J-LAF016HS

n_d = 1.801000 n_e = 1.806432

ν_d = 34.92 ν_e = 34.68

Glass code (d)
801349
Glass code (e)
806347

Spectral l.	Refractive idx
2.058	1.75702
1.970	1.75875
1.530	1.76688
1.129	1.77479
1.064	1.77635
t	1.77767
s	1.78303
A'	1.786896
r	1.790544
C	1.794267
C'	1.795323
He-Ne	1.796314
D	1.800800
d	1.801000
e	1.806432
F	1.817203
F'	1.818577
g	1.830628
h	1.842343
0.389	1.849780
i	–

Coef. disp. form. (pwr ser.)	
A0	3.13977744E+00
A1	-1.36971027E-02
A2	-1.62026634E-04
A3	3.48771551E-02
A4	5.87991861E-04
A5	1.35087453E-04
A6	-1.23042975E-05
A7	9.55959268E-07
A8	0.00000000E+00

Partial dispersion	
F-C	0.022936
F'-C'	0.023254
C-t	0.016596
C-A'	0.007371
d-C	0.006733
e-C	0.012165
g-d	0.029628
g-F	0.013425
h-g	0.011715
i-g	–
C'-t	0.017652
e-C'	0.011109
F'-e	0.012145
i-F'	–

Relative partial dispersion	
C-t／F-C	0.7236
C-A'／F-C	0.3214
d-C／F-C	0.2936
e-C／F-C	0.5304
g-d／F-C	1.2918
g-F／F-C	0.5853
h-g／F-C	0.5108
i-g／F-C	–
C'-t／F'-C'	0.7591
e-C'／F'-C'	0.4777
F'-e／F'-C'	0.5223
i-F'／F'-C'	–

Deviation of relative partial disp.	
ΔPdC	0.0006
ΔPgF	-0.0004

Internal CC (80%/5%)
380/350

Color Code (80%/5%)
420/350

CCI	
B	0.00
G	1.72
R	1.78

Thermal properties	
CTE(-30,70) [1E-7/℃]	62
CTE(100,300) [1E-7/℃]	75
Tg [℃]	632
At [℃]	671
Ht cndct. [W/m･K]	1.010
Sp. heat [kJ/kg･K]	0.603
Ht diffus. [1E-6 m2/sec]	0.462

Chemical properties [class]	
Acid res. (surface)	1
Alkaline detergent res.	1
Climate resistance	1
Water res. (powder)	2
Acid res. (powder)	3

Mechanical properties	
Knoop hardness	649 (6)
Abrasion hardness	93
Young's mod. [GPa]	112.5
Shear mod. [GPa]	43.7
Poisson's ratio	0.288
Stress optical coef. [1E-5 nm/cm／Pa]	2.47

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.00
340	0.00
350	0.05
360	0.31
370	0.63
380	0.80
390	0.88
400	0.917
420	0.953
440	0.970
460	0.979
480	0.985
500	0.990
550	0.996
600	0.997
650	0.997
700	0.998
800	0.998
900	0.999
1000	0.998
1200	0.996
1400	0.992
1600	0.990
1800	0.989
2000	0.971
2200	0.915
2400	0.76

Specific gravity
3.63

Relative Δn/ΔT [1E-6/℃]

Temp. [℃]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389
80 to 90 (ref.)	5.1	5.2	5.5	5.8	6.0	6.3	6.4	6.5	6.8	7.3	8.2	8.4	9.6	11.0	12.0
60 to 80 (ref.)	4.9	5.0	5.3	5.6	5.8	6.1	6.2	6.2	6.6	7.0	8.0	8.1	9.3	10.7	11.6
40 to 60	4.6	4.7	5.1	5.3	5.5	5.8	5.9	5.9	6.3	6.7	7.6	7.7	8.9	10.2	11.1
20 to 40	4.4	4.5	4.8	5.1	5.3	5.5	5.6	5.7	6.0	6.4	7.3	7.4	8.5	9.8	10.7
0 to 20	4.3	4.4	4.6	4.9	5.1	5.3	5.4	5.4	5.8	6.1	7.0	7.1	8.2	9.4	10.2
-20 to 0	4.2	4.2	4.5	4.7	4.9	5.2	5.2	5.3	5.6	5.9	6.7	6.8	7.9	9.0	9.9
-40 to -20	4.1	4.2	4.5	4.7	4.9	5.1	5.1	5.2	5.5	5.8	6.6	6.7	7.7	8.8	9.6
-60 to -40 (ref.)	4.2	4.2	4.5	4.7	4.9	5.1	5.1	5.2	5.5	5.8	6.5	6.6	7.6	8.6	9.4
-70 to -60 (ref.)	4.3	4.4	4.6	4.8	5.0	5.2	5.2	5.3	5.6	5.9	6.6	6.7	7.6	8.6	9.4

Absolute Δn/ΔT [1E-6/℃]

Temp. [℃]	1.083	t	s	A'	r	C	C'	He-Ne	d	e	F	F'	g	h	0.389
80 to 90	4.0	4.1	4.4	4.7	4.9	5.2	5.3	5.3	5.7	6.1	7.1	7.2	8.5	9.9	10.9
60 to 80	3.7	3.8	4.1	4.4	4.6	4.9	4.9	5.0	5.4	5.8	6.7	6.8	8.0	9.4	10.4
40 to 60	3.3	3.4	3.7	3.9	4.2	4.4	4.5	4.6	4.9	5.3	6.2	6.3	7.5	8.8	9.7
20 to 40	2.9	3.0	3.3	3.5	3.7	4.0	4.0	4.1	4.4	4.8	5.7	5.8	6.9	8.1	9.0
0 to 20	2.5	2.6	2.9	3.1	3.3	3.5	3.6	3.7	4.0	4.3	5.1	5.2	6.3	7.5	8.4
-20 to 0	2.1	2.2	2.5	2.7	2.9	3.1	3.1	3.2	3.5	3.8	4.6	4.7	5.7	6.9	7.7
-40 to -20	1.7	1.8	2.0	2.2	2.4	2.6	2.7	2.8	3.0	3.4	4.1	4.2	5.1	6.2	7.0
-60 to -40	1.3	1.4	1.6	1.8	2.0	2.2	2.3	2.3	2.6	2.9	3.6	3.7	4.6	5.6	6.4
-70 to -60	1.0	1.1	1.3	1.5	1.7	1.9	1.9	2.0	2.2	2.5	3.2	3.3	4.1	5.1	5.9

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.24953414E-01
Q1	7.94266552E+01
P2	2.27890133E-02
Q2	5.07623993E-02
P3	3.93600073E-01
Q3	6.96293926E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.6	1.9
Frac. eq. (ref.)	1.1	2.2

Prod. Freq. (A to D)	B

Similar glass type			
OHARA	S-LAM66	HOYA	–
CDGM	H-ZLaF66	SCHOTT	N-LASF45

–	
2019-4-1	Transmittance
2017-4-1	1st edition

HIKARI GLASS CO., LTD.