

J-BAK2

$n_d = 1.539960$

$n_e = 1.542123$

$v_d = 59.52$

$v_e = 59.26$

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

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

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

Specific gravity	2.84
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Thermal properties	
CTE(-30,70) [1E-7/°C]	76
CTE(100,300) [1E-7/°C]	87
Tg [°C]	559
At [°C]	624
Ht condct. [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

Color Code (80%/5%)	330/295
Internal CC	324/292
Internal trans. (10mm)	
λ [nm]	τ
280	-
290	0.03
300	0.19
310	0.48
320	0.73
330	0.87
340	0.940
350	0.971
360	0.984
365	0.988
370	0.990
380	0.990
390	0.993
400	0.996
420	0.995
440	0.994
460	0.994
480	0.995
500	0.996
550	0.996
600	0.996
650	0.995
700	0.995
800	0.992
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

Relative $\Delta n / \Delta T$ [1E-6/°C]															
Temp. [°C]	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 $\Delta n / \Delta T$ [1E-6/°C]															
Temp. [°C]	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
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Similar glass type			
OHARA	S-BAL12	HOYA	-
CDGM	H-BaK2	SCHOTT	N-BAK2

2018-4-1	Prod. Freq.
2015-4-1	Color Code
2009-9-1	1st edition