






UVR Series LEGEND INKS

UV CURE LEGEND INK

-  **Screen Print Application**
-  **Available in:**
 - Black (UVR-182E)**
 - White (UVR-110W)**
-  **Withstands ENIG & Immersion Tin**
-  **Excellent Heat Resistance in HASL**
-  **Low Odor**

PROCESSING PARAMETERS FOR UVR LEGEND INKS

TAIYO UVR-182E (black) and **UVR-110W** (white) are single- component, UV-curable legend ink having outstanding printability, adhesion, and color retention. The short UV-curing time is most suitable for high volume and/or fast throughput requirements. **UVR Legend** inks are available in 1 Kg-set size.

UVR SERIES COMPONENTS

UVR-182E

Color	Black
Non-Volatile Content	100%
Viscosity	180 – 210 poise
Specific Gravity	1.40 – 1.60
Warranty Period	9 months at $\leq 68^{\circ}\text{F}$

UVR-110W

Color	White
Non-Volatile Content	100%
Viscosity	110 – 130 poise
Specific Gravity	1.40 – 1.60
Warranty Period	6 months at $\leq 68^{\circ}\text{F}$

MIXING

UVR Legend ink should be mixed before being applied to the screen to ensure it has not separated during storage.

PRE-CLEANING

Before printing, residues and foreign material remaining on the solder mask surface should be completely removed to optimize adhesion of legend inks.

The hold time should be not exceed 30 minutes.

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SCREEN PRINTING For screen printing by hand or mechanical methods, a monofilament polyester screen between 200 and 305 mesh counts per inch is recommended. A coating thickness range between 0.5 mils - 0.7 mils is preferred.

- Screen Mesh: 200 – 305
 - Squeegee: 70 – 80 durometer
 - Printing Mode: Flood / Print
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UV Cure UV energy readings should be 2.5 – 4.0 joules. The following table can be used as a guide to determine the optimum cure conditions with your particular UV curing unit. The curing conditions may have to be adjusted depending upon ink thickness and color.

Type of UV Lamps	Power (Watts/cm)	Conveyor Speed
High Pressure Mercury Vapor	80 W/cm x 3 lamps 120 W/cm x 3 lamps	2.5 - 3.5 m/min 3.0 - 5.0 m/min
Metal Halide	80 W/cm x 3 lamps 120 W/cm x 3 lamps	3.0 - 5.0 m/min 4.0 - 6.0 m/min

For Process Optimization please contact your local Taiyo America Representative

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