

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 |
| 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 | 0.00 |
| 290 | 0.00 |
| 300 | 0.00 |
| 310 | 0.00 |
| 320 | 0.00 |
| 330 | 0.00 |
| 340 | 0.00 |
| 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 $\Delta n / \Delta T$ [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.) | 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 $\Delta n / \Delta T$ [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 | 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 | - |

| | |
|----------|-------------------------|
| 2019-4-1 | Transmittance |
| 2018-4-1 | Prod. Freq. |
| 2015-4-1 | Color Code, Prod. Freq. |