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 # 9052387 Mfg. Date: 5-23-19
Warranty Ends: 5-23-20

PROPERTY	TEST METHOD	MANUFACTURING SPECIFICATION	RESULT
VISCOSITY	Toki Sangyo RE100U Viscometer 5 rpms @ 25°C	After mixing: 145 - 175 ps	173 ps
THIXOTROPIC INDEX	Toki Sangyo RE100U Viscometer Viscosity ratio: 5 rpm / 50 rpm	After mixing: 1.0 - 1.2	1.1
FINENESS OF GRIND	TAI-0-0002	15 microns maximum	5 microns
VISUAL EXAMINATION	Microscopic examination:		
	1. 1-mil drawdown of wet film	No bubbles, pits, voids, particles, color differences.	Passed ☑
	2. Wet film drawdown on grind gauge	No bubbles, pits, voids, particles, color differences.	Passed ☑
SCREENABILITY	Visual inspection of screen printed panel	No surface defects, such as bubbles, pinholes, etc.	Passed ☑
TACK-DRY	Hot air convection oven 80°C / 30 minutes	Tack-free to the touch	Passed ☑
IMAGING	ORC HMW 680GW - 7 kW 600 mJ / cm^2 Horizontal Developer - 1% Na2CO3 30°C (86°F) / 60 secs., 28 psi	Stouffer 21 step: Report Only (clear on copper)	9
RESISTANCE TO SOLDERING (*)	260°C (500°F) / 10 sec x 3 cycles Rosin-based flux	No discoloration, peeling, or blistering	Passed ☑
SOLVENT RESISTANCE (*)	Immersion in PM Acetate 20°C / 20 mins.	No swelling, softening, or blistering	Passed ☑
PENCIL HARDNESS (*)	TAI-0-0020	5H or greater	7H
ADHESION (*)	TAI-0-0021	100/100 on copper	Passed ☑

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

Verified By:

[signature] Q.C. SUPERVISOR 7/2/19

Name, Title, Date