J-BAK2

n_d = 1.539960 n_e = 1.542123

ν_d = 59.52 ν_e = 59.26

Glass code (d)
540595
Glass code (e)
542593

Spectral l.	Refractive idx
2.058	1.51748
1.970	1.51862
1.530	1.52379
1.129	1.52829
1.064	1.52909
t	1.52976
s	1.53231
A'	1.534045
r	1.535627
C	1.537199
C'	1.537639
He-Ne	1.538049
D	1.539879
d	1.539960
e	1.542123
F	1.546271
F'	1.546787
g	1.551203
h	1.555299
0.389	1.557798
i	1.562285

Partial dispersion	
F-C	0.009072
F'-C'	0.009148
C-t	0.007438
C-A'	0.003154
d-C	0.002761
e-C	0.004924
g-d	0.011243
g-F	0.004932
h-g	0.004096
i-g	0.011082
C'-t	0.007878
e-C'	0.004484
F'-e	0.004664
i-F'	0.015498

Relative partial dispersion	
C-t／F-C	0.8199
C-A'／F-C	0.3477
d-C／F-C	0.3043
e-C／F-C	0.5428
g-d／F-C	1.2393
g-F／F-C	0.5437
h-g／F-C	0.4515
i-g／F-C	1.2216
C'-t／F'-C'	0.8612
e-C'／F'-C'	0.4902
F'-e／F'-C'	0.5098
i-F'／F'-C'	1.6941

Deviation of relative partial disp.	
ΔPdC	0.0003
ΔPgF	−0.0008

Internal CC (80%/5%)
324/287
Color Code (80%/5%)
330/290

CCI	
B	0.00
G	0.05
R	0.02

Thermal properties	
CTE(−30,70) [1E-7/℃]	76
CTE(100,300) [1E-7/℃]	87
Tg [℃]	559
At [℃]	624
StP [℃]	503
AP [℃]	549
SP [℃]	738
Ht cndct. [W/m･K]	0.915
Sp. heat [kJ/kg･K]	0.632
Ht diffus. [1E-6 m2/sec]	0.508

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

Mechanical properties	
Knoop hardness	465 (5)
Abrasion hardness	119
Young's mod. [GPa]	70.7
Shear mod. [GPa]	28.7
Poisson's ratio	0.232
Stress optical coef. [1E-5 nm/cm／Pa]	2.80

Internal trans. (10mm)	
λ [nm]	τ
280	–
290	0.07
300	0.22
310	0.50
320	0.74
330	0.88
340	0.946
350	0.976
360	0.989
370	0.994
380	0.995
390	0.998
400	0.999
420	0.999
440	0.998
460	0.998
480	0.999
500	0.999
550	0.999
600	0.999
650	0.998
700	0.999
800	0.998
900	0.996
1000	0.996
1200	0.996
1400	0.990
1600	0.990
1800	0.972
2000	0.947
2200	0.89
2400	0.85

Specific gravity
2.84

Coef. disp. form. (pwr ser.)	
A0	2.33616060E+00
A1	−8.18245071E-03
A2	−9.82753897E-05
A3	1.27499096E-02
A4	1.22269251E-04
A5	8.48994057E-06
A6	−1.59525058E-07
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.)	1.6	1.6	1.7	1.9	2.0	2.1	2.1	2.1	2.2	2.4	2.7	2.8	3.1	3.5	3.7
60 to 80 (ref.)	1.5	1.5	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.3	2.6	2.6	3.0	3.3	3.5
40 to 60	1.4	1.4	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.4	2.5	2.8	3.1	3.3
20 to 40	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.3	2.3	2.7	3.0	3.2
0 to 20	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9	2.2	2.2	2.6	2.9	3.0
−20 to 0	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.2	2.2	2.5	2.8	3.0
−40 to −20	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.8	1.9	2.2	2.2	2.5	2.8	2.9
−60 to −40 (ref.)	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.9	2.0	2.3	2.3	2.6	2.9	3.0
−70 to −60 (ref.)	1.6	1.6	1.7	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.4	2.5	2.7	3.0	3.1

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	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.7	1.8	2.2	2.5	2.7
60 to 80	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.5	1.6	1.9	2.3	2.5
40 to 60	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.2	1.3	1.6	1.9	2.1
20 to 40	0.0	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.7	0.9	1.0	1.3	1.6	1.8
0 to 20	−0.3	−0.2	−0.1	−0.1	0.0	0.1	0.1	0.1	0.3	0.4	0.6	0.7	1.0	1.3	1.5
−20 to 0	−0.5	−0.5	−0.4	−0.3	−0.2	−0.2	−0.1	−0.1	0.0	0.1	0.4	0.4	0.7	0.9	1.1
−40 to −20	−0.8	−0.7	−0.6	−0.6	−0.5	−0.4	−0.4	−0.4	−0.3	−0.2	0.1	0.1	0.4	0.6	0.8
−60 to −40	−1.0	−1.0	−0.9	−0.8	−0.8	−0.7	−0.7	−0.7	−0.6	−0.5	−0.2	−0.2	0.1	0.3	0.4
−70 to −60	−1.2	−1.2	−1.1	−1.0	−1.0	−0.9	−0.9	−0.9	−0.8	−0.7	−0.5	−0.4	−0.2	0.1	0.2

Coef. disp. form. (frac. eq.)(ref.)	
P1	1.22545246E-01
Q1	9.24022804E+01
P2	1.79911705E-02
Q2	2.59658508E-02
P3	2.90195251E-01
Q3	5.32121925E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	7.5
Frac. eq. (ref.)	0.7	7.5

Prod. Freq. (A to D)	C

Similar glass type			
OHARA	S-BAL12	HOYA	-
CDGM	H-BaK2	SCHOTT	N-BAK2

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

HIKARI GLASS CO., LTD.