H-ZK9A	620603	n_d = 1.62041	υ_d = 60.34	$n_F - n_C$ = 0.010281
		n_e = 1.62286	υ_e = 60.10	$n_{F'} - n_{C'}$ = 0.010363

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.58878
n_{1970}	1970.09	1.59483
n_{1530}	1529.58	1.60134
n_{1129}	1128.64	1.60692
n_{1064}	1064.00	1.60789
n_t	1013.98	1.60868
n_s	852.11	1.61168
$n_{A'}$	768.19	1.61367
n_r	706.52	1.61548
n_C	656.27	1.61727
$n_{C'}$	643.85	1.61777
n_{He-Ne}	632.80	1.61824
n_D	589.29	1.62032
n_d	587.56	1.62041
n_e	546.07	1.62286
n_F	486.13	1.62755
$n_{F'}$	479.99	1.62813
n_g	435.84	1.63310
n_h	404.66	1.63768
n_i	365.01	1.64549

Relative Partial Dispersion	
$P_{d,C}$	0.3054
$P_{e,d}$	0.2383
$P_{g,F}$	0.5398
$P'_{d,c'}$	0.2548
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4796

Chemical Properties (grade)	
RC (S)	1
RA (S)	2
D_W	2
D_A	4
R_{OH} (S)	3
RP (S)	2

Internal Transmittance		
λ (nm)	τ5mm	τ10mm
2400	0.864	0.746
2200	0.944	0.891
2000	0.995	0.990
1800	0.999	0.998
1600	0.999	0.998
1400	0.999	0.998
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
750	0.999	0.998
700	0.999	0.998
650	0.999	0.998
600	0.999	0.998
550	0.999	0.998
500	0.999	0.998
480	0.999	0.998
460	0.999	0.998
440	0.999	0.998
420	0.998	0.996
400	0.997	0.994
390	0.996	0.992
380	0.993	0.987
370	0.988	0.977
360	0.978	0.957
350	0.959	0.919
340	0.925	0.855
330	0.866	0.750
320	0.771	0.594
310	0.620	0.385
300	0.411	0.169
290		
280		

Deviation of Relative Partial Dispersions	
$\triangle P_{F,e}$	-0.0007
$\triangle P_{g,F}$	-0.0035
$\triangle P_{C,t}$	0.0030
$\triangle P_{C,s}$	-0.0015

Expansion Coefficient α (×10^{-7}/K)	
℃	α
-50/-40	56
-40/-30	59
-30/-20	61
-20/-10	62
-10/0	63
0/10	64
10/20	64
20/30	65
30/40	65
40/50	66
50/60	66
60/70	67
70/80	67
80/90	68
90/100	68
100/110	69
110/120	70
120/130	71
130/140	72
140/150	73
150/160	74

Thermal Properties	
Tg (℃)	663
Ts (℃)	695
$T_{10}^{14.5}$ (℃)	600
T_{10}^{13} (℃)	640
$\alpha_{-50/80℃}$ (10^{-7}/K)	64
$\alpha_{100/300℃}$ (10^{-7}/K)	75
λ (W/(m·K))	1.02

Constants of Dispersion Formula	
A_0	2.58626893E+00
A_1	-1.19483745E-02
A_2	1.37737392E-02
A_3	5.49112685E-04
A_4	-4.52101305E-05
A_5	2.44542790E-06

Mechanical Properties	
HK (10^7Pa)	550
F_A	105
E (GPa)	89.5
G (GPa)	34.5
μ	0.297
σ_b (MPa)	87
B (10^{-12}/Pa)	1.82

Density	
ρ (g/cm^3)	3.55

Solarization	
△λ (%)	-2.0

Range of Temperature (℃)	Temperature Coefficients of Refractive Index dn/dt relative (×10^{-6} / ℃)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60～-40	1.8	2.1	2.2	2.2	2.2	2.4	2.5	2.6	2.6	2.7
-40～-20	1.9	2.2	2.2	2.2	2.3	2.4	2.6	2.6	2.7	2.7
-20～0	1.9	2.2	2.3	2.3	2.4	2.5	2.7	2.7	2.8	2.8
0～20	2.0	2.3	2.4	2.4	2.4	2.5	2.7	2.8	2.8	2.9
20～40	2.0	2.3	2.4	2.4	2.4	2.6	2.7	2.8	2.9	2.9
40～60	2.1	2.3	2.5	2.5	2.5	2.6	2.8	3.0	3.1	3.1
60～80	2.2	2.3	2.5	2.5	2.6	2.7	2.9	3.0	3.2	3.3
80～100	2.2	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.4	3.6
100～120	2.4	2.6	2.6	2.6	2.7	2.8	3.0	3.3	3.5	3.6
120～140	2.5	2.6	2.7	2.7	2.7	2.8	3.2	3.3	3.5	3.7
140～160	2.5	2.6	2.7	2.7	2.7	2.9	3.3	3.5	3.7	3.9

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	345/285
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	334/284

Constants of dn/dt		
D_0	D_1	D_2
7.48E-07	1.25E-08	-2.50E-11
E_0	E_1	λ_{TK}
4.11E-07	7.77E-10	7.84E-02