	587.6	1.78800
n_e	546.1	1.79195
n_F	486.1	1.79959
$n_{F'}$	480.0	1.80055
n_g	435.8	1.80878
n_h	404.7	1.81649
n_i	365.0	1.82981

Constants of Dispersion (Cauchy)

A_0	3.1212281
A_1	$-1.4119909 \times 10^{-2}$
A_2	2.6520622×10^{-2}
A_3	4.0415763×10^{-4}
A_4	1.4260634×10^{-5}
A_5	3.1642560×10^{-7}

Relative Partial Dispersions

$P_{d,c}$	0.3014	$P'_{d,c'}$	0.2512
$P_{e,d}$	0.2381	$P'_{e,d}$	0.2357
$P_{g,F}$	0.5539	$P'_{g,F'}$	0.4911

Deviation of Relative Partial Dispersions

$\Delta P_{F,e}$	-0.0035
$\Delta P_{g,F}$	-0.0108

Chemical Properties

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

Thermal Properties

T_g (°C)	655
T_s (°C)	690
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	62
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	70

Mechanical Properties

Hardness ($10^7 Pa$)	795
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	12223
Rigidity Modulus ($10^7 Pa$)	4727
Poisson's Ratio	0.299

Photoelastic Constant

β ($10^{-12}/Pa$)	
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Color

λ_{80}/λ_5	38/31
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Specific Gravity

ρ (g/cm^3)	4.54
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Internal Transmittance

λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.83	0.69
2200	0.96	0.922
2000	0.986	0.972
1800	0.997	0.995
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	0.999	0.998
800	0.999	0.998
700	0.999	0.998
650	0.998	0.997
600	0.998	0.997
550	0.997	0.995
500	0.996	0.993
480	0.995	0.991
460	0.993	0.987
440	0.991	0.983
420	0.988	0.977
400	0.981	0.963
390	0.973	0.947
380	0.96	0.921
370	0.936	0.877
360	0.9	0.81
350	0.84	0.7
340	0.74	0.55
330	0.59	0.35
320	0.35	0.12
310	0.07	
300		
290		
280		

NHG HOYA OHARA SCHOTT

H-LaF10L TAF4 S-LAH64 N-LAF21



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