H-ZF1 648338

n_d = 1.64769	υ_d = 33.84	$n_F - n_C$ = 0.019140
n_e = 1.65222	υ_e = 33.58	$n_{F'} - n_{C'}$ = 0.019421

Refractive Indices		
	λ(nm)	n_λ
n_{2325}	2325.42	
n_{1970}	1970.09	
n_{1530}	1529.58	
n_{1129}	1128.64	1.62614
n_t	1013.98	1.62847
n_s	852.11	1.63284
$n_{A'}$	768.19	1.63603
n_r	706.52	1.63902
n_C	656.27	1.64210
$n_{C'}$	643.85	1.64298
n_{He-Ne}	632.80	1.64380
n_D	589.29	1.64752
n_d	587.56	1.64769
n_e	546.07	1.65222
n_F	486.13	1.66124
$n_{F'}$	479.99	1.66240
n_g	435.84	1.67261
n_h	404.66	1.68262
n_i	365.01	1.70129

Constants of Dispersion Formula	
A_0	2.63761377E+00
A_1	-1.05537193E-02
A_2	2.47752450E-02
A_3	1.17768936E-03
A_4	-5.76159895E-05
A_5	9.52773542E-06

Relative Partial Dispersions			
$P_{d,C}$	0.2921	$P'_{d,c'}$	0.2425
$P_{e,d}$	0.2367	$P'_{e,d}$	0.2333
$P_{g,F}$	0.5940	$P'_{g,F'}$	0.5257

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

Thermal Properties	
Tg(℃)	530
Ts(℃)	578
$T_{10}^{14.5}$(℃)	480
T_{10}^{13}(℃)	520
$\alpha_{-50/80℃}$(10^{-7}/K)	89
$\alpha_{100/300℃}$(10^{-7}/K)	117

Mechanical Properties	
HK(10^7Pa)	530
F_A	145
E(10^7Pa)	8050
G(10^7Pa)	3228
μ	0.247
B(nm/cm/10^5Pa)	2.820

Density	
ρ (g/cm^3)	2.72

Deviation of Relative Partial Dispersions	
$\triangle P_{F,e}$	-0.0003
$\triangle P_{g,F}$	0.0067
$\triangle P_{C,t}$	0.0080
$\triangle P_{C,s}$	0.0022

Internal Transmittance		
λ(nm)	τ5mm	τ10mm
2400	0.901	0.812
2200	0.929	0.863
2000	0.969	0.939
1800	0.982	0.964
1600	0.992	0.984
1400	0.999	0.998
1200	0.999	0.998
1060	0.999	0.998
1000	0.999	0.998
900	0.999	0.998
850	0.999	0.998
800	0.999	0.998
750	0.999	0.998
700	0.999	0.998
650	0.999	0.998
600	0.998	0.995
550	0.996	0.992
500	0.994	0.989
480	0.993	0.986
460	0.992	0.983
440	0.990	0.980
420	0.988	0.977
400	0.980	0.955
390	0.962	0.920
380	0.912	0.828
370	0.763	0.581
360	0.385	0.153
350		
340		
330		
320		
310		
300		
290		
280		

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative (10^{-6} / ℃)						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	-0.8	-0.2	-0.2	0.0	0.2	1.2	2.2
-20 ~ 0	-0.7	0.1	0.0	0.3	1.1	1.4	2.5
0 ~ 20	-0.6	0.5	0.2	0.4	1.0	1.6	2.8
20 ~ 40	-0.5	0.5	0.4	0.6	1.0	1.9	2.8
40 ~ 60	-0.4	0.5	0.6	0.8	1.0	2.2	3.2
60 ~ 80	-0.2	0.5	0.6	0.8	1.1	2.4	3.4

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	390/360

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