

J-BASF6

$$n_d = 1.667550$$

$$n_e = 1.671331$$

$$v_d = 41.87$$

$$v_e = 41.60$$

Glass code (d)
668419
Glass code (e)
671416

Spectral l.	Refractive idx
2.058	1.63334
1.970	1.63489
1.530	1.64203
1.129	1.64851
1.064	1.64972
t	1.65074
s	1.65475
A'	1.657562
r	1.660179
C	1.662821
C'	1.663567
He-Ne	1.664265
D	1.667410
d	1.667550
e	1.671331
F	1.678763
F'	1.679706
g	1.687932
h	1.695862
0.389	1.700870
i	1.710252

Coef. disp. form. (pwr ser.)	
A0	2.71408053E+00
A1	-1.14438690E-02
A2	-1.85062065E-04
A3	2.32439131E-02
A4	1.30291556E-04
A5	1.18143460E-04
A6	-1.18586652E-05
A7	7.68022789E-07
A8	0.00000000E+00

Partial dispersion	
F-C	0.015942
F'-C'	0.016139
C-t	0.012079
C-A'	0.005259
d-C	0.004729
e-C	0.008510
g-d	0.020382
g-F	0.009169
h-g	0.007930
i-g	0.022320
C'-t	0.012825
e-C'	0.007764
F'-e	0.008375
i-F'	0.030546

Relative partial dispersion	
C-t/F-C	0.7577
C-A'/F-C	0.3299
d-C/F-C	0.2966
e-C/F-C	0.5338
g-d/F-C	1.2785
g-F/F-C	0.5751
h-g/F-C	0.4974
i-g/F-C	1.4001
C'-t/F'-C'	0.7947
e-C'/F'-C'	0.4811
F'-e/F'-C'	0.5189
i-F'/F'-C'	1.8927

Deviation of relative partial disp.	
ΔPdC	0.0005
ΔPgF	0.0010

Internal CC (80%/5%)	
389/352	
Color Code (80%/5%)	
405/350	
CCI	
B	0.00
G	2.06
R	2.13

Thermal properties	
CTE(-30,70) [1E-7/°C]	66
CTE(100,300) [1E-7/°C]	81
Tg [°C]	600
At [°C]	644
StP [°C]	551
AP [°C]	586
SP [°C]	710
Ht condct. [W/m·K]	0.899
Sp. heat [kJ/kg·K]	0.653
Ht diffus. [1E-6 m2/sec]	0.429

Chemical properties [class]	
Acid res. (surface)	7
Alkaline detergent res.	2
Climate resistance	2
Water res. (powder)	1
Acid res. (powder)	4

Mechanical properties	
Knoop hardness	510 (5)
Abrasion hardness	128
Young's mod. [GPa]	88.7
Shear mod. [GPa]	35.0
Poisson's ratio	0.268
Stress optical coef. [1E-5 nm/cm/Pa]	2.73

Internal trans. (10mm)	
λ [nm]	τ
280	-
290	-
300	-
310	-
320	-
330	-
340	-
350	0.03
360	0.20
370	0.48
380	0.70
390	0.82
400	0.89
420	0.949
440	0.969
460	0.979
480	0.985
500	0.990
550	0.995
600	0.996
650	0.996
700	0.997
800	0.998
900	0.999
1000	0.999
1200	0.998
1400	0.992
1600	0.990
1800	0.979
2000	0.962
2200	0.89
2400	0.73

Specific gravity	
3.21	

Relative Δn/ΔT [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.)	2.4	2.5	2.6	2.8	3.0	3.2	3.2	3.3	3.5	3.8	4.4	4.5	5.4	6.2	6.8	
60 to 80 (ref.)	2.3	2.3	2.5	2.7	2.9	3.0	3.1	3.1	3.4	3.6	4.2	4.3	5.1	6.0	6.5	
40 to 60	2.2	2.2	2.4	2.5	2.7	2.9	2.9	2.9	3.2	3.4	4.0	4.1	4.9	5.7	6.2	
20 to 40	2.1	2.1	2.2	2.4	2.5	2.7	2.8	2.8	3.0	3.3	3.8	3.9	4.6	5.4	5.9	
0 to 20	2.0	2.0	2.2	2.3	2.4	2.6	2.6	2.7	2.9	3.1	3.7	3.7	4.4	5.2	5.6	
-20 to 0	2.0	2.0	2.1	2.3	2.4	2.5	2.6	2.6	2.8	3.0	3.5	3.6	4.3	5.0	5.4	
-40 to -20	2.0	2.0	2.2	2.3	2.4	2.6	2.6	2.6	2.8	3.0	3.5	3.6	4.2	4.9	5.3	
-60 to -40 (ref.)	2.2	2.2	2.3	2.4	2.5	2.7	2.7	2.7	2.9	3.1	3.6	3.6	4.2	4.9	5.3	
-70 to -60 (ref.)	2.3	2.3	2.5	2.6	2.7	2.8	2.9	2.9	3.1	3.3	3.7	3.8	4.3	5.0	5.3	

Absolute Δn/ΔT [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	1.4	1.4	1.6	1.8	2.0	2.1	2.2	2.2	2.5	2.8	3.4	3.5	4.3	5.2	5.7	
60 to 80	1.2	1.2	1.4	1.6	1.7	1.9	2.0	2.0	2.2	2.5	3.1	3.2	4.0	4.8	5.4	
40 to 60	0.9	0.9	1.1	1.3	1.4	1.6	1.6	1.7	1.9	2.1	2.7	2.8	3.6	4.4	4.9	
20 to 40	0.6	0.7	0.8	1.0	1.1	1.3	1.3	1.4	1.6	1.8	2.3	2.4	3.1	3.9	4.4	
0 to 20	0.4	0.4	0.5	0.7	0.8	0.9	1.0	1.0	1.2	1.5	2.0	2.0	2.7	3.5	3.9	
-20 to 0	0.1	0.1	0.2	0.4	0.5	0.6	0.7	0.7	0.9	1.1	1.6	1.7	2.3	3.0	3.4	
-40 to -20	-0.2	-0.2	-0.1	0.1	0.2	0.3	0.3	0.4	0.6	0.8	1.2	1.3	1.9	2.5	2.9	
-60 to -40	-0.5	-0.5	-0.4	-0.3	-0.1	0.0	0.0	0.1	0.2	0.4	0.8	0.9	1.5	2.1	2.5	
-70 to -60	-0.7	-0.7	-0.6	-0.5	-0.4	-0.2	-0.2	-0.2	0.0	0.1	0.6	0.6	1.2	1.7	2.1	

Coef. disp. form. (frac. eq.) (ref.)	
P1	1.01508388E-01
Q1	6.45319879E+01
P2	1.08815270E-02
Q2	5.72169663E-02
P3	3.52821748E-01
Q3	6.86732413E-03

Fitting error of disp. form. σ [1E-6]		
	Visible	Infrared
Power ser. eq.	0.7	10.4
Frac. eq. (ref.)	1.4	9.7

Prod. Freq. (A to D)	C
----------------------	---

Similar glass type			
OHARA	-	HOYA	-
CDGM	-	SCHOTT	-

2022-7-1	StP, AP, SP
2019-4-1	Transmittance
2018-4-1	Prod. Freq.