

H-ZF4GT	728283	$n_d = 1.72825$	$v_d = 28.32$	$n_F - n_C = 0.025716$
		$n_e = 1.73432$	$v_e = 28.10$	$n_{F'} - n_{C'} = 0.026133$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.67946
n_{1970}	1970.09	1.68559
n_{1530}	1529.58	1.69277
n_{1129}	1128.64	1.70031
n_{1064}	1064.00	1.70186
n_t	1013.98	1.70320
n_s	852.11	1.70875
$n_{A'}$	768.19	1.71285
n_r	706.52	1.71677
n_C	656.27	1.72082
$n_{C'}$	643.85	1.72198
n_{He-Ne}	632.80	1.72307
n_D	589.29	1.72803
n_d	587.56	1.72825
n_e	546.07	1.73432
n_F	486.13	1.74654
$n_{F'}$	479.99	1.74811
n_g	435.84	1.76215
n_h	404.66	1.77615
n_i	365.01	1.80264

Relative Partial Dispersion	
$P_{d,C}$	0.2889
$P_{e,d}$	0.2360
$P_{g,F}$	0.6070
$P'_{d,c'}$	0.2399
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5373

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.942	0.887
2200	0.963	0.927
2000	0.994	0.989
1800	0.998	0.996
1600	0.998	0.996
1400	0.998	0.996
1200	0.998	0.996

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0105
$\Delta P_{C,t}$	0.0078
$\Delta P_{C,s}$	0.0010

Expansion Coefficient α ($\times 10^{-7}/K$)	
$^{\circ}C$	α
-50/-40	80
-40/-30	82
-30/-20	84
-20/-10	86
-10/0	88
0/10	89
10/20	90
20/30	91
30/40	91
40/50	92
50/60	92
60/70	93
70/80	95
80/90	96
90/100	97
100/110	98
110/120	99
120/130	100
130/140	101
140/150	103
150/160	104

1060	0.998	0.996
1000	0.998	0.996
950	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	0.993
480	0.995	0.990
460	0.992	0.985
440	0.989	0.978
420	0.979	0.959
400	0.946	0.895
390	0.897	0.804
380	0.773	0.597
370	0.492	0.242
360	0.134	0.018

Constants of Dispersion Formula	
A_0	2.87833860E+00
A_1	-1.18585043E-02
A_2	3.41292688E-02
A_3	1.67815401E-03
A_4	-5.56455694E-05
A_5	1.43620134E-05

Thermal Properties	
T_g ($^{\circ}C$)	610
T_s ($^{\circ}C$)	641
$T_{10}^{14.5}$ ($^{\circ}C$)	546
T_{10}^{13} ($^{\circ}C$)	575
$\alpha_{50/80^{\circ}C}$ ($10^{-7}/K$)	87
$\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$)	107
λ (W/(m·K))	1.18

50/60	92
60/70	93
70/80	95
80/90	96
90/100	97
100/110	98
110/120	99
120/130	100
130/140	101
140/150	103
150/160	104

350		
340		
330		
320		
310		
300		
290		
280		

Density		Solarization	
ρ (g/cm ³)	3.05	$\Delta\lambda$ (%)	-0.4

Mechanical Properties	
HK (10^7 Pa)	548
F_A	158
E (GPa)	87.4
G (GPa)	34.8
μ	0.257
σ_b (MPa)	79
B (10^{-12} /Pa)	2.76

Range of Temperature ($^{\circ}C$)	Temperature Coefficients of Refractive Index									
	dn/dt relative ($\times 10^{-6} / ^{\circ}C$)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60~-40	0.4	0.7	1.1	1.2	1.3	1.6	2.0	3.1	3.2	3.9
-40~-20	0.4	0.7	1.2	1.2	1.3	1.5	2.0	3.2	3.3	4.2
-20~0	0.4	0.8	1.3	1.3	1.4	1.7	2.3	3.3	3.3	4.5
0~20	0.4	0.8	1.3	1.3	1.4	1.9	2.4	3.6	3.7	4.9
20~40	0.4	0.8	1.4	1.4	1.5	1.9	2.5	3.8	3.8	5.1
40~60	0.5	0.9	1.5	1.6	1.7	2.1	2.6	4.0	4.1	5.3
60~80	0.5	1.0	1.6	1.7	1.8	2.2	2.9	4.2	4.3	5.7
80~100	0.5	1.0	1.7	1.8	1.9	2.3	3.0	4.4	4.5	5.9
100~120	0.6	1.1	1.9	1.9	2.0	2.3	3.1	4.6	4.6	6.1
120~140	0.7	1.2	2.0	2.0	2.1	2.6	3.3	4.7	4.7	6.0
140~160	0.7	1.3	2.1	2.1	2.2	2.6	3.5	4.8	4.9	6.3

390	0.897	0.804
380	0.773	0.597
370	0.492	0.242
360	0.134	0.018
350		
340		
330		
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	410/365
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	390/364

Constants of dn/dt		
D_0	D_1	D_2
-3.28E-06	1.15E-08	-2.60E-11
E_0	E_1	λ_{TK}
1.09E-06	1.15E-09	2.56E-01