J-BAF10

n_d = 1.670030 n_e = 1.673410

ν_d = 47.14 ν_e = 46.86

Glass code (d)
670471
Glass code (e)
673469

Spectral l.	Refractive idx
2.058	1.64083
1.970	1.64204
1.530	1.64770
1.129	1.65310
1.064	1.65414
t	1.65502
s	1.65856
A'	1.661063
r	1.663410
C	1.665785
C'	1.666455
He-Ne	1.667082
D	1.669905
d	1.670030
e	1.673410
F	1.679998
F'	1.680827
g	1.687994
h	1.694772
0.389	1.698973
i	1.706653

Coef. disp. form. (pwr ser.)	
A0	2.72808119E+00
A1	-9.30210914E-03
A2	-7.12221204E-05
A3	2.08031569E-02
A4	4.57311835E-04
A5	-2.96273778E-06
A6	1.63114030E-06
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.014213
F'-C'	0.014372
C-t	0.010760
C-A'	0.004722
d-C	0.004245
e-C	0.007625
g-d	0.017964
g-F	0.007996
h-g	0.006778
i-g	0.018659
C'-t	0.011430
e-C'	0.006955
F'-e	0.007417
i-F'	0.025826

Relative partial dispersion	
C-t／F-C	0.7571
C-A'／F-C	0.3322
d-C／F-C	0.2987
e-C／F-C	0.5365
g-d／F-C	1.2639
g-F／F-C	0.5626
h-g／F-C	0.4769
i-g／F-C	1.3128
C'-t／F'-C'	0.7953
e-C'／F'-C'	0.4839
F'-e／F'-C'	0.5161
i-F'／F'-C'	1.7970

Deviation of relative partial disp.	
ΔPdC	0.0002
ΔPgF	-0.0027

Internal CC (80%/5%)
367/335

Color Code (80%/5%)
380/335

CCI	
B	0.00
G	0.61
R	0.64

Thermal properties	
CTE(-30,70) [1E-7/℃]	67
CTE(100,300) [1E-7/℃]	83
Tg [℃]	581
At [℃]	640
Ht cndct. [W/m･K]	0.985
Sp. heat [kJ/kg･K]	0.564
Ht diffus. [1E-6 m2/sec]	0.489

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

Mechanical properties	
Knoop hardness	534 (5)
Abrasion hardness	133
Young's mod. [GPa]	94.8
Shear mod. [GPa]	37.2
Poisson's ratio	0.274
Stress optical coef. [1E-5 nm/cm／Pa]	2.22

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.00
330	0.01
340	0.13
350	0.41
360	0.69
370	0.85
380	0.922
390	0.956
400	0.973
420	0.985
440	0.988
460	0.991
480	0.995
500	0.996
550	0.999
600	0.998
650	0.999
700	0.999
800	0.999
900	0.998
1000	0.998
1200	0.998
1400	0.999
1600	0.992
1800	0.983
2000	0.973
2200	0.940
2400	0.89

Specific gravity
3.57

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.)	4.5	4.5	4.7	4.9	5.1	5.3	5.3	5.4	5.6	5.9	6.5	6.6	7.3	8.0	8.5
60 to 80 (ref.)	4.4	4.4	4.7	4.8	5.0	5.2	5.2	5.3	5.5	5.8	6.3	6.4	7.1	7.8	8.3
40 to 60	4.2	4.3	4.5	4.7	4.8	5.0	5.1	5.1	5.3	5.6	6.1	6.2	6.9	7.6	8.0
20 to 40	4.1	4.2	4.4	4.6	4.7	4.9	4.9	5.0	5.2	5.4	6.0	6.0	6.7	7.3	7.8
0 to 20	4.1	4.1	4.3	4.5	4.6	4.8	4.8	4.9	5.1	5.3	5.8	5.9	6.5	7.2	7.6
-20 to 0	4.1	4.1	4.3	4.5	4.6	4.8	4.8	4.8	5.0	5.3	5.8	5.8	6.4	7.0	7.5
-40 to -20	4.1	4.2	4.4	4.5	4.7	4.8	4.8	4.9	5.1	5.3	5.8	5.8	6.4	7.0	7.4
-60 to -40 (ref.)	4.3	4.3	4.5	4.7	4.8	4.9	5.0	5.0	5.2	5.4	5.8	5.9	6.4	7.0	7.4
-70 to -60 (ref.)	4.5	4.5	4.7	4.8	5.0	5.1	5.1	5.2	5.4	5.6	6.0	6.1	6.6	7.1	7.5

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	3.4	3.5	3.7	3.9	4.1	4.3	4.3	4.4	4.6	4.9	5.4	5.5	6.2	7.0	7.5
60 to 80	3.2	3.3	3.5	3.7	3.9	4.0	4.1	4.1	4.4	4.6	5.2	5.2	5.9	6.6	7.1
40 to 60	3.0	3.0	3.3	3.4	3.6	3.7	3.8	3.8	4.0	4.3	4.8	4.9	5.6	6.2	6.7
20 to 40	2.7	2.8	3.0	3.1	3.3	3.4	3.5	3.5	3.7	4.0	4.5	4.6	5.2	5.8	6.3
0 to 20	2.4	2.5	2.7	2.8	3.0	3.1	3.2	3.2	3.4	3.7	4.1	4.2	4.8	5.4	5.9
-20 to 0	2.2	2.2	2.4	2.6	2.7	2.8	2.9	2.9	3.1	3.3	3.8	3.9	4.4	5.0	5.4
-40 to -20	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.6	2.8	3.0	3.5	3.5	4.1	4.6	5.0
-60 to -40	1.6	1.7	1.9	2.0	2.1	2.2	2.3	2.3	2.5	2.7	3.1	3.2	3.7	4.2	4.6
-70 to -60	1.4	1.5	1.7	1.8	1.9	2.0	2.1	2.1	2.3	2.5	2.9	2.9	3.4	3.9	4.3

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.12167309E-01
Q1	9.09103715E+01
P2	1.25830025E-02
Q2	4.36118239E-02
P3	3.52889109E-01
Q3	6.43290245E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.7	4.2
Frac. eq. (ref.)	0.6	5.5

Prod. Freq. (A to D)	C

Similar glass type			
OHARA	S-BAH10	HOYA	BAF10
CDGM	H-ZBaF52	SCHOTT	N-BAF10

2019-4-1	Transmittance
2015-4-1	Color Code, Prod. Freq, Similar glass type
2012-4-1	Similar glass type

HIKARI GLASS CO., LTD.