

H-ZF72A 923189	$n_d = 1.92286$	$\nu_d = 18.90$	$n_F - n_c = 0.048838$
	$n_e = 1.93429$	$\nu_e = 18.74$	$n_{F'} - n_{c'} = 0.049853$

Refractive Indices		
	$\lambda(\text{nm})$	
n_r	706.5	1.90181
n_c	656.3	1.90916
$n_{c'}$	643.8	1.91127
$n_{\text{He-Ne}}$	632.8	1.91327
n_D	589.3	1.92245
n_d	587.6	1.92286
n_e	546.1	1.93429
n_F	486.1	1.95800
$n_{F'}$	480.0	1.96112
n_g	435.8	1.98972
n_h	404.7	2.01976
n_i	365.0	

Chemical Properties (grade)	
RC(S)	1
RA(S)	1
D_W	1
D_A	1

Internal Transmittance		
$\lambda(\text{nm})$	$\tau_{5\text{mm}}$	$\tau_{10\text{mm}}$
2400	0.966	0.923
2200	0.988	0.960
2000	0.997	0.990
1800	0.997	0.994
1600	0.997	0.994
1400	0.997	0.994
1200	0.997	0.994
1060	0.997	0.994
1000	0.997	0.994
950	0.997	0.994
900	0.997	0.994
850	0.997	0.994
800	0.997	0.994

Thermal Properties	
$T_g(^{\circ}\text{C})$	689
$T_s(^{\circ}\text{C})$	719
$T_{10}^{14.5}(^{\circ}\text{C})$	650
$T_{10}^{13}(^{\circ}\text{C})$	682
$\alpha_{20/120^{\circ}\text{C}} (10^{-7}/\text{K})$	65
$\alpha_{100/300^{\circ}\text{C}} (10^{-7}/\text{K})$	75
$\lambda(\text{W}/\text{m}\cdot\text{K})$	

Constants of Dispersion Formula	
A_0	3.51243790E+00
A_1	-3.87403960E-02
A_2	4.30255460E-02
A_3	1.13832750E-02
A_4	-1.25677650E-03
A_5	1.24007680E-04

Mechanical Properties	
$H_K(10^7\text{Pa})$	448
F_A	238
$E(10^7\text{Pa})$	9761
$G(10^7\text{Pa})$	3901
μ	0.251
$B(10^{-12}/\text{Pa})$	

Relative Partial Dispersion			
$P_{d,c}$	0.2805	$P'_{d,c'}$	0.2325
$P_{e,d}$	0.2340	$P'_{e,d'}$	0.2293
$P_{g,F}$	0.6495	$P'_{g,F'}$	0.5737

Anomalous dispersions	
$\Delta P_{F,e}$	0.0057
$\Delta P_{g,F}$	0.0373

Range of Temperature ($^{\circ}\text{C}$)	Temperature Coefficients of Refractive Index						
	dn/dt relative ($10^{-6} / ^{\circ}\text{C}$)						
	t	C'	He-Ne	D	e	F'	g
-40~-20	-1.5	-0.3	-0.2	0.2	0.9	2.9	5.5
-20~0	-1.5	-0.2	-0.1	0.4	1.2	3.3	6.2
0~20	-1.5	0.0	0.1	0.7	1.5	3.8	6.8
20~40	-1.3	0.2	0.4	0.9	1.8	4.2	7.5
40~60	-1.1	0.5	0.7	1.3	2.2	4.7	8.2
60~80	-0.9	0.8	1.0	1.6	2.6	5.3	8.9

700	0.997	0.994
650	0.997	0.994
600	0.997	0.994
550	0.989	0.986
500	0.977	0.968
480	0.973	0.956
460	0.969	0.938
440	0.967	0.906
420	0.948	0.824
400	0.735	0.471
390	0.344	0.110
380		
370		
360		
350		
340		
330		
320		
310		
300		
290		
280		

Density	
$\rho(\text{g}/\text{cm}^3)$	3.58

Coloration Code			
λ_{80}/λ_5		λ_{70}/λ_5	45/39

Remarks