

H-LaK53A	755523	$n_d = 1.75500$	$v_d = 52.32$	$n_F - n_C = 0.014430$
		$n_e = 1.75844$	$v_e = 52.09$	$n_F - n_C = 0.014561$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.71389
n_{1970}	1970.09	1.72137
n_{1530}	1529.58	1.72950
n_{1129}	1128.64	1.73661
n_{1064}	1064.00	1.73789
n_t	1013.98	1.73893
n_s	852.11	1.74293
$n_{A'}$	768.19	1.74566
n_f	706.52	1.74815
n_C	656.27	1.75063
$n_{C'}$	643.85	1.75132
n_{He-Ne}	632.80	1.75197
n_D	589.29	1.75487
n_d	587.56	1.75500
n_e	546.07	1.75844
n_F	486.13	1.76506
$n_{F'}$	479.99	1.76588
n_g	435.84	1.77295
n_h	404.66	1.77953
n_i	365.01	1.79081

Relative Partial Dispersion	
$P_{d,C}$	0.3028
$P_{e,d}$	0.2384
$P_{g,F}$	0.5468
$P'_{d,c'}$	0.2527
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4855

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.778	0.605
2200	0.934	0.872
2000	0.990	0.980
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	0.997	0.994
420	0.995	0.989
400	0.992	0.984
390	0.989	0.978
380	0.984	0.968
370	0.975	0.950
360	0.957	0.918
350	0.934	0.873
340	0.897	0.805
330	0.846	0.715
320	0.779	0.607
310	0.672	0.450
300	0.606	0.367
290	0.515	0.266
280	0.354	0.129

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0026
$\Delta P_{g,F}$	-0.0099
$\Delta P_{C,t}$	0.0172
$\Delta P_{C,s}$	0.0076

Expansion Coefficient α ($\times 10^{-7}/K$)	
$^{\circ}C$	α
-50/-40	53
-40/-30	54
-30/-20	55
-20/-10	56
-10/0	57
0/10	58
10/20	59
20/30	59
30/40	59
40/50	60
50/60	60
60/70	60
70/80	61
80/90	61
90/100	62
100/110	63
110/120	63
120/130	64
130/140	65
140/150	66
150/160	67

Thermal Properties	
T _g ($^{\circ}C$)	695
T _s ($^{\circ}C$)	712
T ₁₀ ^{14.5} ($^{\circ}C$)	631
T ₁₀ ¹³ ($^{\circ}C$)	652
$\alpha_{-50/80^{\circ}C}$ ($10^{-7}/K$)	57
$\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$)	72
λ (W/(m K))	1.06

Constants of Dispersion Formula	
A ₀	3.01906956E+00
A ₁	-1.58184620E-02
A ₂	2.09047144E-02
A ₃	8.46561491E-04
A ₄	-6.18209745E-05
A ₅	3.65072914E-06

Mechanical Properties	
HK (10^7 Pa)	718
F _A	58
E (GPa)	121.8
G (GPa)	46.4
μ	0.313
σ_b (MPa)	102
B (10^{-12} /Pa)	1.36

Density		Solarization	
ρ (g/cm ³)	4.24	$\Delta\lambda$ (%)	-3.2

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	3.3	3.5	3.7	3.7	3.7	4.0	4.2	4.6	4.7	4.9
-40 ~ -20	3.4	3.5	3.7	3.7	3.8	4.0	4.2	4.6	4.7	5.0
-20 ~ 0	3.4	3.6	3.8	3.8	3.8	4.1	4.3	4.7	4.8	5.0
0 ~ 20	3.4	3.6	3.9	3.9	3.9	4.2	4.3	4.7	4.8	5.1
20 ~ 40	3.5	3.7	3.9	3.9	3.9	4.2	4.4	4.8	4.9	5.1
40 ~ 60	3.5	3.8	4.0	4.0	4.0	4.2	4.5	5.0	5.0	5.3
60 ~ 80	3.5	3.9	4.1	4.1	4.1	4.3	4.5	5.0	5.0	5.5
80 ~ 100	3.6	3.9	4.2	4.2	4.2	4.4	4.5	5.1	5.1	5.6
100 ~ 120	3.7	4.1	4.3	4.3	4.3	4.5	4.6	5.2	5.2	5.7
120 ~ 140	3.7	4.2	4.3	4.3	4.4	4.6	4.7	5.4	5.4	5.8
140 ~ 160	3.9	4.3	4.3	4.4	4.6	4.6	4.9	5.5	5.5	5.9

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	370/280
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	340/276

Constants of dn/dt		
D ₀	D ₁	D ₂
2.70E-06	1.23E-08	-2.14E-11
E ₀	E ₁	λ_{TK}
4.31E-07	2.47E-10	2.29E-01