

D-ZK3L	589613	$n_d = 1.58913$	$v_d = 61.25$	$n_F - n_C = 0.009619$
		$n_e = 1.59142$	$v_e = 61.03$	$n_{F'} - n_{C'} = 0.009690$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.55682
n_{1970}	1970.09	1.56338
n_{1530}	1529.58	1.57035
n_{1129}	1128.64	1.57613
n_{1064}	1064.00	1.57711
n_t	1013.98	1.57790
n_s	852.11	1.58083
$n_{A'}$	768.19	1.58275
n_r	706.52	1.58448
n_C	656.27	1.58618
$n_{C'}$	643.85	1.58665
n_{He-Ne}	632.80	1.58709
n_D	589.29	1.58904
n_d	587.56	1.58913
n_e	546.07	1.59142
n_F	486.13	1.59580
$n_{F'}$	479.99	1.59634
n_g	435.84	1.60095
n_h	404.66	1.60520
n_i	365.01	1.61247

Constants of Dispersion Formula	
A_0	2.49074484E+00
A_1	-1.28107504E-02
A_2	1.19021712E-02
A_3	7.38866979E-04
A_4	-8.24332058E-05
A_5	4.70546661E-06

Density	Solarization
ρ (g/cm ³)	$\Delta\lambda$ (%)
2.79	-2.5

Relative Partial Dispersion	
$P_{d,C}$	0.3067
$P_{e,d}$	0.2381
$P_{g,F}$	0.5354
$P'_{d,c'}$	0.2559
$P'_{e,d}$	0.2363
$P'_{g,F'}$	0.4757

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0010
$\Delta P_{g,F}$	-0.0065
$\Delta P_{C,t}$	0.0239
$\Delta P_{C,s}$	0.0088

Thermal Properties	
T _g (°C)	508
T _s (°C)	530
T ₁₀ ^{14.5} (°C)	444
T ₁₀ ¹³ (°C)	465
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	75
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	89
λ (W/(m·K))	1.31
β_d	100

Mechanical Properties	
HK (10 ⁷ Pa)	628
F _A	85
E (GPa)	98.3
G (GPa)	39.3
μ	0.250
σ_b (MPa)	69.8
B (10 ⁻¹² /Pa)	2.12

Chemical Properties (grade)	
RC (S)	1
RA (S)	3
D _W	2
D _A	3
R _{OH} (S)	2
RP (S)	2

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	58
-40/-30	61
-30/-20	63
-20/-10	64
-10/0	65
0/10	66
10/20	67
20/30	68
30/40	69
40/50	70
50/60	71
60/70	72
70/80	73
80/90	74
90/100	75
100/110	76
110/120	78
120/130	79
130/140	81
140/150	82
150/160	83

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.805	0.648
2200	0.913	0.834
2000	0.988	0.976
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	0.999	0.998
400	0.999	0.998
390	0.995	0.989
380	0.993	0.984
370	0.989	0.977
360	0.980	0.962
350	0.965	0.933
340	0.937	0.880
330	0.892	0.794
320	0.815	0.664
310	0.705	0.498
300	0.566	0.322
290	0.417	0.176
280	0.281	0.082

Range of Temperature (°C)	Temperature Coefficients of Refractive Index									
	dn/dt relative (×10 ⁻⁶ / °C)									
	t	s	C	C'	He-Ne	d	e	F	F'	g
-60 ~ -40	3.7	3.8	4.0	4.0	4.1	4.1	4.3	4.8	4.8	5.0
-40 ~ -20	3.7	3.8	4.0	4.0	4.1	4.2	4.4	4.8	4.8	5.0
-20 ~ 0	3.7	3.8	4.0	4.1	4.1	4.2	4.4	4.8	4.8	5.0
0 ~ 20	3.7	3.8	4.0	4.1	4.2	4.2	4.4	4.8	4.8	5.0
20 ~ 40	3.7	3.8	4.1	4.1	4.2	4.2	4.4	4.8	4.9	5.0
40 ~ 60	3.7	3.8	4.2	4.2	4.3	4.3	4.4	4.8	4.9	5.0
60 ~ 80	3.7	3.8	4.2	4.3	4.3	4.3	4.4	4.8	5.0	5.0
80 ~ 100	3.8	3.8	4.2	4.3	4.3	4.3	4.4	4.8	5.0	5.1
100 ~ 120	3.8	3.8	4.2	4.3	4.3	4.4	4.5	4.8	5.0	5.1
120 ~ 140	3.8	3.9	4.3	4.3	4.3	4.4	4.5	4.8	5.0	5.1
140 ~ 160	3.8	3.9	4.3	4.3	4.4	4.4	4.5	4.8	5.0	5.1

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	340/275
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	331/275

Constants of dn/dt		
D ₀	D ₁	D ₂
4.03E-06	1.27E-08	-2.83E-11
E ₀	E ₁	λ_{TK}
6.09E-07	-8.90E-12	3.02E-08