

H-QF50	581409	$n_d = 1.58144$	$v_d = 40.89$	$n_F - n_C = 0.014220$
		$n_e = 1.58481$	$v_e = 40.61$	$n_F - n_C = 0.014400$

Refractive Indices		
	λ (nm)	n_λ
n_{2325}	2325.42	1.54848
n_{1970}	1970.09	1.55364
n_{1530}	1529.58	1.55940
n_{1129}	1128.64	1.56481
n_{1064}	1064.00	1.56584
n_t	1013.98	1.56671
n_s	852.11	1.57015
$n_{A'}$	768.19	1.57260
n_f	706.52	1.57490
n_C	656.27	1.57723
$n_{C'}$	643.85	1.57789
n_{He-Ne}	632.80	1.57852
n_D	589.29	1.58131
n_d	587.56	1.58144
n_e	546.07	1.58481
n_F	486.13	1.59145
$n_{F'}$	479.99	1.59229
n_g	435.84	1.59961
n_h	404.66	1.60669
n_i	365.01	1.61951

Relative Partial Dispersion	
$P_{d,C}$	0.2961
$P_{e,d}$	0.2370
$P_{g,F}$	0.5738
$P'_{d,c'}$	0.2465
$P'_{e,d}$	0.2340
$P'_{g,F'}$	0.5083

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

Internal Transmittance		
λ (nm)	τ_{5mm}	τ_{10mm}
2400	0.933	0.810
2200	0.946	0.859
2000	0.980	0.960
1800	0.990	0.980
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	0.998	0.996
460	0.997	0.994
440	0.996	0.992
420	0.994	0.989
400	0.992	0.981
390	0.986	0.966
380	0.966	0.926
370	0.903	0.808
360	0.701	0.488
350	0.268	0.075
340		
330		
320		
310		
300		
290		
280		

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0018
$\Delta P_{C,t}$	0.0016
$\Delta P_{C,s}$	-0.0006

Expansion Coefficient α ($\times 10^{-7}/K$)	
$^{\circ}C$	α
-50/-40	73
-40/-30	76
-30/-20	78
-20/-10	79
-10/0	80
0/10	80
10/20	81
20/30	82
30/40	82
40/50	83
50/60	84
60/70	84
70/80	85
80/90	85
90/100	86
100/110	87
110/120	88
120/130	90
130/140	91
140/150	92
150/160	93

Thermal Properties	
T _g ($^{\circ}C$)	590
T _s ($^{\circ}C$)	649
T ₁₀ ^{14.5} ($^{\circ}C$)	515
T ₁₀ ¹³ ($^{\circ}C$)	559
$\alpha_{-50/80^{\circ}C}$ ($10^{-7}/K$)	82
$\alpha_{100/300^{\circ}C}$ ($10^{-7}/K$)	98
λ (W/(m K))	0.98

Constants of Dispersion Formula	
A ₀	2.44672171E+00
A ₁	-9.64692814E-03
A ₂	1.72763622E-02
A ₃	1.09967502E-03
A ₄	-9.37435013E-05
A ₅	8.00160916E-06

Mechanical Properties	
HK (10^7 Pa)	499
F _A	128
E (GPa)	70.3
G (GPa)	27.7
μ	0.269
σ_b (MPa)	62
B (10^{-12} /Pa)	3.07

Density	Solarization
ρ (g/cm ³)	$\Delta\lambda$ (%)
2.64	-0.6

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	1.4	1.8	2.0	2.1	2.1	2.5	2.6	2.9	3.0	3.6
-40 ~ -20	1.6	1.9	2.2	2.3	2.3	2.5	2.7	3.1	3.1	3.8
-20 ~ 0	1.5	2.0	2.3	2.4	2.5	2.6	2.8	3.4	3.5	4.2
0 ~ 20	1.6	2.3	2.5	2.6	2.6	2.8	3.1	3.5	3.6	4.4
20 ~ 40	1.9	2.6	2.7	2.7	2.7	3.0	3.3	3.7	3.7	4.6
40 ~ 60	2.0	2.6	2.8	2.8	2.8	3.2	3.5	3.9	3.9	4.8
60 ~ 80	2.3	2.7	3.0	3.0	3.0	3.3	3.8	4.2	4.2	5.0
80 ~ 100	2.3	2.8	3.1	3.1	3.2	3.5	3.9	4.3	4.4	5.3
100 ~ 120	2.3	2.9	3.1	3.2	3.3	3.6	4.1	4.4	4.5	5.4
120 ~ 140	2.5	3.1	3.3	3.3	3.4	3.7	4.2	4.5	4.6	5.6
140 ~ 160	2.7	3.2	3.5	3.5	3.6	3.9	4.3	4.7	4.8	5.8

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	380/350
Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	370/350

Constants of dn/dt		
D ₀	D ₁	D ₂
3.81E-07	1.80E-08	-3.28E-11
E ₀	E ₁	λ_{TK}
7.19E-07	6.44E-10	2.45E-01