

# TIJ 2.5 Ink Guide

Print on a wide range of substrates with HP Thermal Inkjet Technology



\* All of value are experimental data. Environment: 20°C / 60%RH

| Type               | Product Name   | Color         | Firing Voltage | Pulse Width | Pluse Warming | MAX Frequency | Heater   | Expiry    |
|--------------------|----------------|---------------|----------------|-------------|---------------|---------------|----------|-----------|
| Solvent based Ink  | JS10           | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS12           | Black         | 9.0V           | 1.6µs       | Off           | 12kHz         | Air dry  | 9 months  |
|                    | JS12+          | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS13           | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS16           | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS17           | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS18           | Black         | 8.8V           | 1.8µs       | Off           | 12kHz         | Air dry  | 12 months |
|                    | JS21           | White         | 9.0V           | 1.8µs       | Off           | 12kHz         | Air dry  | 6 months  |
|                    | JS21+          | White         | 9.0V           | 1.8µs       | Off           | 12kHz         | Air dry  | 9 months  |
|                    | JS31           | Red           | 9.2V           | 1.6µs       | Off           | 12kHz         | Air dry  | 6 months  |
|                    | JS41           | Yellow        | 9.0V           | 1.8µs       | Off           | 12kHz         | Air dry  | 6 months  |
|                    | JS51           | Blue          | 9.2V           | 1.6µs       | Off           | 12kHz         | Air dry  | 6 months  |
|                    | JS61           | Green         | 9.2V           | 1.6µs       | Off           | 12kHz         | Air dry  | 9 months  |
|                    | JS71(R)        | Invisible Red | 9.2V           | 1.6µs       | Off           | 12kHz         | Air dry  | 9 months  |
| JS71(B)            | Invisible Blue | 9.2V          | 1.6µs          | Off         | 12kHz         | Air dry       | 9 months |           |
| UV-LED Curable Ink | JS83UV         | Black         | 9.2V           | 2.2µs       | Off           | 12kHz         | UV cure  | 5 months  |
| Aqueous            | JW10           | Black         | 10.6V          | 2.0µs       | On 40° C      | 12kHz         | Air dry  | 24 months |
|                    | JW11           | Black         | 10.6V          | 2.0µs       | On 40° C      | 12kHz         | Air dry  | 24 months |
|                    | JW12           | Black         | 10.6V          | 2.0µs       | On 40° C      | 12kHz         | Air dry  | 24 months |

# Decap times & Media Flexibility

★★★★★ Excellent, ★★★★ Very Good, ★★★ Good, ★★ Average, ▼ Below Average, × Unsuitable  
 Values here are indicated only for reference, and are not guaranteed.

| Type                               | Product Name   | Item             | Aqueous Varnish Coat | Paper   | PET     | PP, OPP | PE      | Blister Foil | Aluminium | Glass   |       |
|------------------------------------|--|------------------|----------------------|---------|---------|---------|---------|--------------|-----------|---------|-------|
| Solvent based Ink                  | JS10   | Fixing           | ★★☆☆☆                | ★★★★★   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆        | ★★☆☆☆     | ★★☆☆☆   |       |
|                                    |  | Dry time [sec]   | 6                    | 1       | 8       | 8       | 8       | 7            | 7         | 8       |       |
|                                    |  | Decap time [min] | 120                  |         |         |         |         |              |           |         |       |
|                                    | JS12   | Fixing           | ★★★☆☆                | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 5                    | 1       | 6       | 6       | 6       | 2            | 2         | 6       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS12+<br>Better adhesion and blackness than JS12             | Fixing           | ★★★★☆                | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 6                    | 1       | 8       | 8       | 8       | 4            | 4         | 8       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS13   | Fixing           | ★★★★☆                | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 2                    | 1       | 3       | 3       | 3       | 3            | 3         | 3       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS16   | Fixing           | ★★★★☆                | ★★★★★   | ★★☆☆☆   | ★★☆☆☆   | ★★★★☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 5                    | 1       | 4       | 8       | 5       | 7            | 4         | 7       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS17   | Fixing           | ★★★☆☆                | ★★★★★   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 6                    | 1       | 6       | 9       | 7       | 7            | 6         | 8       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS18   | Fixing           | ★★☆☆☆                | ★★★★★   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★★★☆        | ★★★★☆     | ★★★★☆   | ★★★★☆ |
|                                    |  | Dry time [sec]   | 5                    | 1       | 5       | 6       | 6       | 7            | 4         | 8       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
|                                    | JS21   | Fixing           | ★★☆☆☆                | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆        | ★★☆☆☆     | ★★☆☆☆   | ★★☆☆☆ |
|                                    |  | Dry time [sec]   | 4                    | 1       | 5       | 5       | 5       | 5            | 5         | 5       |       |
|                                    |  | Decap time [min] | 20                   |         |         |         |         |              |           |         |       |
|                                    | JS21+<br>Decap time and a more opaque whiter color than JS21 | Fixing           | ★★☆☆☆                | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆        | ★★☆☆☆     | ★★☆☆☆   | ★★☆☆☆ |
|                                    |  | Dry time [sec]   | 4                    | 1       | 5       | 5       | 5       | 5            | 5         | 5       |       |
|                                    |  | Decap time [min] | 60                   |         |         |         |         |              |           |         |       |
| JS31                               | Fixing   | ★★★★★            | ★★★★★                | ★★★★★   | ★★★★★   | ★★★★★   | ★★★★★   | ★★★★★        | ★★★★★     | ★★★★★   |       |
|                                    | Dry time [sec]   | 4                | 1                    | 5       | 5       | 5       | 2       | 2            | 5         |         |       |
|                                    | Decap time [min]   | 60               |                      |         |         |         |         |              |           |         |       |
| JS41                               | Fixing   | ★★☆☆☆            | ★★☆☆☆                | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆   | ★★☆☆☆        | ★★☆☆☆     | ★★☆☆☆   |       |
|                                    | Dry time [sec]   | 4                | 1                    | 5       | 5       | 5       | 5       | 5            | 5         |         |       |
|                                    | Decap time [min]   | 20               |                      |         |         |         |         |              |           |         |       |
| JS51                               | Fixing   | ★★★★★            | ★★★★★                | ★★★★★   | ★★★★★   | ★★★★★   | ★★★★★   | ★★★★★        | ★★★★★     | ★★★★★   |       |
|                                    | Dry time [sec]   | 4                | 1                    | 5       | 5       | 5       | 2       | 2            | 5         |         |       |
|                                    | Decap time [min]   | 60               |                      |         |         |         |         |              |           |         |       |
| JS61                               | Fixing   | ★★☆☆☆            | ★★★★★                | ★★☆☆☆   | ★★☆☆☆   | ★★★★☆   | ★★☆☆☆   | ★★☆☆☆        | ★★☆☆☆     | ★★☆☆☆   |       |
|                                    | Dry time [sec]   | 6                | 1                    | 8       | 8       | 8       | 7       | 7            | 8         |         |       |
|                                    | Decap time [min]   | 120              |                      |         |         |         |         |              |           |         |       |
| JS71(R)<br>JS71(B)                 | Fixing   | ▼                | ▼                    | ▼       | ▼       | ▼       | ▼       | ▼            | ▼         | ▼       |       |
|                                    | Dry time [sec]   | 4                | 1                    | 5       | 5       | 5       | 5       | 5            | 5         |         |       |
|                                    | Decap time [min]   | 60               |                      |         |         |         |         |              |           |         |       |
| UV-LED Curable Ink                 | JS83UV   | Fixing           | ★★★★☆                | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆   | ★★★★☆        | ★★☆☆☆     | ★★☆☆☆   |       |
|                                    |  | Curable speed    | 20m/min              | 20m/min | 20m/min | 20m/min | 20m/min | 20m/min      | 20m/min   | 10m/min |       |
|                                    |  | Decap time [min] | 30                   |         |         |         |         |              |           |         |       |
| Aqueous                            | JW10   | Fixing           | ×                    | ★★★★★   | ×       | ×       | ×       | ×            | ×         | ×       |       |
|                                    |  | Dry time [sec]   | ×                    | 1~2     | -       | -       | -       | -            | -         | -       |       |
|                                    |  | Decap time [min] | —                    |         |         |         |         |              |           |         |       |
|                                    | JW11   | Fixing           | ×                    | ★★★★★   | ×       | ×       | ×       | ×            | ×         | ×       |       |
|                                    |  | Dry time [sec]   | ×                    | 1~2     | -       | -       | -       | -            | -         | -       |       |
|                                    |  | Decap time [min] | —                    |         |         |         |         |              |           |         |       |
| JW12<br>Better blackness than JW11 | Fixing   | ×                | ★★★★★                | ×       | ×       | ×       | ×       | ×            | ×         |         |       |
|                                    | Dry time [sec]   | ×                | 1~2                  | -       | -       | -       | -       | -            | -         |         |       |
|                                    |  | Decap time [min] | —                    |         |         |         |         |              |           |         |       |