

J-K5

$n_d = 1.522490$

$n_e = 1.524594$

$v_d = 59.21$

$v_e = 58.95$

Glass code (d)	522592
Glass code (e)	525590

Spectral l.	Refractive idx
2.058	1.50022
1.970	1.50138
1.530	1.50659
1.129	1.51107
1.064	1.51187
t	1.51252
s	1.51503
A'	1.516727
r	1.518271
C	1.519803
C'	1.520231
He-Ne	1.520631
D	1.522411
d	1.522490
e	1.524594
F	1.528627
F'	1.529130
g	1.533427
h	1.537420
0.389	1.539861
i	1.544251

Coef. disp. form. (pwr ser.)	
A0	2.28421062E+00
A1	-8.15537489E-03
A2	-1.05573054E-04
A3	1.22386101E-02
A4	1.10833374E-04
A5	9.05979458E-06
A6	-1.07673777E-07
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.008824
F'-C'	0.008899
C-t	0.007278
C-A'	0.003076
d-C	0.002687
e-C	0.004791
g-d	0.010937
g-F	0.004800
h-g	0.003993
i-g	0.010824
C'-t	0.007706
e-C'	0.004363
F'-e	0.004536
i-F'	0.015121

Relative partial dispersion	
C-t/F-C	0.8248
C-A'/F-C	0.3486
d-C/F-C	0.3045
e-C/F-C	0.5430
g-d/F-C	1.2395
g-F/F-C	0.5440
h-g/F-C	0.4525
i-g/F-C	1.2267
C'-t/F'-C'	0.8659
e-C'/F'-C'	0.4903
F'-e/F'-C'	0.5097
i-F'/F'-C'	1.6992

Deviation of relative partial disp.	
ΔPdC	0.0006
ΔPgF	-0.0010

Internal CC (80%/5%)	
345/318	

Color Code (80%/5%)	
350/320	

CCI	
B	-
G	-
R	-

Thermal properties	
CTE(-30,70) [1E-7/°C]	77
CTE(100,300) [1E-7/°C]	91
Tg [°C]	563
At [°C]	612
Ht condct. [W/m·K]	1.133
Sp. heat [kJ/kg·K]	0.728
Ht diffus. [1E-6 m2/sec]	0.617

Chemical properties [class]	
Acid res. (surface)	1
Alkaline detergent res.	1
Climate resistance	1
Water res. (powder)	3
Acid res. (powder)	1

Mechanical properties	
Knoop hardness	475 (5)
Abrasion hardness	94
Young's mod. [GPa]	73.1
Shear mod. [GPa]	29.9
Poisson's ratio	0.222
Stress optical coef. [1E-5 nm/cm/Pa]	2.79

Internal trans. (10mm)	
λ [nm]	τ
280	0.00
290	0.00
300	0.00
310	0.00
320	0.09
330	0.40
340	0.70
350	0.86
360	0.933
370	0.967
380	0.980
390	0.989
400	0.994
420	0.995
440	0.995
460	0.996
480	0.996
500	0.996
550	0.996
600	0.997
650	0.997
700	0.996
800	0.998
900	0.999
1000	0.999
1200	0.999
1400	0.970
1600	0.985
1800	0.974
2000	0.945
2200	0.80
2400	0.63

Specific gravity	
2.52	

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.)	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.6	2.9	2.9	3.3	3.6	3.9	
60 to 80 (ref.)	1.7	1.7	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.7	2.8	3.1	3.5	3.7	
40 to 60	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.0	2.1	2.3	2.6	2.6	3.0	3.3	3.5	
20 to 40	1.5	1.5	1.6	1.7	1.8	1.9	1.9	1.9	2.0	2.2	2.5	2.5	2.8	3.2	3.3	
0 to 20	1.4	1.5	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.4	2.4	2.7	3.0	3.2	
-20 to 0	1.4	1.5	1.5	1.6	1.7	1.8	1.8	1.8	1.9	2.1	2.3	2.4	2.7	3.0	3.1	
-40 to -20	1.5	1.5	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.1	2.4	2.4	2.7	3.0	3.1	
-60 to -40 (ref.)	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.0	2.1	2.2	2.5	2.5	2.8	3.0	3.2	
-70 to -60 (ref.)	1.8	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.3	2.4	2.6	2.6	2.9	3.2	3.3	

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	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.6	1.9	2.0	2.3	2.7	2.9	
60 to 80	0.7	0.7	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.4	1.7	1.7	2.1	2.4	2.6	
40 to 60	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.4	1.4	1.8	2.1	2.3	
20 to 40	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.7	0.8	1.1	1.2	1.5	1.8	2.0	
0 to 20	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.6	0.8	0.9	1.2	1.5	1.6	
-20 to 0	-0.3	-0.3	-0.2	-0.1	-0.1	0.0	0.1	0.1	0.2	0.3	0.5	0.6	0.9	1.1	1.3	
-40 to -20	-0.5	-0.5	-0.5	-0.4	-0.3	-0.2	-0.2	-0.2	-0.1	0.0	0.3	0.3	0.6	0.8	1.0	
-60 to -40	-0.8	-0.8	-0.7	-0.6	-0.6	-0.5	-0.5	-0.5	-0.4	-0.3	0.0	0.0	0.3	0.5	0.6	
-70 to -60	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.2	-0.2	0.0	0.3	0.4	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.36005021E-01
Q1	9.95639722E+01
P2	1.00006529E-02
Q2	3.33640621E-02
P3	2.89810235E-01
Q3	5.65060229E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	9.2
Frac. eq. (ref.)	0.6	14.9

Prod. Freq. (A to D)	D
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Similar glass type			
OHARA	S-NSL5	HOYA	-
CDGM	H-K50	SCHOTT	N-K5

2019-4-1	Transmittance
2018-4-1	Prod. Freq.
2015-4-1	Color Code, Similar glass type