

J-LAK02

$n_d = 1.670000$

$n_e = 1.672786$

$v_d = 57.35$

$v_e = 57.12$

Glass code (d)	670574
Glass code (e)	673571

Spectral l.	Refractive idx
2.058	1.64015
1.970	1.64172
1.530	1.64880
1.129	1.65483
1.064	1.65589
t	1.65677
s	1.66011
A'	1.662360
r	1.664409
C	1.666440
C'	1.667008
He-Ne	1.667537
D	1.669896
d	1.670000
e	1.672786
F	1.678123
F'	1.678787
g	1.684465
h	1.689730
0.389	1.692942
i	1.698708

Coef. disp. form. (pwr ser.)	
A0	2.74008995E+00
A1	-1.20461104E-02
A2	-1.75410927E-04
A3	1.76614454E-02
A4	1.89317290E-04
A5	1.04494737E-05
A6	-1.62215193E-07
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.011683
F'-C'	0.011779
C-t	0.009670
C-A'	0.004080
d-C	0.003560
e-C	0.006346
g-d	0.014465
g-F	0.006342
h-g	0.005265
i-g	0.014243
C'-t	0.010238
e-C'	0.005778
F'-e	0.006001
i-F'	0.019921

Relative partial dispersion	
C-t/F-C	0.8277
C-A'/F-C	0.3492
d-C/F-C	0.3047
e-C/F-C	0.5432
g-d/F-C	1.2381
g-F/F-C	0.5428
h-g/F-C	0.4507
i-g/F-C	1.2191
C'-t/F'-C'	0.8692
e-C'/F'-C'	0.4905
F'-e/F'-C'	0.5095
i-F'/F'-C'	1.6912

Deviation of relative partial disp.	
ΔPdC	0.0016
ΔPgF	-0.0053

Specific gravity	3.75
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Thermal properties	
CTE(-30,70) [1E-7/°C]	63
CTE(100,300) [1E-7/°C]	78
Tg [°C]	645
At [°C]	675
Ht cndct. [W/m·K]	0.788
Sp. heat [kJ/kg·K]	0.532
Ht diffus. [1E-6 m2/sec]	0.395

Chemical properties [class]	
Acid res. (surface)	5
Alkaline detergent res.	4
Climate resistance	2
Water res. (powder)	3
Acid res. (powder)	5

Mechanical properties	
Knoop hardness	631 (6)
Abrasion hardness	139
Young's mod. [GPa]	96.6
Shear mod. [GPa]	37.6
Poisson's ratio	0.283
Stress optical coef. [1E-5 nm/cm/Pa]	1.87

Color Code (80%/5%)	360/290
Internal CC	343/286
Internal trans. (10mm)	
λ [nm]	τ
280	0.02
290	0.08
300	0.19
310	0.34
320	0.50
330	0.65
340	0.77
350	0.86
360	0.912
365	0.932
370	0.947
380	0.966
390	0.978
400	0.983
420	0.988
440	0.990
460	0.992
480	0.994
500	0.995
550	0.996
600	0.996
650	0.995
700	0.994
800	0.991
900	0.997
1000	0.996
1200	0.997
1400	0.992
1600	0.988
1800	0.975
2000	0.954
2200	0.86
2400	0.65

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.)	1.4	1.4	1.5	1.7	1.8	1.9	1.9	2.0	2.1	2.3	2.6	2.6	3.0	3.4	3.6	
60 to 80 (ref.)	1.3	1.3	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.2	2.5	2.5	2.9	3.2	3.5	
40 to 60	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.1	2.4	2.4	2.8	3.1	3.3	
20 to 40	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.8	2.0	2.3	2.3	2.7	3.0	3.2	
0 to 20	1.2	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.2	2.3	2.6	2.9	3.1	
-20 to 0	1.2	1.2	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9	2.2	2.3	2.6	2.9	3.1	
-40 to -20	1.3	1.3	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.3	2.3	2.6	2.9	3.1	
-60 to -40 (ref.)	1.5	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	2.2	2.5	2.5	2.8	3.1	3.3	
-70 to -60 (ref.)	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.7	2.7	3.0	3.3	3.5	

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	0.4	0.4	0.5	0.6	0.8	0.9	0.9	0.9	0.9	1.1	1.5	1.6	1.9	2.3	2.5	
60 to 80	0.2	0.2	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.9	1.0	1.3	1.7	2.1	2.3	
40 to 60	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.8	1.1	1.1	1.4	1.8	2.0	
20 to 40	-0.3	-0.2	-0.1	0.0	0.1	0.2	0.2	0.2	0.4	0.5	0.8	0.8	1.2	1.5	1.7	
0 to 20	-0.5	-0.4	-0.3	-0.2	-0.1	0.0	0.0	0.0	0.1	0.3	0.5	0.6	0.9	1.2	1.4	
-20 to 0	-0.7	-0.7	-0.5	-0.5	-0.4	-0.3	-0.3	-0.2	-0.1	0.0	0.3	0.3	0.6	0.9	1.1	
-40 to -20	-0.9	-0.9	-0.8	-0.7	-0.6	-0.5	-0.5	-0.5	-0.4	-0.2	0.0	0.0	0.3	0.6	0.8	
-60 to -40	-1.2	-1.1	-1.0	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.5	-0.3	-0.2	0.0	0.3	0.5	
-70 to -60	-1.3	-1.3	-1.2	-1.1	-1.0	-0.9	-0.9	-0.9	-0.8	-0.7	-0.5	-0.4	-0.2	0.1	0.3	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.16396191E-01
Q1	7.13715725E+01
P2	2.60772282E-02
Q2	2.34562516E-02
P3	3.41070979E-01
Q3	5.05461332E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	9.8
Frac. eq. (ref.)	0.7	10.2

Prod. Freq. (A to D)	C
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Similar glass type			
OHARA	-	HOYA	-
CDGM	-	SCHOTT	-

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