

# J-LASKH2

$n_d = 1.755000$

$n_e = 1.758438$

$v_d = 52.34$

$v_e = 52.10$

Glass code (d)
75523
Glass code (e)
75821

Spectral l.	Refractive idx
2.058	1.72014
1.970	1.72189
1.530	1.72981
1.129	1.73670
1.064	1.73794
t	1.73898
s	1.74294
A'	1.745658
r	1.748146
C	1.750628
C'	1.751323
He-Ne	1.751971
D	1.754872
d	1.755000
e	1.758438
F	1.765054
F'	1.765879
g	1.772953
h	1.779538
0.389	1.783566
i	1.790817

Partial dispersion	
F-C	0.014426
F'-C'	0.014556
C-t	0.011653
C-A'	0.004970
d-C	0.004372
e-C	0.007810
g-d	0.017953
g-F	0.007899
h-g	0.006585
i-g	0.017864
C'-t	0.012348
e-C'	0.007115
F'-e	0.007441
i-F'	0.024938

Relative partial dispersion	
C-t/F-C	0.8078
C-A'/F-C	0.3445
d-C/F-C	0.3031
e-C/F-C	0.5414
g-d/F-C	1.2445
g-F/F-C	0.5476
h-g/F-C	0.4565
i-g/F-C	1.2383
C'-t/F'-C'	0.8483
e-C'/F'-C'	0.4888
F'-e/F'-C'	0.5112
i-F'/F'-C'	1.7132

Deviation of relative partial disp.	
$\Delta PdC$	0.0022
$\Delta PgF$	-0.0090

Internal CC (80%/5%)	
344/274	
Color Code (80%/5%)	
370/275	
CCI	
B	0.00
G	0.35
R	0.35

Thermal properties	
CTE(-30,70) [1E-7/°C]	61
CTE(100,300) [1E-7/°C]	72
Tg [°C]	670
At [°C]	697
StP [°C]	627
AP [°C]	654
SP [°C]	747
Ht condct. [W/m·K]	0.823
Sp. heat [kJ/kg·K]	0.510
Ht diffus. [1E-6 m2/sec]	0.377

Chemical properties [class]	
Acid res. (surface)	4
Alkaline detergent res.	2
Climate resistance	1
Water res. (powder)	1
Acid res. (powder)	4

Mechanical properties	
Knoop hardness	678 (7)
Abrasion hardness	62
Young's mod. [GPa]	118.8
Shear mod. [GPa]	45.8
Poisson's ratio	0.297
Stress optical coef. [1E-5 nm/cm/Pa]	1.60

Internal trans. (10mm)	
$\lambda$ [nm]	$\tau$
280	0.08
290	0.16
300	0.27
310	0.37
320	0.52
330	0.66
340	0.76
350	0.84
360	0.900
370	0.938
380	0.961
390	0.974
400	0.983
420	0.990
440	0.993
460	0.995
480	0.997
500	0.998
550	0.999
600	0.999
650	0.999
700	0.999
800	0.998
900	0.997
1000	0.997
1200	0.998
1400	0.993
1600	0.988
1800	0.974
2000	0.947
2200	0.86
2400	0.61

Specific gravity
4.29

Coef. disp. form. (pwr ser.)	
A0	3.01618042E+00
A1	-1.39280117E-02
A2	-2.04284446E-04
A3	2.27027519E-02
A4	3.17846393E-04
A5	1.01400049E-05
A6	3.63521536E-08
A7	0.00000000E+00
A8	0.00000000E+00

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.)	3.9	3.9	4.1	4.3	4.4	4.5	4.6	4.6	4.8	5.0	5.5	5.6	6.1	6.7	7.0	
60 to 80 (ref.)	3.8	3.8	4.0	4.1	4.3	4.4	4.4	4.5	4.7	4.9	5.3	5.4	6.0	6.5	6.8	
40 to 60	3.6	3.7	3.8	4.0	4.1	4.2	4.3	4.3	4.5	4.7	5.1	5.2	5.7	6.2	6.5	
20 to 40	3.5	3.5	3.7	3.8	4.0	4.1	4.1	4.2	4.3	4.5	5.0	5.0	5.5	6.0	6.3	
0 to 20	3.4	3.5	3.6	3.8	3.9	4.0	4.0	4.1	4.2	4.4	4.8	4.9	5.4	5.8	6.1	
-20 to 0	3.4	3.4	3.6	3.7	3.8	4.0	4.0	4.0	4.2	4.4	4.7	4.8	5.3	5.7	5.9	
-40 to -20	3.5	3.5	3.6	3.8	3.9	4.0	4.0	4.1	4.2	4.4	4.7	4.8	5.2	5.7	5.9	
-60 to -40 (ref.)	3.6	3.6	3.8	3.9	4.0	4.1	4.2	4.2	4.3	4.5	4.8	4.9	5.3	5.7	5.9	
-70 to -60 (ref.)	3.8	3.8	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.7	5.0	5.0	5.5	5.8	6.0	

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	2.8	2.9	3.0	3.2	3.3	3.5	3.5	3.5	3.7	3.9	4.4	4.5	5.0	5.6	5.8	
60 to 80	2.6	2.6	2.8	2.9	3.1	3.2	3.3	3.3	3.5	3.7	4.1	4.2	4.7	5.2	5.5	
40 to 60	2.3	2.3	2.5	2.6	2.8	2.9	2.9	3.0	3.1	3.3	3.8	3.8	4.3	4.8	5.1	
20 to 40	2.0	2.0	2.2	2.3	2.5	2.6	2.6	2.7	2.8	3.0	3.4	3.5	4.0	4.4	4.7	
0 to 20	1.7	1.7	1.9	2.0	2.1	2.3	2.3	2.3	2.5	2.7	3.0	3.1	3.6	4.0	4.2	
-20 to 0	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.2	2.3	2.7	2.7	3.2	3.6	3.8	
-40 to -20	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.8	2.0	2.3	2.4	2.8	3.2	3.4	
-60 to -40	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6	2.0	2.0	2.4	2.8	3.0	
-70 to -60	0.6	0.6	0.8	0.9	1.0	1.1	1.1	1.1	1.2	1.4	1.7	1.7	2.1	2.5	2.7	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.09833774E-01
Q1	6.56037326E+01
P2	4.70337592E-02
Q2	2.11653374E-02
P3	3.54937207E-01
Q3	4.78614953E-03

Fitting error of disp. form. $\sigma$ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.5	6.7
Frac. eq. (ref.)	0.6	6.7

Prod. Freq. (A to D)	B
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Similar glass type			
OHARA	S-LAH97	HOYA	TAC6
CDGM	H-LaK53B	SCHOTT	N-LAK33B

2022-7-1	StP, AP, SP
2020-4-1	Similar glass type, chemical properties
2019-4-1	Transmittance