

H-ZF10 689312	$n_d = 1.68893$	$v_d = 31.16$	$n_F - n_C = 0.022109$
	$n_e = 1.69416$	$v_e = 30.92$	$n_{F'} - n_{C'} = 0.022450$

Refractive Indices		
	$\lambda(\text{nm})$	n_λ
n_{2325}	2325.42	1.64510
n_{1970}	1970.09	1.65089
n_{1530}	1529.58	1.65759
n_{1129}	1128.64	1.66444
n_t	1013.98	1.66704
n_s	852.11	1.67195
$n_{A'}$	768.19	1.67555
n_r	706.52	1.67898
n_C	656.27	1.68251
$n_{C'}$	643.85	1.68351
$n_{\text{He-Ne}}$	632.80	1.68445
n_D	589.29	1.68874
n_d	587.56	1.68893
n_e	546.07	1.69416
n_F	486.13	1.70462
$n_{F'}$	479.99	1.70596
n_g	435.84	1.71786
n_h	404.66	1.72964
n_i	365.01	1.75182

Constants of Dispersion Formula	
A_0	2.76089226E+00
A_1	-1.10845008E-02
A_2	2.89559966E-02
A_3	1.51547191E-03
A_4	-8.76539698E-05
A_5	1.38043475E-05

Relative Partial Dispersions			
$P_{d,C}$	0.2904	$P'_{d,C'}$	0.2414
$P_{e,d}$	0.2365	$P'_{e,d}$	0.2330
$P_{g,F}$	0.5988	$P'_{g,F'}$	0.5301

Range of Temperature (°C)	Temperature Coefficients of Refractive Index						
	dn/dt relative ($10^{-6} / ^\circ\text{C}$)						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	0.8	1.6	1.7	1.9	2.3	3.2	4.2
-20 ~ 0	0.8	1.6	1.7	2.0	2.4	3.3	4.4
0 ~ 20	0.7	1.7	1.7	2.0	2.4	3.4	4.6
20 ~ 40	0.7	1.7	1.7	2.1	2.5	3.5	4.8
40 ~ 60	0.7	1.8	1.8	2.2	2.6	3.7	5.0
60 ~ 80	0.8	1.9	2.0	2.3	2.8	3.9	5.3

Chemical Properties (grade)	
RC(S)	1
RA(S)	1
D_W	1
D_A	1
$R_{OH}(S)$	1
RP(S)	1

Thermal Properties	
$T_g(^{\circ}\text{C})$	585
$T_s(^{\circ}\text{C})$	631
$T_{10}^{14.5}(^{\circ}\text{C})$	528
$T_{10}^{13}(^{\circ}\text{C})$	566
$\alpha_{-50/80^{\circ}\text{C}}(10^{-7}/\text{K})$	89
$\alpha_{100/300^{\circ}\text{C}}(10^{-7}/\text{K})$	109

Mechanical Properties	
HK(10^7Pa)	545
F_A	139
$E(10^7\text{Pa})$	9050
$G(10^7\text{Pa})$	3637
μ	0.244
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	2.770

Density	
$\rho(\text{g}/\text{cm}^3)$	2.93

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0070
$\Delta P_{C,t}$	0.0086
$\Delta P_{C,s}$	0.0024

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_{5\text{mm}}$	$\tau_{10\text{mm}}$
2400	0.944	0.890
2200	0.966	0.933
2000	0.993	0.986
1800	0.998	0.996
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996
1060	0.998	0.996
1000	0.998	0.996
900	0.998	0.996
850	0.998	0.996
800	0.998	0.996
750	0.998	0.996
700	0.998	0.996
650	0.998	0.996
600	0.998	0.996
550	0.998	0.996
500	0.996	0.992
480	0.994	0.988
460	0.992	0.984
440	0.990	0.980
420	0.985	0.970
400	0.971	0.931
390	0.941	0.879
380	0.861	0.741
370	0.652	0.427
360	0.256	0.075
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	400/360

Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	386/361