

**TAIYO AMERICA, INC.**  
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**CERTIFICATE OF 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 GEC50      Lot # **9042287**      Mfg. Date: **4-22-19**  
 Warranty Ends: **10-22-19**

<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	Before mixing: 250 - 310 ps After mixing: 150 - 180 ps	<b>276 ps</b> <b>173 ps</b>
<b>THIXOTROPIC INDEX</b>	Toki Sangyo RE100U Viscometer Viscosity ratio: 5 rpm / 50 rpm	Before mixing: 1.1 - 1.5 After mixing: 1.1 - 1.4	<b>1.3</b> <b>1.2</b>
<b>FINENESS OF GRIND</b>	TAI-0-0002	5 microns maximum	<b>5 microns</b>
<b>VISUAL EXAMINATION</b>	Microscopic examination: 1. 1-mil drawdown of wet film 2. Wet film drawdown on grind gauge	No bubbles, pits, voids, particles, color differences. No bubbles, pits, voids, particles, color differences.	<b>Passed</b> <input checked="" type="checkbox"/> <b>Passed</b> <input checked="" type="checkbox"/>
<b>SCREENABILITY</b>	Visual inspection of screen printed panel	No surface defects, such as bubbles, pinholes, etc.	<b>Passed</b> <input checked="" type="checkbox"/>
<b>TACK-DRY</b>	Hot air convection oven 80°C / 30 minutes	Tack-free to the touch	<b>Passed</b> <input checked="" type="checkbox"/>
<b>IMAGING</b>	ORC HMW 680GW - 7 kW 300 mJ / cm <sup>2</sup> Horizontal Developer - 1% Na2CO3 30°C (86°F) / 60 secs., 28 psi	Report Only (clear on copper)	<b>10</b>
<b>RESISTANCE TO SOLDERING (*)</b>	260°C (500°F) / 30 sec x 1 cycle Rosin-based flux	No discoloration, peeling, or blistering	<b>Passed</b> <input checked="" type="checkbox"/>
<b>SOLVENT RESISTANCE (*)</b>	Immersion in PM Acetate 20°C / 20 mins.	No swelling, softening, or blistering	<b>Passed</b> <input checked="" type="checkbox"/> <b>8 H</b>
<b>PENCIL HARDNESS (*)</b>	TAI-0-0020	7H or greater	
<b>ADHESION (*)</b>	TAI-0-0021	100/100 on copper	<b>Passed</b> <input checked="" type="checkbox"/>

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

Verified By: *[Signature]*  
 Name, Title, Date  
*Q.C. SUPERVISOR 4/24/19*