J-LASF015HS

n_d = 1.804000 n_e = 1.808106

ν_d = 46.60 ν_e = 46.35

Glass code (d)
804466
Glass code (e)
808464

Spectral l.	Refractive idx
2.058	1.76695
1.970	1.76858
1.530	1.77612
1.129	1.78310
1.064	1.78442
t	1.78553
s	1.78994
A'	1.793033
r	1.795917
C	1.798824
C'	1.799643
He-Ne	1.800408
D	1.803847
d	1.804000
e	1.808106
F	1.816078
F'	1.817079
g	1.825697
h	1.833795
0.389	1.838784
i	1.847835

Coef. disp. form. (pwr ser.)	
A0	3.17452404E+00
A1	-1.32156517E-02
A2	-1.65919934E-04
A3	2.76472367E-02
A4	4.83338934E-04
A5	1.20380702E-05
A6	6.02649728E-07
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.017254
F'-C'	0.017436
C-t	0.013293
C-A'	0.005791
d-C	0.005176
e-C	0.009282
g-d	0.021697
g-F	0.009619
h-g	0.008098
i-g	0.022138
C'-t	0.014112
e-C'	0.008463
F'-e	0.008973
i-F'	0.030756

Relative partial dispersion	
C-t／F-C	0.7704
C-A'／F-C	0.3356
d-C／F-C	0.3000
e-C／F-C	0.5380
g-d／F-C	1.2575
g-F／F-C	0.5575
h-g／F-C	0.4693
i-g／F-C	1.2831
C'-t／F'-C'	0.8094
e-C'／F'-C'	0.4854
F'-e／F'-C'	0.5146
i-F'／F'-C'	1.7639

Deviation of relative partial disp.	
ΔPdC	0.0018
ΔPgF	-0.0087

Internal CC (80%/5%)
347/311
Color Code (80%/5%)
380/310

CCI	
B	0.00
G	0.45
R	0.46

Thermal properties	
CTE(-30,70) [1E-7/℃]	60
CTE(100,300) [1E-7/℃]	75
Tg [℃]	697
At [℃]	728
StP [℃]	653
AP [℃]	683
SP [℃]	785
Ht cndct. [W/m･K]	0.834
Sp. heat [kJ/kg･K]	0.470
Ht diffus. [1E-6 m2/sec]	0.387

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

Mechanical properties	
Knoop hardness	670 (7)
Abrasion hardness	64
Young's mod. [GPa]	119.6
Shear mod. [GPa]	46.1
Poisson's ratio	0.298
Stress optical coef. [1E-5 nm/cm／Pa]	1.43

Internal trans. (10mm)	
λ [nm]	τ
280	–
290	–
300	–
310	0.04
320	0.26
330	0.52
340	0.71
350	0.83
360	0.89
370	0.933
380	0.957
390	0.971
400	0.979
420	0.987
440	0.991
460	0.994
480	0.996
500	0.998
550	0.999
600	0.999
650	0.999
700	0.999
800	0.999
900	0.998
1000	0.999
1200	0.999
1400	0.996
1600	0.994
1800	0.980
2000	0.956
2200	0.88
2400	0.70

Specific gravity
4.57

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.)	3.5	3.6	3.8	4.0	4.1	4.3	4.4	4.4	4.7	5.0	5.6	5.6	6.3	6.9	7.4
60 to 80 (ref.)	3.4	3.5	3.7	3.9	4.0	4.2	4.2	4.3	4.5	4.8	5.4	5.5	6.1	6.8	7.3
40 to 60	3.3	3.4	3.6	3.7	3.9	4.1	4.1	4.2	4.4	4.7	5.3	5.3	5.9	6.6	7.0
20 to 40	3.2	3.3	3.5	3.7	3.8	4.0	4.0	4.1	4.3	4.6	5.1	5.2	5.8	6.4	6.8
0 to 20	3.2	3.3	3.5	3.6	3.7	3.9	3.9	4.0	4.2	4.5	5.0	5.1	5.7	6.2	6.7
-20 to 0	3.2	3.3	3.5	3.6	3.7	3.9	3.9	4.0	4.2	4.5	5.0	5.1	5.6	6.2	6.6
-40 to -20	3.3	3.4	3.6	3.7	3.8	4.0	4.0	4.1	4.3	4.5	5.0	5.1	5.6	6.2	6.6
-60 to -40 (ref.)	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.2	4.4	4.7	5.2	5.2	5.7	6.3	6.7
-70 to -60 (ref.)	3.7	3.8	4.0	4.1	4.2	4.4	4.4	4.4	4.6	4.9	5.4	5.4	5.9	6.4	6.8

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	2.4	2.5	2.7	2.9	3.0	3.2	3.2	3.3	3.5	3.8	4.4	4.5	5.1	5.8	6.3
60 to 80	2.2	2.3	2.5	2.7	2.8	3.0	3.0	3.1	3.3	3.6	4.2	4.2	4.9	5.5	6.0
40 to 60	1.9	2.0	2.2	2.4	2.5	2.7	2.7	2.8	3.0	3.3	3.9	3.9	4.5	5.1	5.6
20 to 40	1.7	1.8	2.0	2.1	2.2	2.4	2.4	2.5	2.7	3.0	3.5	3.6	4.2	4.7	5.2
0 to 20	1.4	1.5	1.7	1.8	2.0	2.1	2.2	2.2	2.4	2.7	3.2	3.3	3.8	4.4	4.8
-20 to 0	1.2	1.2	1.4	1.6	1.7	1.8	1.9	1.9	2.1	2.4	2.9	2.9	3.5	4.0	4.4
-40 to -20	0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.6	1.8	2.1	2.5	2.6	3.1	3.6	4.0
-60 to -40	0.6	0.7	0.9	1.0	1.1	1.2	1.3	1.3	1.5	1.8	2.2	2.3	2.7	3.2	3.6
-70 to -60	0.4	0.5	0.7	0.8	0.9	1.0	1.1	1.1	1.3	1.5	2.0	2.0	2.5	3.0	3.3

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.10686191E-01
Q1	7.43053260E+01
P2	2.71367682E-02
Q2	3.09494207E-02
P3	3.93128419E-01
Q3	5.72630320E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.8	3.9
Frac. eq. (ref.)	0.9	4.0

Prod. Freq. (A to D)	A

Similar glass type			
OHARA	S-LAH65VS	HOYA	TAF3
CDGM	H-ZLaF50E	SCHOTT	N-LASF44

2022-7-1	StP, AP, SP
2020-4-1	Similar glass type
2019-4-1	1st edition

HIKARI GLASS CO., LTD.