H-LaF7	782371	n_d = 1.781790	υ_d = 37.09	$n_F - n_C$ = 0.021077
		n_e = 1.786785	υ_e = 36.83	$n_{F'} - n_{C'}$ = 0.021362

折射率 Refractive Index

	λ（nm）	
$n_{2325.42}$	2325.42	1.736936
$n_{1970.09}$	1970.09	1.743369
$n_{1529.58}$	1529.58	1.750575
$n_{1060.0}$	1060.0	1.759212
n_t	1013.98	1.760326
n_s	852.11	1.765241
n_r	706.52	1.772157
n_C	656.27	1.775589
$n_{C'}$	643.85	1.776562
n_{He-Ne}	632.8	1.777476
n_D	589.29	1.781606
n_d	587.56	1.781790
n_e	546.07	1.786785
n_F	486.13	1.796666
$n_{F'}$	479.99	1.797924
n_g	435.83	1.808925
n_h	404.66	1.819562
n_i	365.01	1.838825
$n_{313.18}$	313.18	
$n_{302.15}$	302.15	

色散公式常数 Constants of Dispersion Formula

K_1	1.85620526E+00
L_1	1.09606128E-02
K_2	1.38494652E+00
L_2	1.14477380E+02
K_3	2.23526441E-01
L_3	5.05771615E-02

折射率温度系数常数 Constants of dn/dt

D_0	-1.67E-06
D_1	1.23E-08
D_2	-1.07E-11
E_0	6.82E-07
E_1	8.70E-10
λ_{TK}(μm)	0.269

相对部分色散 Relative Partial Dispersions

$P_{s,t}$	0.2332	$P'_{s,t}$	0.2301
$P_{C,s}$	0.4910	$P'_{C',s}$	0.5300
$P_{d,C}$	0.2942	$P'_{d,C'}$	0.2447
$P_{e,d}$	0.2370	$P'_{e,d}$	0.2338
$P_{g,F}$	0.5816	$P'_{g,F'}$	0.5150
$P_{i,h}$	0.9139	$P'_{i,h}$	0.9017

异常色散 Abnormal Dispersions

$\Delta P_{C,t}$	0.0031	$\Delta P_{C,s}$	0.0015
$\Delta P_{F,e}$	-0.0005	$\Delta P_{g,F}$	-0.0009

着色度 Color Code

λ_{80}/λ_5	410/350
λ_{70}/λ_5	

热性质 Thermal Properties

T_g (℃)	659
T_s (℃)	699
$T_{10}^{14.5}$ (℃)	603
T_{10}^{13} (℃)	650
$T_{10}^{7.6}$(℃)	763
$\alpha_{-30/70℃}$(10^{-7}/K)	80
$\alpha_{100/300℃}$(10^{-7}/K)	95
λ[W/(m·K)]	

化学性质 Chemical Properties

	Grade
D_W	1
D_A	5
CR	1
RC(S)	1
RA(S)	3

内部透过率 Internal Transmittance τ

λ（nm）	τ (5mm)	τ (10mm)
2400	0.901	0.812
2200	0.964	0.930
2000	0.985	0.970
1800	0.993	0.986
1600	0.998	0.995
1400	0.998	0.997
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	0.996
650	0.998	0.996
600	0.997	0.995
550	0.997	0.995
500	0.995	0.991
480	0.994	0.988
460	0.991	0.983
440	0.986	0.973
420	0.978	0.957
400	0.956	0.914
390	0.930	0.864
380	0.880	0.774
370	0.774	0.599
360	0.562	0.316
350	0.224	0.050
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	0.7	1.4	1.8	2.1	2.9	3.7
-40～-20	0.9	1.7	1.9	2.2	3.1	3.7
-20～0	1.0	1.8	2.0	2.3	3.3	3.9
0～20	1.1	1.9	2.1	2.4	3.4	4.1
20～40	1.2	1.9	2.2	2.6	3.5	4.6
40～60	1.3	2.0	2.3	2.7	3.6	4.8
60～80	1.3	2.2	2.5	2.9	3.8	5.0
80～100	1.4	2.4	2.8	3.2	4.2	5.3
100～120	1.5	2.7	3.2	3.5	4.6	5.5
120～140	1.7	3.0	3.5	3.9	4.8	5.8

机械性质 Mechanical Properties

H_K (10^7Pa)	571
F_A	161
E (10^7Pa)	10916
G (10^7Pa)	4243
μ	0.286
B (10^{-12}/Pa)	1.76

其他性质 Other Properties

ρ (g/cm^3)	3.77

备注 Remarks

CDGM