

<b>H-ZK21</b> <b>623581</b>	$n_d = 1.62299$	$v_d = 58.12$	$n_F - n_C = 0.010719$
	$n_e = 1.62555$	$v_e = 57.87$	$n_{F'} - n_{C'} = 0.010809$

Refractive Indices		
	$\lambda(\text{nm})$	$n_\lambda$
$n_{2325}$	2325.42	1.59235
$n_{1970}$	1970.09	1.59795
$n_{1530}$	1529.58	1.60402
$n_{1129}$	1128.64	1.60931
$n_t$	1013.98	1.61103
$n_s$	852.11	1.61401
$n_{A'}$	768.19	1.61603
$n_r$	706.52	1.61787
$n_C$	656.27	1.61973
$n_{C'}$	643.85	1.62025
$n_{\text{He-Ne}}$	632.80	1.62074
$n_D$	589.29	1.62290
$n_d$	587.56	1.62299
$n_e$	546.07	1.62555
$n_F$	486.13	1.63045
$n_{F'}$	479.99	1.63106
$n_g$	435.84	1.63629
$n_h$	404.66	1.64113
$n_i$	365.01	1.64946

Constants of Dispersion Formula	
$A_0$	2.59254654E+00
$A_1$	-1.10129354E-02
$A_2$	1.38896553E-02
$A_3$	8.21371542E-04
$A_4$	-8.84083953E-05
$A_5$	5.19951049E-06

Relative Partial Dispersions			
$P_{d,C}$	0.3041	$P'_{d,C'}$	0.2535
$P_{e,d}$	0.2388	$P'_{e,d}$	0.2368
$P_{g,F}$	0.5448	$P'_{g,F'}$	0.4838

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	1.9	2.3	2.3	2.4	2.5	2.8	3.1
-20 ~ 0	1.9	2.2	2.3	2.4	2.5	2.8	3.1
0 ~ 20	1.9	2.3	2.3	2.4	2.6	2.9	3.2
20 ~ 40	2.0	2.3	2.4	2.5	2.6	3.0	3.3
40 ~ 60	2.1	2.4	2.5	2.6	2.7	3.1	3.4
60 ~ 80	2.2	2.6	2.6	2.7	2.9	3.2	3.6

Chemical Properties (grade)	
RC(S)	3
RA(S)	3
$D_W$	2
$D_A$	4
$R_{OH}(S)$	2
RP(S)	2

Thermal Properties	
$T_g(^{\circ}\text{C})$	658
$T_s(^{\circ}\text{C})$	704
$T_{10}^{14.5}(^{\circ}\text{C})$	605
$T_{10}^{13}(^{\circ}\text{C})$	651
$\alpha_{-50/80^{\circ}\text{C}}(10^{-7}/\text{K})$	64
$\alpha_{100/300^{\circ}\text{C}}(10^{-7}/\text{K})$	79

Mechanical Properties	
HK( $10^7\text{Pa}$ )	558
$F_A$	138
$E(10^7\text{Pa})$	9979
$G(10^7\text{Pa})$	4021
$\mu$	0.241
$B(\text{nm}/\text{cm}/10^5\text{Pa})$	1.970

Density	
$\rho(\text{g}/\text{cm}^3)$	3.57

Deviation of Relative Partial Dispersions	
$\Delta P_{F,e}$	-0.0010
$\Delta P_{g,F}$	-0.0023
$\Delta P_{C,t}$	-0.0102
$\Delta P_{C,s}$	-0.0063

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_5\text{mm}$	$\tau_{10}\text{mm}$
2400	0.882	0.778
2200	0.948	0.899
2000	0.980	0.960
1800	0.988	0.976
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	0.999	0.998
460	0.999	0.998
440	0.999	0.998
420	0.996	0.992
400	0.993	0.986
390	0.990	0.980
380	0.986	0.972
370	0.975	0.951
360	0.956	0.914
350	0.938	0.880
340	0.881	0.776
330	0.788	0.621
320	0.656	0.430
310	0.488	0.238
300	0.314	0.099
290		
280		

Coloration Code	
$\lambda_{80}(\lambda_{70})/\lambda_5$	355/295

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