

H-ZF1 648338

nd =1.64769	vd =33.84	nF - nC =0.01914
ne =1.65222	ve =33.58	nF' - nc' =0.019421

Refractive Indices		
	λ (nm)	
n_r	706.5	1.63903
n_c	656.3	1.64209
$n_{c'}$	643.8	1.64298
n_{He-Ne}	632.8	1.6438
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66124
$n_{F'}$	480.0	1.6624
n_g	435.8	1.67257
n_h	404.7	1.68259
n_i	365.0	1.70125

Constants of Dispersion (Cauchy)	
A_0	2.6399644
A_1	$-1.16457181 \times 10^{-2}$
A_2	$2.30617331 \times 10^{-2}$
A_3	$1.73482191 \times 10^{-3}$
A_4	$-1.39860591 \times 10^{-4}$
A_5	$1.39166701 \times 10^{-5}$

Relative Partial Dispersions			
$P_{d,c}$	0.2924	$P'_{d,c'}$	0.2425
$P_{e,d}$	0.2366	$P'_{e,d}$	0.2333
$P_{g,F}$	0.592	$P'_{g,F'}$	0.5237

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0005
$\Delta P_{g,F}$	0.0043

NHG	HOYA	OHARA	SCHOTT
H-ZF1	E-FD2	S-TiM22	

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

Thermal Properties	
T_g (°C)	570
T_s (°C)	622
$T_{10}^{14.5}$ (°C)	480
T_{10}^{13} (°C)	516
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	88.29
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	98.69

Mechanical Properties	
Hardness ($10^7 Pa$)	507
FA (Relative Abrasion)	
Young's Modulus ($10^7 Pa$)	8050
Rigidity Modulus ($10^7 Pa$)	3228
Poisson's Ratio	0.247

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

Color	
λ_{80}/λ_5	40/36

Specific Gravity	
ρ (g/cm^3)	2.77

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.932	0.869
2200	0.953	0.908
2000	0.978	0.956
1800	0.989	0.979
1600	0.995	0.99
1400	0.997	0.995
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	0.997	0.995
600	0.996	0.993
550	0.995	0.991
500	0.991	0.983
480	0.989	0.979
460	0.986	0.973
440	0.984	0.969
420	0.98	0.961
400	0.96	0.921
390	0.927	0.859
380	0.85	0.72
370	0.66	0.43
360	0.26	0.07
350	0.05	
340		
330		
320		
310		
300		
290		
280		



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