TAIYO AMERICA, INC. 2675 Antler Drive, Carson City, NV 89701 Phone: (775) 885-9959 Fax: (775) 885-9972

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.

This product meets all the requirements of IPC-SM-840E Classes H and T and Bellcore (Telecordia) GR-78-CORE and is UL recognized 94V-0 (File #E166421, UL Name: PSR-4000DE).

PSR-4000HFX Satin Blue	Lot# 0082537	Mfg. Date: $\vartheta - 25 - 25$ Warranty Ends: $5 - 25$	-21
PROPERTY VISCOSITY	<u>TEST METHOD</u> Toki Sangyo RE100U Viscometer 5 rpms @ 25°C	MANUFACTURING <u>SPECIFICATION</u> Before mixing: Report Only After mixing: 220 - 270 ps	<u>RESULT</u> 600 ps 247 ps
THIXOTROPIC INDEX	Toki Sangyo RE100U Viscometer Viscosity ratio: 5 rpm / 50 rpm	After mixing: Report Only	1.4
FINENESS OF GRIND	TAI-0-0002	5 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 400 mJ / cm ² Horizontal Developer - 1% Na2CO3	Stouffer 21 step: 8 - 12 (clear on copper)	10
	$30^{\circ}C (86^{\circ}F) / 60$ secs., 28 psi		
RESISTANCE TO SOLDERING (*)	260°C (500°F) / 30 sec x 1 cycle Rosin-based flux	No discoloration, peeling, or blistering	Passed 2
SOLVENT RESISTANCE (*)	Immersion in PM Acetate 20 [°] C / 20 mins.	No swelling, softening, or blistering	Passed v.
PENCIL HARDNESS (*)	TAI-0-0020	6H or greater	0.11
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: . С. Supsprison 9/11/20 , Title, Date Name.

10/14/11

FRM-0-0107