F4	**620364**	n_d = 1.62005	υ_d = 36.35	$n_F - n_C$ = 0.017060
		n_e = 1.62408	υ_e = 36.09	$n_{F'} - n_{C'}$ = 0.017291

Refractive Indices

	λ (nm)	n_λ
n_{2325}	2325.42	1.58511
n_{1970}	1970.09	1.58980
n_{1530}	1529.58	1.59522
n_{1129}	1128.64	1.60075
n_{1064}	1064.00	1.60186
n_t	1013.98	1.60282
n_s	852.11	1.60672
$n_{A'}$	768.19	1.60957
n_r	706.52	1.61228
n_C	656.27	1.61504
$n_{C'}$	643.85	1.61582
n_{He-Ne}	632.80	1.61656
n_D	589.29	1.61990
n_d	587.56	1.62005
n_e	546.07	1.62408
n_F	486.13	1.63210
$n_{F'}$	479.99	1.63312
n_g	435.84	1.64205
n_h	404.66	1.65066
n_i	365.01	1.66625

Relative Partial Dispersion

$P_{d,C}$	0.2937
$P_{e,d}$	0.2362
$P_{g,F}$	0.5832
$P'_{d,c'}$	0.2445
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5162

Deviation of Relative Partial Dispersions

$\triangle P_{F,e}$	0.0000
$\triangle P_{g,F}$	0.0000
$\triangle P_{C,t}$	0.0000
$\triangle P_{C,s}$	0.0001

Thermal Properties

Tg (℃)	414
Ts (℃)	471
$T_{10}^{14.5}$ (℃)	355
T_{10}^{13} (℃)	398
$\alpha_{-50/80℃}$ (10^{-7}/K)	88
$\alpha_{100/300℃}$ (10^{-7}/K)	110
λ (W/(m K))	0.73

Constants of Dispersion Formula

A_0	2.55510802E+00
A_1	-8.64431010E-03
A_2	2.26592448E-02
A_3	8.22256872E-04
A_4	-1.60646686E-05
A_5	4.04183096E-06

Mechanical Properties

HK (10^7Pa)	418
F_A	172
E (GPa)	58.4
G (GPa)	23.3
μ	0.251
σ_b (MPa)	60
B (10^{-12}/Pa)	2.48

Density

ρ (g/cm^3)	3.57

Solarization

$\triangle\lambda$ (%)	0.5

Chemical Properties (grade)

RC (S)	1
RA (S)	3
D_W	1
D_A	1
R_{OH} (S)	1
RP (S)	1
CR	

Expansion Coefficient α ($\times 10^{-7}$/K)

℃	α
-50/-40	78
-40/-30	81
-30/-20	83
-20/-10	85
-10/0	86
0/10	88
10/20	89
20/30	90
30/40	91
40/50	92
50/60	93
60/70	94
70/80	95
80/90	96
90/100	98
100/110	99
110/120	100
120/130	101
130/140	103
140/150	104
150/160	105

Internal Transmittance

λ (nm)	τ5mm	τ10mm
2400	0.889	0.790
2200	0.918	0.843
2000	0.964	0.930
1800	0.986	0.972
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	0.997	0.994
420	0.995	0.990
400	0.993	0.986
390	0.991	0.978
380	0.987	0.968
370	0.982	0.957
360	0.971	0.932
350	0.940	0.874
340	0.855	0.725
330	0.620	0.383
320	0.178	0.036
310		
300		
290		
280		

Temperature Coefficients of Refractive Index
dn/dt relative ($\times 10^{-6}$ / ℃)

Range of Temperature (℃)	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	1.2	1.7	2.1	2.1	2.1	2.3	2.5	3.2	3.3	4.3
-40 ~ -20	1.2	1.7	2.1	2.1	2.1	2.3	2.6	3.3	3.4	4.5
-20 ~ 0	1.3	1.7	2.1	2.1	2.1	2.4	2.7	3.5	3.6	4.5
0 ~ 20	1.3	1.8	2.1	2.1	2.2	2.5	2.8	3.6	3.7	4.6
20 ~ 40	1.4	1.9	2.2	2.2	2.2	2.5	3.0	3.7	3.8	4.9
40 ~ 60	1.4	1.9	2.3	2.4	2.4	2.7	3.0	3.9	4.0	5.0
60 ~ 80	1.5	2.0	2.5	2.6	2.6	2.9	3.4	4.1	4.2	5.2
80 ~ 100	1.7	2.1	2.6	2.6	2.7	2.9	3.5	4.2	4.3	5.3
100 ~ 120	1.8	2.2	2.7	2.7	2.8	3.2	3.7	4.3	4.4	5.5
120 ~ 140	2.0	2.3	2.8	2.9	3.0	3.4	3.8	4.5	4.6	5.7
140 ~ 160	2.1	2.4	3.0	3.1	3.2	3.5	4.1	4.7	4.8	5.9

Coloration Code

$\lambda_{80}(\lambda_{70})/\lambda_5$	350/320

Coloration of Internal Transmittance

$\lambda\tau_{80}/\lambda\tau_5$	342/320

Constants of dn/dt

D_0	D_1	D_2
-1.07E-06	1.43E-08	-1.76E-11
E_0	E_1	λ_{TK}
8.75E-07	5.84E-10	2.59E-01

NHG