

<b>H-ZLaF1</b> <b>802443</b>	$n_d = 1.80166$	$v_d = 44.27$	$n_F - n_C = 0.018110$
	$n_e = 1.80596$	$v_e = 44.05$	$n_{F'} - n_{C'} = 0.018298$

Refractive Indices		
	$\lambda(\text{nm})$	$n_\lambda$
$n_{2325}$	2325.42	1.75717
$n_{1970}$	1970.09	1.76442
$n_{1530}$	1529.58	1.77245
$n_{1129}$	1128.64	1.77986
$n_t$	1013.98	1.78241
$n_s$	852.11	1.78699
$n_{A'}$	768.19	1.79021
$n_r$	706.52	1.79320
$n_C$	656.27	1.79624
$n_{C'}$	643.85	1.79710
$n_{\text{He-Ne}}$	632.80	1.79790
$n_D$	589.29	1.80150
$n_d$	587.56	1.80166
$n_e$	546.07	1.80596
$n_F$	486.13	1.81435
$n_{F'}$	479.99	1.81540
$n_g$	435.84	1.82453
$n_h$	404.66	1.83313
$n_i$	365.01	1.84826

Constants of Dispersion Formula	
$A_0$	3.16631969E+00
$A_1$	-1.54466845E-02
$A_2$	2.60570901E-02
$A_3$	1.38032646E-03
$A_4$	-1.08373262E-04
$A_5$	7.65458938E-06

Relative Partial Dispersions			
$P_{d,C}$	0.2993	$P'_{d,C'}$	0.2492
$P_{e,d}$	0.2374	$P'_{e,d}$	0.2350
$P_{g,F}$	0.5621	$P'_{g,F'}$	0.4989

Range of Temperature (°C)	Temperature Coefficients of Refractive Index						
	dn/dt relative ( $10^{-6} / ^\circ\text{C}$ )						
	t	C'	He-Ne	D	e	F'	g
-40 ~ -20	4.6	5.3	5.4	5.6	5.8	6.5	7.1
-20 ~ 0	4.6	5.3	5.4	5.6	5.9	6.5	7.2
0 ~ 20	4.6	5.4	5.4	5.7	6.0	6.6	7.4
20 ~ 40	4.6	5.4	5.5	5.7	6.0	6.7	7.4
40 ~ 60	4.8	5.6	5.6	5.9	6.2	6.9	7.7
60 ~ 80	4.9	5.8	5.8	6.1	6.4	7.2	8.0

Chemical Properties (grade)	
RC(S)	1
RA(S)	1
$D_w$	1
$D_A$	3
$R_{OH}(S)$	1
RP(S)	1

Thermal Properties	
$T_g(^\circ\text{C})$	639
$T_s(^\circ\text{C})$	672
$T_{10}^{14.5}(^\circ\text{C})$	596
$T_{10}^{13}(^\circ\text{C})$	627
$\alpha_{-50/80^\circ\text{C}}(10^{-7}/\text{K})$	56
$\alpha_{100/300^\circ\text{C}}(10^{-7}/\text{K})$	74

Mechanical Properties	
HK( $10^7\text{Pa}$ )	681
$F_A$	75
$E(10^7\text{Pa})$	12586
$G(10^7\text{Pa})$	4852
$\mu$	0.297
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	1.540

Density	
$\rho(\text{g}/\text{cm}^3)$	4.41

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0025
$\Delta P_{g,F}$	-0.0079
$\Delta P_{C,t}$	0.0090
$\Delta P_{C,s}$	0.0041

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_5\text{mm}$	$\tau_{10}\text{mm}$
2400	0.803	0.645
2200	0.935	0.874
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
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	0.997	0.994
460	0.995	0.989
440	0.993	0.984
420	0.990	0.979
400	0.985	0.967
390	0.978	0.953
380	0.964	0.927
370	0.936	0.875
360	0.875	0.766
350	0.735	0.547
340	0.447	0.210
330	0.104	0.016
320		
310		
300		
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	390/340

Coloration of Internal Transmittance	
$\lambda\tau_{80}/\lambda\tau_5$	363/334