

H-ZK3A	589613	$n_d = 1.58913$	$v_d = 61.25$	$n_F - n_C = 0.009618$
		$n_e = 1.59142$	$v_e = 61.01$	$n_{F'} - n_{C'} = 0.009694$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.55975
n_{1970}	1970.09	1.56532
n_{1530}	1529.58	1.57133
n_{1129}	1128.64	1.57650
n_{1064}	1064.00	1.57741
n_t	1013.98	1.57815
n_s	852.11	1.58095
$n_{A'}$	768.19	1.58282
n_r	706.52	1.58451
n_C	656.27	1.58619
$n_{C'}$	643.85	1.58666
n_{He-Ne}	632.80	1.58709
n_D	589.29	1.58903
n_d	587.56	1.58913
n_e	546.07	1.59142
n_F	486.13	1.59581
$n_{F'}$	479.99	1.59635
n_g	435.84	1.60102
n_h	404.66	1.60533
n_i	365.01	1.61266

Constants of Dispersion Formula	
A_0	2.48859886E+00
A_1	-1.07631038E-02
A_2	1.30844889E-02
A_3	3.33048453E-04
A_4	-1.29820178E-05
A_5	6.37252025E-07

Density		Solarization	
ρ (g/cm ³)	3.31	$\Delta\lambda$ (%)	-5.9

Relative Partial Dispersion	
$P_{d,C}$	0.3057
$P_{e,d}$	0.2381
$P_{g,F}$	0.5417
$P'_{d,c'}$	0.2548
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4817

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0002
$\Delta P_{C,t}$	-0.0010
$\Delta P_{C,s}$	-0.0026

Thermal Properties	
T _g (°C)	681
T _s (°C)	722
T ₁₀ ^{14.5} (°C)	609
T ₁₀ ¹³ (°C)	650
$\alpha_{50/80^\circ C}$ (10 ⁻⁷ /K)	55
$\alpha_{100/300^\circ C}$ (10 ⁻⁷ /K)	67
λ (W/(m·K))	1.05

Mechanical Properties	
HK (10 ⁷ Pa)	550
F _A	119
E (GPa)	81.3
G (GPa)	32.7
μ	0.244
σ_b (MPa)	72.4
B (10 ⁻¹² /Pa)	2.06

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

Expansion Coefficient α (×10 ⁻⁷ /K)	
°C	α
-50/-40	48
-40/-30	50
-30/-20	53
-20/-10	54
-10/0	56
0/10	56
10/20	56
20/30	57
30/40	57
40/50	58
50/60	58
60/70	59
70/80	59
80/90	60
90/100	61
100/110	62
110/120	62
120/130	63
130/140	63
140/150	65
150/160	66

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.917	0.842
2200	0.973	0.947
2000	0.991	0.982
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	0.998	0.996
390	0.997	0.994
380	0.995	0.990
370	0.989	0.978
360	0.977	0.954
350	0.957	0.915
340	0.924	0.853
330	0.866	0.749
320	0.773	0.598
310	0.637	0.406
300	0.463	0.214
290	0.290	0.084
280	0.168	0.028

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	345/295
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	336/285

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	3.0	3.1	3.3	3.3	3.4	3.5	3.5	3.8	3.9	4.2
-40 ~ -20	3.0	3.2	3.3	3.3	3.3	3.5	3.7	3.8	3.9	4.2
-20 ~ 0	3.1	3.3	3.4	3.4	3.4	3.5	3.7	3.9	3.9	4.2
0 ~ 20	3.1	3.3	3.4	3.4	3.5	3.5	3.6	3.9	3.9	4.3
20 ~ 40	3.1	3.3	3.4	3.4	3.5	3.6	3.7	4.0	4.0	4.4
40 ~ 60	3.2	3.3	3.5	3.5	3.6	3.7	3.8	4.1	4.2	4.5
60 ~ 80	3.3	3.5	3.6	3.7	3.8	3.9	4.0	4.3	4.4	4.7
80 ~ 100	3.4	3.6	3.7	3.8	3.9	4.1	4.2	4.4	4.5	4.9
100 ~ 120	3.5	3.6	3.8	3.9	4.0	4.3	4.5	4.6	4.7	5.2
120 ~ 140	3.6	3.8	4.0	4.1	4.2	4.4	4.6	4.8	4.9	5.4
140 ~ 160	3.7	3.9	4.1	4.2	4.3	4.6	4.9	5.1	5.2	5.7

Constants of dn/dt		
D ₀	D ₁	D ₂
3.00E-06	1.29E-08	-9.66E-12
E ₀	E ₁	λ_{TK}
3.80E-07	7.20E-10	2.31E-01