ZF4	728283	n_d = 1.72825	υ_d = 28.32	$n_F - n_C$ = 0.025716
		n_e = 1.73432	υ_e = 28.10	$n_{F'} - n_{C'}$ = 0.026133

折射率 Refractive Index

	λ（nm）	
$n_{2325.42}$	2325.42	
$n_{1970.09}$	1970.09	
$n_{1529.58}$	1529.58	
$n_{1060.0}$	1060.0	
n_t	1013.98	1.70324
n_s	852.11	1.70882
n_r	706.52	1.71679
n_C	656.27	1.72082
$n_{C'}$	643.85	1.72198
n_{He-Ne}	632.8	1.72307
n_D	589.29	1.72803
n_d	587.56	1.72825
n_e	546.07	1.73432
n_F	486.13	1.74654
$n_{F'}$	479.99	1.74811
n_g	435.83	1.76207
n_h	404.66	1.77601
n_i	365.01	
$n_{313.18}$	313.18	
$n_{302.15}$	302.15	

色散公式常数 Constants of Dispersion Formula

A_0	2.8923490E+00
A_1	-1.7933942E-02
A_2	2.3009472E-02
A_3	5.6390617E-03
A_4	-6.9815495E-04
A_5	5.2528998E-05

折射率温度系数常数 Constants of dn/dt

D_0	-3.94E-06
D_1	1.20E-08
D_2	-6.11E-11
E_0	8.57E-07
E_1	1.51E-09
λ_{TK}(μm)	0.293

相对部分色散 Relative Partial Dispersions

$P_{s,t}$	0.2170	$P'_{s,t}$	0.2135
$P_{C,s}$	0.4666	$P'_{C',s}$	0.5036
$P_{d,C}$	0.2890	$P'_{d,C'}$	0.2401
$P_{e,d}$	0.2361	$P'_{e,d}$	0.2323
$P_{g,F}$	0.6038	$P'_{g,F'}$	0.5341
$P_{i,h}$		$P'_{i,h}$	

异常色散 Abnormal Dispersions

$\Delta P_{C,t}$	0.0040	$\Delta P_{C,s}$	-0.0020
$\Delta P_{F,e}$	0.0008	$\Delta P_{g,F}$	0.0064

着色度 Color Code

λ_{80}/λ_5	405/345
λ_{70}/λ_5	

热性质 Thermal Properties

T_g (℃)	407
T_s (℃)	454
$T_{10}^{14.5}$ (℃)	364
T_{10}^{13} (℃)	398
$T_{10}^{7.6}$(℃)	
$\alpha_{-30/70℃}$(10^{-7}/K)	96
$\alpha_{100/300℃}$(10^{-7}/K)	111
λ[W/(m·K)]	

化学性质 Chemical Properties

	Grade
D_W	1
D_A	6
CR	1
RC(S)	3
RA(S)	3

内部透过率 Internal Transmittance τ

λ（nm）	τ (5mm)	τ (10mm)
2400	0.939	0.881
2200	0.958	0.918
2000	0.979	0.958
1800	0.989	0.978
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
700	0.998	0.997
650	0.998	0.997
600	0.998	0.996
550	0.997	0.995
500	0.995	0.991
480	0.993	0.986
460	0.989	0.979
440	0.984	0.968
420	0.974	0.949
400	0.951	0.904
390	0.930	0.864
380	0.890	0.800
370	0.840	0.700
360	0.690	0.480
350	0.400	0.160
340		
330		
320		
310		
300		
290		
280		

折射率温度系数 Temperature Coefficients of Refractive Index

温度范围（℃） Range of Temperature	dn/dt relative(10^{-6}/℃)					
	t	C′	d	e	F′	g
-60～-40						
-40～-20	0.0	0.2	0.4	1.1	1.5	2.8
-20～0	0.0	0.4	0.7	1.2	2.5	4.0
0～20	-0.1	0.8	1.1	1.5	2.5	4.2
20～40	-0.2	1.1	1.4	1.9	2.8	4.2
40～60	-0.3	1.0	1.4	2.0	3.2	4.7
60～80	-0.1	1.1	1.8	2.1	3.6	5.4
80～100						
100～120						
120～140						

机械性质 Mechanical Properties

H_K (10^7Pa)	366
F_A	135
E (10^7Pa)	5295
G (10^7Pa)	2126
μ	0.245
B (10^{-12}/Pa)	1.67

其他性质 Other Properties

ρ (g/cm^3)	4.51

备注 Remarks

CDGM