

S-LAH66

Code(d) **773496**

Code(e) **776493**

| | | | | | |
|------------------------|----------------------------|---------------------|--------------|-------------------------|-----------------|
| Refractive Index n_d | 1.77250 1.772499 | Abbe Number ν_d | 49.60 | Dispersion n_F-n_C | 0.015576 |
| Refractive Index n_e | 1.776208 | Abbe Number ν_e | 49.36 | Dispersion $n_F-n_{C'}$ | 0.015727 |

| Refractive Indices | | |
|------------------------|----------|---------|
| $\lambda(\mu\text{m})$ | | |
| n_{2325} | 2.32542 | 1.73031 |
| n_{1970} | 1.97009 | 1.73786 |
| n_{1530} | 1.52958 | 1.74590 |
| n_{1129} | 1.12864 | 1.75303 |
| n_t | 1.01398 | 1.75541 |
| n_s | 0.85211 | 1.75960 |
| $n_{A'}$ | 0.76819 | 1.76248 |
| n_r | 0.70652 | 1.76514 |
| n_C | 0.65627 | 1.76780 |
| $n_{C'}$ | 0.64385 | 1.76854 |
| $n_{\text{He-Ne}}$ | 0.6328 | 1.76924 |
| n_D | 0.58929 | 1.77236 |
| n_d | 0.58756 | 1.77250 |
| n_e | 0.54607 | 1.77621 |
| n_F | 0.48613 | 1.78337 |
| $n_{F'}$ | 0.47999 | 1.78427 |
| $n_{\text{He-Cd}}$ | 0.44157 | 1.79083 |
| n_g | 0.435835 | 1.79197 |
| n_h | 0.404656 | 1.79917 |
| n_i | 0.365015 | 1.81158 |

| Constants of Dispersion Formula | |
|---------------------------------|----------------|
| A_1 | 1.39280586E+00 |
| A_2 | 6.79577094E-01 |
| A_3 | 1.38702069E+00 |
| B_1 | 6.08475118E-03 |
| B_2 | 2.33925351E-02 |
| B_3 | 9.58354094E+01 |

| Chemical Properties | |
|---|------|
| Water Resistance(Powder) Group RW(P) | 1 |
| Acid Resistance(Powder) Group RA(P) | 3 |
| Weathering Resistance(Surface) Group W(S) | 1 |
| Acid Resistance(Surface) Group SR | 51.2 |
| Phosphate Resistance PR | 1.0 |

| Mechanical Properties | |
|--------------------------|---------|
| Young's Modulus E (GPa) | 121.9 |
| Rigidity Modulus G (GPa) | 47.2 |
| Poisson's Ratio σ | 0.291 |
| Knoop Hardness Hk(Class) | 700 7 |
| Abrasion Aa | 61 |

| Partial Dispersions | |
|---------------------|----------|
| n_C-n_t | 0.012391 |
| $n_C-n_{A'}$ | 0.005314 |
| n_d-n_C | 0.004701 |
| n_e-n_C | 0.008410 |
| n_g-n_d | 0.019473 |
| n_g-n_F | 0.008598 |
| n_h-n_g | 0.007202 |
| n_i-n_g | 0.019610 |
| n_C-n_t | 0.013137 |
| $n_e-n_{C'}$ | 0.007664 |
| $n_{F'}-n_e$ | 0.008063 |
| $n_i-n_{F'}$ | 0.027311 |

| Relative Partial Dispersions | |
|------------------------------|--------|
| $\theta_{C,t}$ | 0.7955 |
| $\theta_{C,A'}$ | 0.3412 |
| $\theta_{d,C}$ | 0.3018 |
| $\theta_{e,C}$ | 0.5399 |
| $\theta_{g,d}$ | 1.2502 |
| $\theta_{g,F}$ | 0.5520 |
| $\theta_{h,g}$ | 0.4624 |
| $\theta_{i,g}$ | 1.2590 |
| $\theta'_{C,t}$ | 0.8353 |
| $\theta'_{e,C'}$ | 0.4873 |
| $\theta'_{F',e}$ | 0.5127 |
| $\theta'_{i,F'}$ | 1.7366 |

| Deviation of Relative Dispersions $\Delta\theta$ from "Normal" | |
|--|---------|
| $\Delta\theta_{C,t}$ | 0.0161 |
| $\Delta\theta_{C,A'}$ | 0.0052 |
| $\Delta\theta_{g,d}$ | -0.0115 |
| $\Delta\theta_{g,F}$ | -0.0092 |
| $\Delta\theta_{i,g}$ | -0.0507 |

| Thermal Properties | |
|--|-------|
| Strain Point StP (°C) | 641 |
| Annealing Point AP (°C) | 660 |
| Transformation Temperature Tg (°C) | 686 |
| Yield Point At (°C) | 706 |
| Softening Point SP (°C) | 726 |
| Expansion Coefficients (-30~+70°C) | 62 |
| α (10^{-7}K^{-1}) (+100~+300°C) | 74 |
| Thermal Conductivity λ W/(m·K) | 0.845 |

| Coloring | | | |
|----------------|-----|-------------|-----|
| λ_{80} | 370 | λ_5 | 305 |
| λ_{70} | | | |

| Internal transmission | | | |
|-----------------------|-----|------------------|-----|
| $\lambda_{0.80}$ | 349 | $\lambda_{0.05}$ | 308 |

| CCI | | |
|------|------|------|
| B | G | R |
| 0.00 | 0.44 | 0.42 |

| Internal Transmittance | |
|------------------------|-------------|
| $\lambda(\text{nm})$ | τ 10mm |
| 280 | |
| 290 | |
| 300 | |
| 310 | 0.10 |
| 320 | 0.33 |
| 330 | 0.55 |
| 340 | 0.71 |
| 350 | 0.81 |
| 360 | 0.88 |
| 370 | 0.930 |
| 380 | 0.956 |
| 390 | 0.971 |
| 400 | 0.979 |
| 420 | 0.987 |
| 440 | 0.991 |
| 460 | 0.994 |
| 480 | 0.996 |
| 500 | 0.997 |
| 550 | 0.999 |
| 600 | 0.998 |
| 650 | 0.998 |
| 700 | 0.999 |
| 800 | 0.998 |
| 900 | 0.998 |
| 1000 | 0.998 |
| 1200 | 0.997 |
| 1400 | 0.993 |
| 1600 | 0.993 |
| 1800 | 0.983 |
| 2000 | 0.958 |
| 2200 | 0.88 |
| 2400 | 0.64 |

| Temperature Coefficients of Refractive Index | | | | | | | |
|--|--|-----|-------|-----|-----|-----|-----|
| Range of Temperature (°C) | $\Delta n / \Delta T$ relative (10^{-6}K^{-1}) | | | | | | |
| | t | C' | He-Ne | D | e | F' | g |
| -40~-20 | 3.4 | 3.8 | 3.8 | 4.0 | 4.2 | 4.7 | 5.1 |
| -20~ 0 | 3.5 | 3.9 | 4.0 | 4.2 | 4.4 | 4.8 | 5.3 |
| 0~20 | 3.6 | 4.1 | 4.1 | 4.3 | 4.5 | 5.0 | 5.5 |
| 20~40 | 3.7 | 4.2 | 4.3 | 4.5 | 4.7 | 5.2 | 5.7 |
| 40~60 | 3.8 | 4.4 | 4.4 | 4.7 | 4.9 | 5.4 | 5.9 |
| 60~80 | 3.9 | 4.5 | 4.6 | 4.8 | 5.0 | 5.6 | 6.1 |

| Other Properties | |
|--|------|
| Photoelastic Constant β nm/(cm·10 ⁵ Pa) | 1.43 |
| Specific Gravity d | 4.23 |
| Remarks | |

OHARA 24-01

OHARA Copyright© OHARA INC. All Rights Reserved.

※The name of the glass type is the model number assigned based on the main components of the composition: large, medium, small refractive index and serial number.