

D-LaF743 743493

nd = 1.74330	vd = 49.33	nF - nC = 0.015069
ne = 1.74689	ve = 49.07	nF' - nC' = 0.015221

Refractive Indices

	λ (nm)	
n_r	706.5	1.73621
n_c	656.3	1.73876
$n_{c'}$	643.8	1.73948
n_{He-Ne}	632.8	1.74016
n_D	589.3	1.74317
n_d	587.6	1.74330
n_e	546.1	1.74689
n_F	486.1	1.75383
$n_{F'}$	480.0	1.75470
n_g	435.8	1.76216
n_h	404.7	1.76913
n_i	365.0	1.78115

Constants of Dispersion (Cauchy)

A_0	2.975245
A_1	-1.425016×10^{-2}
A_2	2.140074×10^{-2}
A_3	9.755337×10^{-4}
A_4	-6.979530×10^{-5}
A_5	4.114924×10^{-6}

Relative Partial Dispersions

$P_{d,c}$	0.3013	$P'_{d,c'}$	0.251
$P_{e,d}$	0.2382	$P'_{e,d}$	0.2359
$P_{g,F}$	0.5528	$P'_{g,F'}$	0.4901

Deviation of Relative Partial Dispersions

$\Delta P_{F,e}$	-0.0025
$\Delta P_{g,F}$	-0.0089

Chemical Properties

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

Thermal Properties

T_g (°C)	543
T_s (°C)	589
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	67

Mechanical Properties

Hardness ($10^7 Pa$)	665
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	11050
Rigidity Modulus ($10^7 Pa$)	4230
Poisson's Ratio	0.307

Photoelastic Constant

β ($10^{-12}/Pa$)	2.26
---------------------------	------

Color

λ_{80}/λ_5	36/28
--------------------------	-------

Specific Gravity

ρ (g/cm^3)	4.22
---------------------	------

Internal Transmittance

λ (nm)	τ_{5mm}	τ_{10mm}
2400		
2200		
2000		
1800		
1600		
1400		
1200		
1060		
1000		
950		
900		
850		
800		
700	0.999	0.999
650	0.999	0.999
600	0.999	0.999
550	0.999	0.999
500	0.999	0.999
480	0.999	0.999
460	0.999	0.998
440	0.999	0.998
420	0.998	0.996
400	0.995	0.991
390	0.993	0.986
380	0.988	0.976
370	0.979	0.959
360	0.965	0.932
350	0.940	0.880
340	0.900	0.810
330	0.850	0.720
320	0.770	0.590
310	0.620	0.390
300	0.540	0.290
290	0.380	0.140
280	0.190	0.030

NHG HOYA OHARA SCHOTT

D-LaF743 M-NBF1



Naked Optics Corp.

16 Mt. Bethel Rd. #374

Warren, NJ 07059

908-685-0352 (ph) . 908-325-0250 (fax)