

J-PKH1

 $n_d = 1.518600$
 $n_e = 1.520372$
 $v_d = 69.89$
 $v_e = 69.67$

Glass code (d)
519699
Glass code (e)
520697

Spectral l.	Refractive idx
2.058	1.49701
1.970	1.49826
1.530	1.50384
1.129	1.50840
1.064	1.50918
t	1.50980
s	1.51212
A'	1.513636
r	1.514988
C	1.516311
C'	1.516678
He-Ne	1.517020
D	1.518533
d	1.518600
e	1.520372
F	1.523731
F'	1.524147
g	1.527677
h	1.530922
0.389	1.532889
i	1.536397

Coef. disp. form. (pwr ser.)	
A0	2.27892705E+00
A1	-9.04327622E-03
A2	-1.10679206E-04
A3	1.01870033E-02
A4	9.31149884E-05
A5	2.72256540E-06
A6	-1.82952398E-08
A7	0.00000000E+00
A8	0.00000000E+00

Partial dispersion	
F-C	0.007420
F'-C'	0.007469
C-t	0.006510
C-A'	0.002675
d-C	0.002289
e-C	0.004061
g-d	0.009077
g-F	0.003946
h-g	0.003245
i-g	0.008720
C'-t	0.006877
e-C'	0.003694
F'-e	0.003775
i-F'	0.012250

Relative partial dispersion	
C-t/F-C	0.8774
C-A'/F-C	0.3605
d-C/F-C	0.3085
e-C/F-C	0.5473
g-d/F-C	1.2233
g-F/F-C	0.5318
h-g/F-C	0.4373
i-g/F-C	1.1752
C'-t/F'-C'	0.9207
e-C'/F'-C'	0.4946
F'-e/F'-C'	0.5054
i-F'/F'-C'	1.6401

Deviation of relative partial disp.	
ΔPdC	-0.0003
ΔPgF	0.0047

Internal CC (80%/5%)	
315/273	
Color Code (80%/5%)	
320/275	
CCI	
B	0.00
G	0.20
R	0.22

Thermal properties	
CTE(-30,70) [1E-7/°C]	63
CTE(100,300) [1E-7/°C]	75
Tg [°C]	572
At [°C]	612
StP [°C]	515
AP [°C]	553
SP [°C]	696
Ht condct. [W/m·K]	0.860
Sp. heat [kJ/kg·K]	0.777
Ht diffus. [1E-6 m2/sec]	0.425

Chemical properties [class]	
Acid res. (surface)	1
Alkaline detergent res.	3
Climate resistance	2
Water res. (powder)	1
Acid res. (powder)	1

Mechanical properties	
Knoop hardness	536 (5)
Abrasion hardness	188
Young's mod. [GPa]	73.1
Shear mod. [GPa]	29.8
Poisson's ratio	0.224
Stress optical coef. [1E-5 nm/cm/Pa]	2.78

Internal trans. (10mm)		
λ [nm]	τ	
280	0.12	
290	0.31	
300	0.54	
310	0.73	
320	0.86	
330	0.925	
340	0.960	
350	0.976	
360	0.983	
370	0.988	
380	0.991	
390	0.994	
400	0.995	
420	0.995	
440	0.994	
460	0.995	
480	0.995	
500	0.996	
550	0.999	
600	0.999	
650	0.999	
700	0.998	
800	0.997	
900	0.996	
1000	0.996	
1200	0.996	
1400	0.992	
1600	0.963	
1800	0.904	
2000	0.84	
2200	0.70	
2400	0.64	

Specific gravity	
2.6	

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.)	3.6	3.6	3.7	3.8	3.9	4.0	4.0	4.0	4.1	4.2	4.4	4.5	4.7	5.0	5.1	
60 to 80 (ref.)	3.5	3.5	3.6	3.7	3.8	3.8	3.8	3.9	3.9	4.1	4.3	4.3	4.6	4.8	4.9	
40 to 60	3.3	3.4	3.5	3.5	3.6	3.7	3.7	3.7	3.8	3.9	4.1	4.1	4.4	4.6	4.8	
20 to 40	3.2	3.2	3.3	3.4	3.5	3.5	3.5	3.6	3.6	3.7	4.0	4.0	4.2	4.5	4.6	
0 to 20	3.1	3.2	3.2	3.3	3.4	3.4	3.4	3.5	3.5	3.6	3.9	3.9	4.1	4.4	4.5	
-20 to 0	3.1	3.1	3.2	3.3	3.3	3.4	3.4	3.4	3.5	3.6	3.8	3.8	4.1	4.3	4.4	
-40 to -20	3.1	3.1	3.2	3.3	3.3	3.4	3.4	3.4	3.5	3.6	3.8	3.8	4.1	4.3	4.4	
-60 to -40 (ref.)	3.2	3.2	3.3	3.4	3.4	3.5	3.5	3.5	3.6	3.7	3.9	3.9	4.1	4.4	4.5	
-70 to -60 (ref.)	3.4	3.4	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.8	4.0	4.0	4.3	4.5	4.6	

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	2.7	2.7	2.8	2.9	2.9	3.0	3.0	3.0	3.1	3.2	3.5	3.5	3.8	4.0	4.1	
60 to 80	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.8	2.9	3.0	3.2	3.3	3.5	3.8	3.9	
40 to 60	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.6	2.7	2.9	3.0	3.2	3.4	3.6	
20 to 40	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.6	2.7	2.9	3.1	3.2	
0 to 20	1.6	1.7	1.7	1.8	1.9	1.9	1.9	1.9	2.0	2.1	2.3	2.3	2.6	2.8	2.9	
-20 to 0	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.8	2.0	2.0	2.3	2.5	2.6	
-40 to -20	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.7	1.7	2.0	2.2	2.3	
-60 to -40	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.4	1.4	1.6	1.8	1.9	
-70 to -60	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9	1.0	1.2	1.2	1.4	1.6	1.7	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.14576746E-01
Q1	7.69727154E+01
P2	1.10968918E-02
Q2	2.34302770E-02
P3	2.87809559E-01
Q3	4.87585612E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	5.2
Frac. eq. (ref.)	0.5	5.2

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

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2017-4-1	Prod. Freq