

**TAIYO AMERICA, INC.**  
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**CERTIFICATE OF ANALYSIS and CONFORMANCE**

This is to certify that the following product has been inspected prior to sale and shipment, and complies with Taiyo America's manufacturing specifications for this product.

PSR-4000 SW01TA      Lot # 0091827      Mfg. Date: 9-18-20  
 Warranty Ends: 9-18-21

<u>PROPERTY</u>	<u>TEST METHOD</u>	<u>MANUFACTURING SPECIFICATION</u>	<u>RESULT</u>
<b>VISCOSITY</b>	Toki Sangyo RE100U Viscometer 5 rpms @ 25°C	After mixing: 145 - 175 ps	159 ps
<b>THIXOTROPIC INDEX</b>	Toki Sangyo RE100U Viscometer Viscosity ratio: 5 rpm / 50 rpm	After mixing: 1.0 - 1.2	1.2
<b>FINENESS OF GRIND</b>	TAI-0-0002	15 microns maximum	5 microns
<b>VISUAL EXAMINATION</b>	Microscopic examination:		
	1. 1-mil drawdown of wet film	No bubbles, pits, voids, particles, color differences.	Passed <input checked="" type="checkbox"/>
	2. Wet film drawdown on grind gauge	No bubbles, pits, voids, particles, color differences.	Passed <input checked="" type="checkbox"/>
<b>SCREENABILITY</b>	Visual inspection of screen printed panel	No surface defects, such as bubbles, pinholes, etc.	Passed <input checked="" type="checkbox"/>
<b>TACK-DRY</b>	Hot air convection oven 80°C / 30 minutes	Tack-free to the touch	Passed <input checked="" type="checkbox"/>
<b>IMAGING</b>	ORC HMW 680GW - 7 kW 600 mJ / cm <sup>2</sup> Horizontal Developer - 1% Na2CO3 30°C (86°F) / 60 secs., 28 psi	Stouffer 21 step: Report Only (clear on copper)	9
<b>RESISTANCE TO SOLDERING (*)</b>	260°C (500°F) / 10 sec x 3 cycles Rosin-based flux	No discoloration, peeling, or blistering	Passed <input checked="" type="checkbox"/>
<b>SOLVENT RESISTANCE (*)</b>	Immersion in PM Acetate 20°C / 20 mins.	No swelling, softening, or blistering	Passed <input checked="" type="checkbox"/>
<b>PENCIL HARDNESS (*)</b>	TAI-0-0020	5H or greater	9H
<b>ADHESION (*)</b>	TAI-0-0021	100/100 on copper	Passed <input checked="" type="checkbox"/>

(\*) - Final cure for these tests was 60 minutes @ 150°C (302°F) in a convection oven.

Verified By:

*[Signature]* P.C. SUPERVISOR 9/23/20  
 Name, Title, Date