

**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-4000BN).

PSR-4000BN Black

Lot # 0081117

Mfg. Date: 8-11-20

Warranty Ends: 8-11-21

**PROPERTY**  
**VISCOSITY**

**TEST METHOD**

Toki Sangyo RE100U Viscometer  
5 rpms @ 25°C

**MANUFACTURING SPECIFICATION**

Before mixing: 325 - 375 ps  
After mixing: 175 - 225 ps

**RESULT**

356 ps  
206 ps

**THIXOTROPIC INDEX**

Toki Sangyo RE100U Viscometer  
Viscosity ratio: 5 rpm / 50 rpm

After mixing: 1.2 - 1.6

1.4

**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  
500 mJ / cm<sup>2</sup> (under artwork)  
Horizontal Developer - 1% Na<sub>2</sub>CO<sub>3</sub>  
30°C (86°F) / 60 secs., 28 psi

Stouffer 21 step: 9 - 13  
(clear on copper)

10

**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 / 30 mins.

No swelling, softening, or blistering

Passed

**PENCIL HARDNESS (\*)**

TAI-0-0020

7H or greater

9H

**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 8/13/20  
 Name, Title, Date