

H-ZF52	847238
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nd =1.84666	vd =23.78	nF - nC =0.035597
ne =1.85505	ve =23.60	nF' - nc' =0.036234

Refractive Indices		
	λ (nm)	
n_r	706.5	1.83100
n_c	656.3	1.83649
$n_{c'}$	643.8	1.83807
n_{He-Ne}	632.8	1.83956
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85505
n_F	486.1	1.87209
$n_{F'}$	480.0	1.87430
n_g	435.8	1.89413
n_h	404.7	1.91423
n_i	365.0	1.95356

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.941	0.886
2200	0.959	0.919
2000	0.981	0.962
1800	0.99	0.981
1600	0.997	0.994
1400	0.997	0.995
1200	0.998	0.997
1060	0.999	0.998
1000	0.999	0.998
950	0.999	0.998
900	0.998	0.997
850	0.998	0.997
800	0.994	0.988
700	0.993	0.987
650	0.993	0.986
600	0.993	0.986
550	0.992	0.985
500	0.99	0.98
480	0.988	0.976
460	0.985	0.971
440	0.982	0.965
420	0.976	0.953
400	0.951	0.904
390	0.91	0.83
380	0.81	0.66
370	0.57	0.33
360	0.16	0.03
350		
340		
330		
320		
310		
300		
290		
280		

Thermal Properties	
T_g (°C)	621
T_s (°C)	653
$T_{10}^{14.5}$ (°C)	
T_{10}^{13} (°C)	619
$\alpha_{20/120^\circ C}$ ($10^{-7}/K$)	89.68
$\alpha_{20/300^\circ C}$ ($10^{-7}/K$)	102.05

Constants of Dispersion (Cauchy)	
A_0	3.2606321
A_1	$-1.7780398 \times 10^{-2}$
A_2	4.0902938×10^{-2}
A_3	5.6076934×10^{-3}
A_4	$-5.6434039 \times 10^{-4}$
A_5	5.4763391×10^{-5}

Mechanical Properties	
Hardness ($10^7 Pa$)	550
FA (Relative Abrasion)	0.62
Young's Modulus ($10^7 Pa$)	10130
Rigidity Modulus ($10^7 Pa$)	4070
Poisson's Ratio	0.244

Relative Partial Dispersions			
$P_{d,c}$	0.2857	$P'_{d,c'}$	0.2371
$P_{e,d}$	0.2357	$P'_{e,d}$	0.2316
$P_{g,F}$	0.6191	$P'_{g,F'}$	0.5473

Photoelastic Constant	
β ($10^{-12}/Pa$)	2.73

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0016
$\Delta P_{g,F}$	0.0150

Color	
λ_{70}/λ_5	41/37

Specific Gravity	
ρ (g/cm^3)	3.49

NHG	HOYA	OHARA	SCHOTT
H-ZF52	FDS90	S-TIH53	N-SF57



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