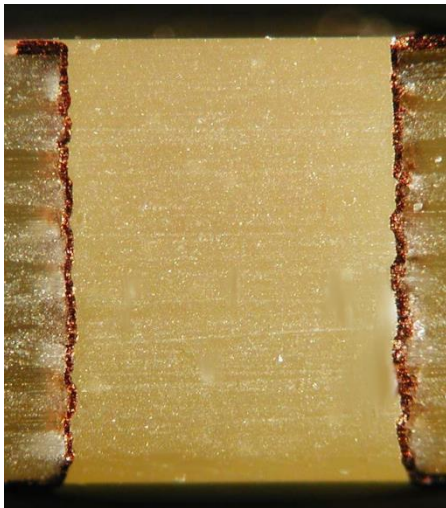
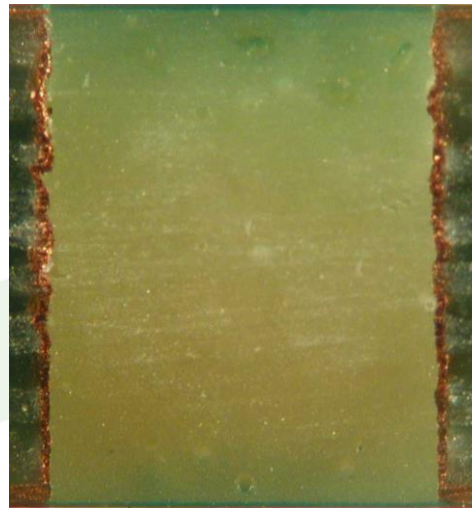


UVHP-100



UVHP-100



UVHP-100 with PSR-4000BN as topcoat

- ③ **UV Cure, One-component hole fill material**
- ③ **For Plated or non-plated holes**
- ③ **Very Low Shrinkage**
- ③ **Compatible with Solder Mask top coat**
- ③ **RoHS Compliant**
- ③ **Halogen-Free**
- ③ **Compatible with Lead-Free Processing**

UV Cured Hole Plugging Product

UVHP-100 is a single-component product designed for permanent hole plugging applications with minimal bubbles/voids and shrinkage. It is formulated for application by hand screening, semi-automatic and automatic printing using do-patterned screens. This product may be used in plated or non-plated holes. **UVHP-100** is cured with high intensity UV radiation using a conveyORIZED UV curing unit. Boards are cured in “seconds”, resulting in increased productivity over standard thermally cure hole plugging products. All Taiyo America products comply with the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the use of certain Hazardous Substances (RoHS) in electrical and electronic equipment.

UVHP-100:

Features

- Single-component UV Cure Hole fill material
- Halogen-Free Product
- Low Shrinkage
- 100% Solids

Process

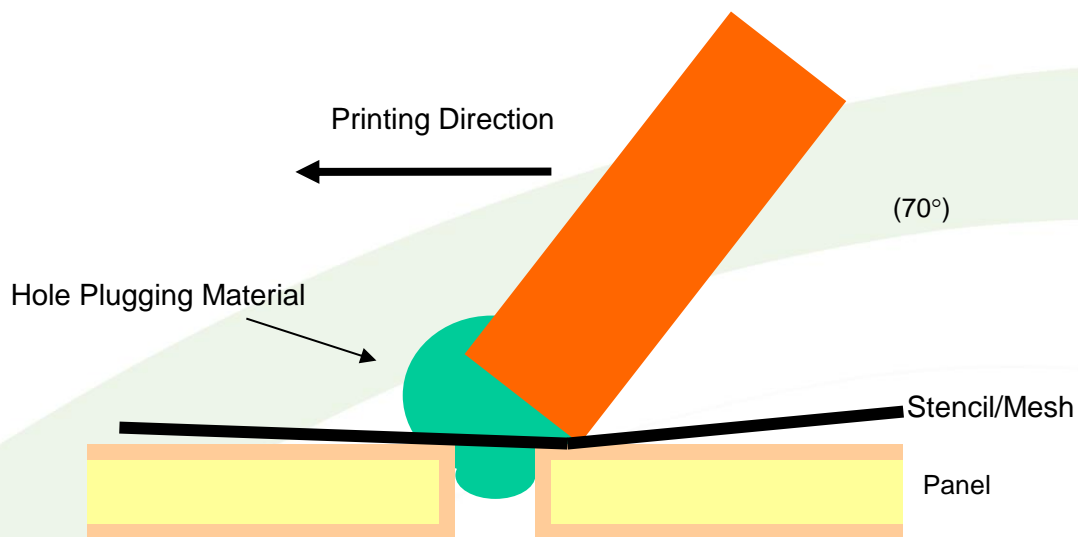
Product Storage	12 month shelf life stored at 68°F (20°C)
Panels	Plated Through Holes or Non-plated Through Holes
Pretreatment	Acid rinse, mechanical scrubbing with rinse and dry
Printing	150 – 250 mesh, dot-patterned polyester screen
UV Cure	High intensity UV Light at 4 J/cm ²

Final Properties

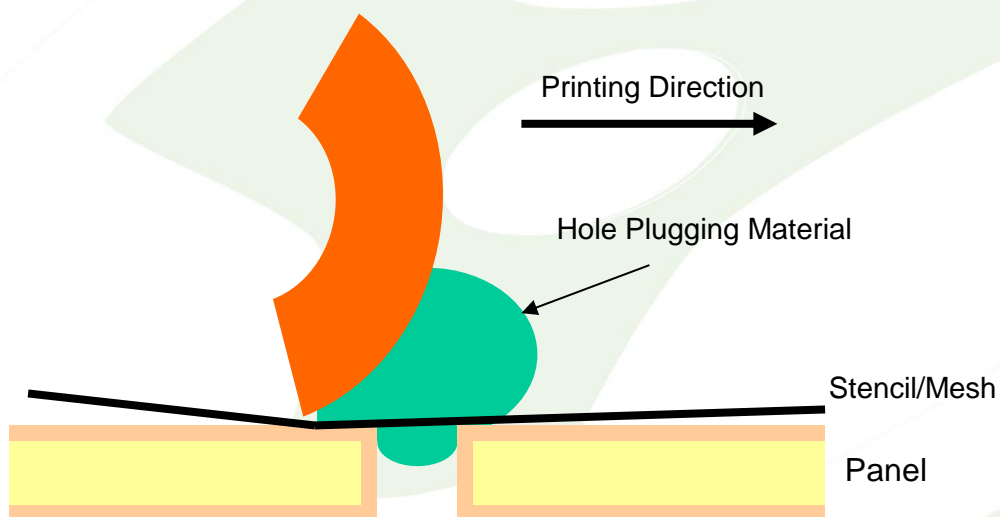
Test		Results
Color		Light Green
Adhesion cross cut		100/100
Pencil Hardness		7H
Halogen Content		408 ppm
Tg – DSC		100°C
Tg – DMA (Loss Modulus)		100°C
Tg – TMA (Tension Mode)		99°C
CTE – TMA (Tension Mode)	α1 (10-65°C)	59 ppm
	α2 (120-180°C)	160 ppm
Electrochemical Migration (21 Days)		4.96 x 10 ⁷ Ω
Thermal Stress (Solder Float at 288°C/10secs/5cycles)		Pass
Solder Resistance Rosin Flux, 260°C/20secs/2cycles		Pass
Solvent Resistance: PM Acetate at room temperature for 30 minutes		Pass

Screen Print Set Up with Straight Squeegee

Screen Printing (Pushing Method)



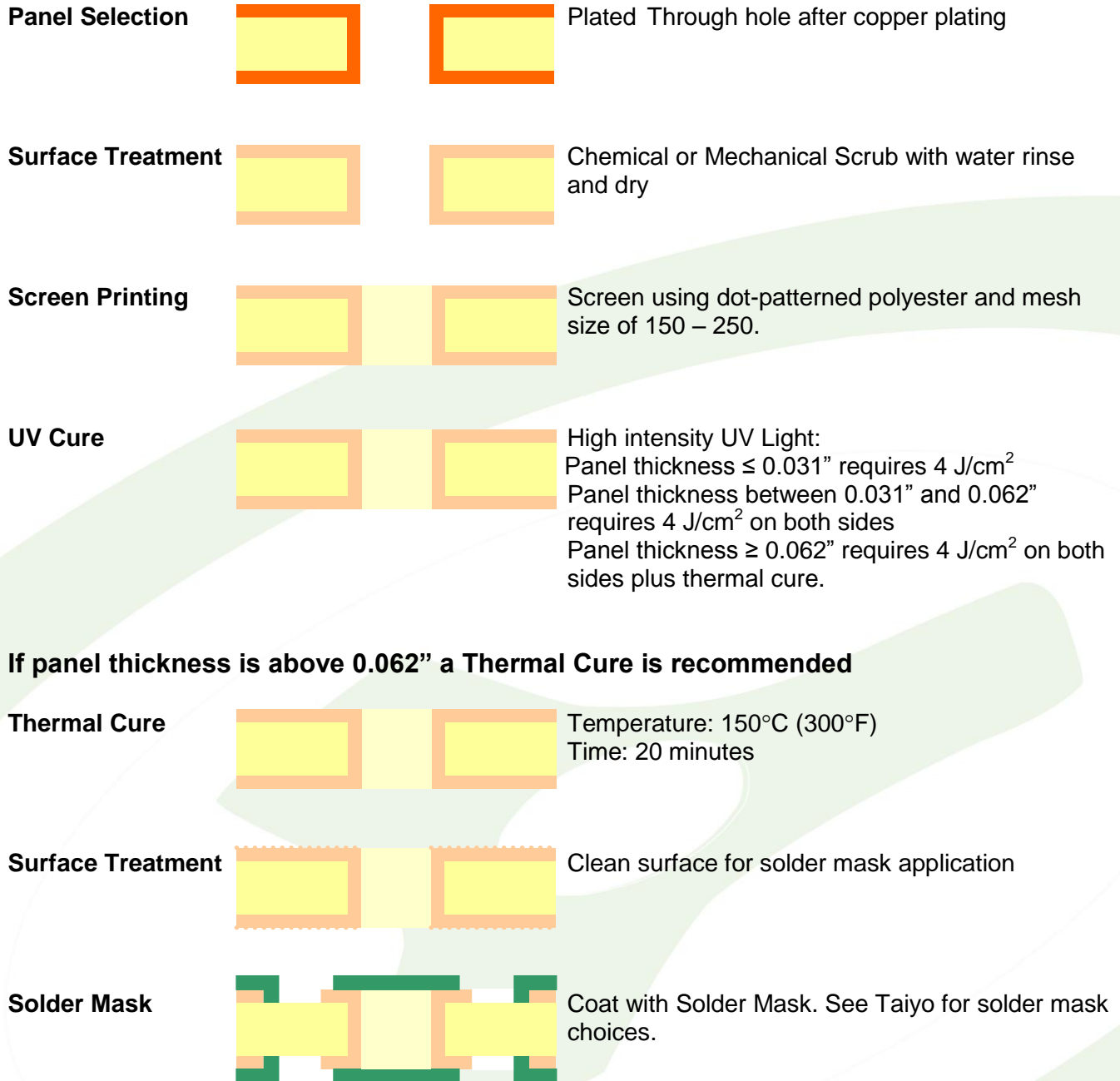
Screen Printing (Plow Method)



TECHNICAL DATA SHEET

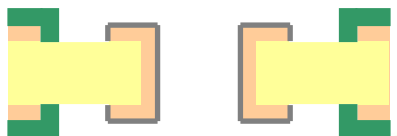


Hole Plugging Process for UVHP-100 (Prior to Solder Mask)

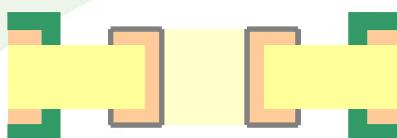


Hole Plugging Process for UVHP-100 (After Solder Mask or Final Metal Finish)

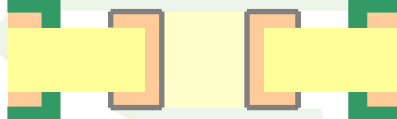
Panel Selection  PCB after solder mask and/or after final metal finish treatment.

Surface Treatment  Chemical Clean with water rinse and dry

Screen Printing  Screen using dot-patterned polyester and mesh size of 150 – 250.

UV Cure  High intensity UV Light:
 Panel thickness ≤ 0.031 " requires 4 J/cm^2
 Panel thickness between 0.031 " and 0.062 " requires 4 J/cm^2 on both sides
 Panel thickness ≥ 0.062 " requires 4 J/cm^2 on both sides plus thermal cure.

If panel thickness is above 0.062" a Thermal Cure is recommended

Thermal Cure  Temperature: 150°C (300°F)
 Time: 20 minutes

Taiyo America, Inc. (TAIYO) warrants its products to be free from defects in materials and workmanship for the specified warranty period (**UVHP-100 Warranty period is 12 Months**) provided the customer has, at all times, stored the ink at a temperature of 68°F or less. TAIYO accepts no responsibility or liability for damages, whether direct, indirect, or consequential, resulting from failure in the performance of its products. If a TAIYO product is found to be defective in material or workmanship, its liability is limited to the purchase price of the product found to be defective. TAIYO MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. TAIYO'S obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay. If requested by TAIYO, products for which a warranty claim is made are to be returned transportation prepaid to TAIYO'S factory. Any improper use or any alteration of TAIYO'S product by the customer, as in TAIYO'S judgment affects the product materially and adversely, shall void this limited warranty.