H-ZF4 728283

nd =1.72825	vd =28.32	nF – nC =0.025716
ne =1.73432	ve =28.10	nF´- nc´ =0.026133

Refractive Indices		
	λ (nm)	
706.5	706.5	1.71677
n_r	656.3	1.72082
$n_{c'}$	643.8	1.72198
n_{He-Ne}	632.8	1.72307
n_D	589.3	1.72803
n_d	587.6	1.72825
n_e	546.1	1.73432
n_F	486.1	1.74656
$n_{F'}$	480.0	1.74811
n_g	435.8	1.76208
n_h	404.7	1.77578
n_i	365.0	1.80089

Constants of Dispersion (Cauchy)	
A_0	2.8650614
A_1	-3.504002×10^{-3}
A_2	4.2417474×10^{-2}
A_3	-9.06594×10^{-4}
A_4	3.52867×10^{-4}
A_5	-1.19534×10^{-5}

Relative Partial Dispersions			
$P_{d,c}$	0.289	$P'_{d,c'}$	0.2401
$P_{e,d}$	0.2361	$P'_{e,d}$	0.2323
$P_{g,F}$	0.6045	$P'_{g,F'}$	0.5347

Deviation of Relative Partial Dispersions	
$\triangle P_{F,e}$	0.001
$\triangle P_{g,F}$	0.0064

NHG	HOYA	OHARA	SCHOTT
H-ZF4	E-FD10	S-TIH10	N-SF10

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

Thermal Properties	
Tg (℃)	598
T_S (℃)	636
$T_{10}^{14.5}$ (℃)	544
T_{10}^{13} (℃)	578
$\alpha_{20/120℃}$ (10^{-7}/K)	88.73
$\alpha_{20/300℃}$ (10^{-7}/K)	101.48

Mechanical Properties	
Hardness (10^7Pa)	581
F_A (Relative Abrasion)	
Young's Modulus (10^7Pa)	8563
Rigidity Modulus (10^7Pa)	3414
Poisson's Ratio	0.254

Photoelastic Constant	
β (10^{-12}/Pa)	

Color	
λ_{80}/λ_5	42/37

Specific Gravity	
ρ (g/cm^3)	3.05

Internal Transmission		
λ (nm)	τ5mm	τ10mm
2400	0.949	0.9
2200	0.965	0.932
2000	0.981	0.963
1800	0.99	0.98
1600	0.998	0.996
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	0.998	0.996
650	0.996	0.993
600	0.997	0.994
550	0.996	0.993
500	0.992	0.984
480	0.99	0.98
460	0.986	0.972
440	0.981	0.962
420	0.965	0.931
400	0.92	0.84
390	0.86	0.73
380	0.72	0.51
370	0.44	0.19
360	0.12	0.01
350		
340		
330		
320		
310		
300		
290		
280		

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