J-BAF11

n_d = 1.666720 n_e = 1.670002

ν_d = 48.33 ν_e = 48.04

Glass code (d)
667483
Glass code (e)
670480

Spectral l.	Refractive idx
2.058	1.63817
1.970	1.63935
1.530	1.64491
1.129	1.65021
1.064	1.65123
t	1.65210
s	1.65555
A'	1.657996
r	1.660282
C	1.662593
C'	1.663245
He-Ne	1.663855
D	1.666598
d	1.666720
e	1.670002
F	1.676388
F'	1.677191
g	1.684118
h	1.690647
0.389	1.694683
i	1.702036

Partial dispersion	
F-C	0.013795
F'-C'	0.013946
C-t	0.010494
C-A'	0.004597
d-C	0.004127
e-C	0.007409
g-d	0.017398
g-F	0.007730
h-g	0.006529
i-g	0.017918
C'-t	0.011146
e-C'	0.006757
F'-e	0.007189
i-F'	0.024845

Relative partial dispersion	
C-t／F-C	0.7607
C-A'／F-C	0.3332
d-C／F-C	0.2992
e-C／F-C	0.5371
g-d／F-C	1.2612
g-F／F-C	0.5603
h-g／F-C	0.4733
i-g／F-C	1.2989
C'-t／F'-C'	0.7992
e-C'／F'-C'	0.4845
F'-e／F'-C'	0.5155
i-F'／F'-C'	1.7815

Deviation of relative partial disp.	
ΔPdC	0.0001
ΔPgF	−0.0029

Internal CC (80%/5%)
362/331
Color Code (80%/5%)
375/330

CCI	
B	0.00
G	0.47
R	0.46

Thermal properties	
CTE(−30,70) [1E-7/℃]	67
CTE(100,300) [1E-7/℃]	84
Tg [℃]	573
At [℃]	631
StP [℃]	534
AP [℃]	573
SP [℃]	729
Ht cndct. [W/m･K]	0.895
Sp. heat [kJ/kg･K]	0.563
Ht diffus. [1E-6 m2/sec]	0.442

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	544 (5)
Abrasion hardness	124
Young's mod. [GPa]	94.0
Shear mod. [GPa]	36.8
Poisson's ratio	0.277
Stress optical coef. [1E-5 nm/cm／Pa]	2.21

Internal trans. (10mm)	
λ [nm]	τ
280	–
290	–
300	–
310	–
320	–
330	0.04
340	0.22
350	0.52
360	0.76
370	0.89
380	0.941
390	0.967
400	0.979
420	0.987
440	0.989
460	0.991
480	0.994
500	0.996
550	0.998
600	0.997
650	0.997
700	0.997
800	0.997
900	0.997
1000	0.997
1200	0.998
1400	0.997
1600	0.992
1800	0.979
2000	0.970
2200	0.935
2400	0.88

Specific gravity
3.59

Coef. disp. form. (pwr ser.)	
A0	2.71886836E+00
A1	−9.21086428E−03
A2	−5.97080099E−05
A3	2.02512558E−02
A4	4.23467645E−04
A5	−1.03717059E−06
A6	1.22100678E−06
A7	0.00000000E+00
A8	0.00000000E+00

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.)	4.3	4.3	4.5	4.7	4.9	5.0	5.1	5.1	5.4	5.6	6.2	6.3	7.0	7.7	8.1
60 to 80 (ref.)	4.2	4.2	4.4	4.6	4.7	4.9	5.0	5.0	5.2	5.5	6.1	6.1	6.8	7.5	7.9
40 to 60	4.1	4.1	4.3	4.4	4.6	4.8	4.8	4.9	5.1	5.3	5.9	5.9	6.6	7.2	7.6
20 to 40	4.0	4.0	4.2	4.3	4.5	4.6	4.7	4.7	4.9	5.2	5.7	5.8	6.4	7.0	7.4
0 to 20	3.9	3.9	4.1	4.3	4.4	4.6	4.6	4.7	4.8	5.1	5.6	5.6	6.2	6.8	7.2
−20 to 0	3.9	3.9	4.1	4.2	4.4	4.5	4.6	4.6	4.8	5.0	5.5	5.6	6.1	6.7	7.0
−40 to −20	4.0	4.0	4.1	4.3	4.4	4.6	4.6	4.6	4.8	5.0	5.5	5.6	6.1	6.6	6.9
−60 to −40 (ref.)	4.1	4.1	4.3	4.4	4.6	4.7	4.7	4.8	4.9	5.2	5.6	5.6	6.2	6.7	7.0
−70 to −60 (ref.)	4.3	4.3	4.5	4.6	4.7	4.9	4.9	4.9	5.1	5.3	5.7	5.8	6.3	6.8	7.1

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	3.3	3.3	3.5	3.7	3.8	4.0	4.1	4.1	4.3	4.6	5.2	5.2	5.9	6.6	7.0
60 to 80	3.1	3.1	3.3	3.5	3.6	3.8	3.8	3.9	4.1	4.4	4.9	5.0	5.7	6.3	6.7
40 to 60	2.8	2.8	3.0	3.2	3.3	3.5	3.5	3.6	3.8	4.0	4.6	4.6	5.3	5.9	6.3
20 to 40	2.5	2.6	2.7	2.9	3.0	3.2	3.2	3.3	3.5	3.7	4.2	4.3	4.9	5.5	5.9
0 to 20	2.3	2.3	2.5	2.6	2.8	2.9	3.0	3.0	3.2	3.4	3.9	3.9	4.5	5.1	5.4
−20 to 0	2.0	2.0	2.2	2.3	2.5	2.6	2.7	2.7	2.9	3.1	3.5	3.6	4.2	4.7	5.0
−40 to −20	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.4	2.6	2.8	3.2	3.3	3.8	4.3	4.6
−60 to −40	1.5	1.5	1.6	1.8	1.9	2.0	2.1	2.1	2.3	2.5	2.9	2.9	3.4	3.9	4.2
−70 to −60	1.3	1.3	1.4	1.6	1.7	1.8	1.8	1.9	2.0	2.2	2.6	2.7	3.1	3.6	3.9

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.22633232E−01
Q1	1.00010916E+02
P2	1.54366657E−02
Q2	3.89083675E−02
P3	3.48798360E−01
Q3	6.16825972E−03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	1.9
Frac. eq. (ref.)	0.5	2.8

Prod. Freq. (A to D)	C

Similar glass type			
OHARA	S-BAH11	HOYA	BAF11
CDGM	H-ZBaF16	SCHOTT	-

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

HIKARI GLASS CO., LTD.