

J-LF6

$n_d = 1.567320$

$n_e = 1.570480$

$v_d = 42.58$

$v_e = 42.29$

Glass code (d)
567426
Glass code (e)
570423

Spectral l.	Refractive idx
2.058	1.53950
1.970	1.54071
1.530	1.54633
1.129	1.55153
1.064	1.55252
t	1.55336
s	1.55666
A'	1.558991
r	1.561168
C	1.563371
C'	1.563993
He-Ne	1.564576
D	1.567203
d	1.567320
e	1.570480
F	1.576695
F'	1.577484
g	1.584361
h	1.590985
0.389	1.595163
i	1.602977

Coef. disp. form. (pwr ser.)	
A0	2.40368894E+00
A1	-8.44989386E-03
A2	-1.22270670E-04
A3	1.83786358E-02
A4	9.28895588E-05
A5	9.23801901E-05
A6	-9.14295770E-06
A7	5.77555194E-07
A8	0.00000000E+00

Partial dispersion	
F-C	0.013324
F'-C'	0.013491
C-t	0.010016
C-A'	0.004380
d-C	0.003949
e-C	0.007109
g-d	0.017041
g-F	0.007666
h-g	0.006624
i-g	0.018616
C'-t	0.010638
e-C'	0.006487
F'-e	0.007004
i-F'	0.025493

Relative partial dispersion	
C-t/F-C	0.7517
C-A'/F-C	0.3287
d-C/F-C	0.2964
e-C/F-C	0.5335
g-d/F-C	1.2790
g-F/F-C	0.5754
h-g/F-C	0.4971
i-g/F-C	1.3972
C'-t/F'-C'	0.7885
e-C'/F'-C'	0.4808
F'-e/F'-C'	0.5192
i-F'/F'-C'	1.8896

Deviation of relative partial disp.	
ΔPdC	0.0000
ΔPgF	0.0024

Internal CC (80%/5%)	
368/343	
Color Code (80%/5%)	
375/345	
CCI	
B	0.00
G	0.33
R	0.33

Thermal properties	
CTE(-30,70) [1E-7/°C]	91
CTE(100,300) [1E-7/°C]	106
Tg [°C]	499
At [°C]	557
StP [°C]	443
AP [°C]	481
SP [°C]	641
Ht condct. [W/m·K]	1.070
Sp. heat [kJ/kg·K]	0.784
Ht diffus. [1E-6 m2/sec]	0.524

Chemical properties [class]	
Acid res. (surface)	1
Alkaline detergent res.	1
Climate resistance	1
Water res. (powder)	1
Acid res. (powder)	1

Mechanical properties	
Knoop hardness	476 (5)
Abrasion hardness	119
Young's mod. [GPa]	73.4
Shear mod. [GPa]	29.8
Poisson's ratio	0.232
Stress optical coef. [1E-5 nm/cm/Pa]	2.69

Internal trans. (10mm)		
λ [nm]	τ	
280	-	
290	-	
300	-	
310	-	
320	-	
330	-	
340	-	
350	0.19	
360	0.56	
370	0.83	
380	0.934	
390	0.971	
400	0.986	
420	0.994	
440	0.995	
460	0.997	
480	0.998	
500	0.998	
550	0.999	
600	0.999	
650	0.999	
700	0.999	
800	0.998	
900	0.996	
1000	0.996	
1200	0.997	
1400	0.993	
1600	0.987	
1800	0.963	
2000	0.933	
2200	0.86	
2400	0.82	

Specific gravity
2.61

Relative $\Delta n / \Delta T$ [1E-6/°C]																
Temp. [°C]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389	
80 to 90 (ref.)	0.6	0.6	0.8	1.0	1.1	1.3	1.3	1.3	1.6	1.8	2.4	2.4	3.2	4.0	4.5	
60 to 80 (ref.)	0.5	0.6	0.8	0.9	1.0	1.2	1.2	1.3	1.5	1.7	2.3	2.3	3.0	3.8	4.4	
40 to 60	0.4	0.5	0.7	0.8	1.0	1.1	1.1	1.2	1.4	1.6	2.1	2.2	2.9	3.6	4.1	
20 to 40	0.4	0.5	0.6	0.8	0.9	1.0	1.1	1.1	1.3	1.5	2.0	2.1	2.7	3.5	4.0	
0 to 20	0.4	0.5	0.6	0.8	0.9	1.0	1.1	1.1	1.3	1.5	2.0	2.0	2.6	3.3	3.8	
-20 to 0	0.5	0.5	0.7	0.8	0.9	1.1	1.1	1.1	1.3	1.5	2.0	2.0	2.6	3.2	3.7	
-40 to -20	0.6	0.6	0.8	0.9	1.0	1.1	1.2	1.2	1.4	1.6	2.0	2.1	2.6	3.2	3.7	
-60 to -40 (ref.)	0.8	0.8	1.0	1.1	1.2	1.3	1.4	1.4	1.6	1.7	2.2	2.2	2.7	3.3	3.7	
-70 to -60 (ref.)	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.8	1.9	2.3	2.4	2.9	3.4	3.8	

Absolute $\Delta n / \Delta T$ [1E-6/°C]																
Temp. [°C]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389	
80 to 90	-0.4	-0.3	-0.2	0.0	0.1	0.3	0.3	0.4	0.6	0.8	1.4	1.5	2.2	3.0	3.5	
60 to 80	-0.5	-0.5	-0.3	-0.2	0.0	0.1	0.2	0.2	0.4	0.7	1.2	1.3	1.9	2.7	3.3	
40 to 60	-0.7	-0.7	-0.5	-0.4	-0.2	-0.1	-0.1	0.0	0.2	0.4	0.9	1.0	1.6	2.4	2.9	
20 to 40	-0.9	-0.9	-0.7	-0.6	-0.4	-0.3	-0.3	-0.2	-0.1	0.2	0.7	0.7	1.3	2.0	2.5	
0 to 20	-1.1	-1.1	-0.9	-0.8	-0.7	-0.5	-0.5	-0.5	-0.3	-0.1	0.4	0.4	1.0	1.7	2.2	
-20 to 0	-1.3	-1.3	-1.1	-1.0	-0.9	-0.7	-0.7	-0.7	-0.5	-0.3	0.1	0.2	0.7	1.4	1.8	
-40 to -20	-1.5	-1.4	-1.3	-1.2	-1.1	-1.0	-0.9	-0.9	-0.7	-0.6	-0.1	-0.1	0.4	1.0	1.5	
-60 to -40	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	-1.2	-1.1	-1.0	-0.8	-0.4	-0.4	0.1	0.7	1.1	
-70 to -60	-1.8	-1.8	-1.7	-1.6	-1.5	-1.3	-1.3	-1.3	-1.2	-1.0	-0.6	-0.6	-0.1	0.4	0.8	

Coef. disp. form. (frac. eq.) (ref.)	
P1	9.96589303E-02
Q1	7.47533697E+01
P2	1.06620520E-02
Q2	5.58428365E-02
P3	3.08177533E-01
Q3	7.01297392E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	10.1
Frac. eq. (ref.)	1.2	9.1

Prod. Freq. (A to D)	D
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Similar glass type			
OHARA	S-TIL26	HOYA	E-FL6
CDGM	H-QF56	SCHOTT	-

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2018-4-1	Prod. Freq.