

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 FH and FT.

PSR-9000 LDI Green Lot # 0040257 Mfg. Date: 4-02-20
 Warranty Ends: 10-02-20

| <u>PROPERTY</u> | <u>TEST METHOD</u> | <u>MANUFACTURING SPECIFICATION</u> | <u>RESULT</u> |
|------------------------------------|--|---|--|
| VISCOSITY | Toki Sangyo RE100U Viscometer 5 rpms @ 25°C | Before mixing: Report Only After mixing: 140- 200 ps | 238 ps 175 ps |
| THIXOTROPIC INDEX | Toki Sangyo RE100U Viscometer Viscosity ratio: 5 rpm / 50 rpm | After mixing: Report Only | 1.3 |
| 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 <input checked="" type="checkbox"/> |
| | 2. Wet film drawdown on grind gauge | No bubbles, pits, voids, particles, color differences. | Passed <input checked="" type="checkbox"/> |
| SCREENABILITY | Visual inspection of screen printed panel | No surface defects, such as bubbles, pinholes, etc. | Passed <input checked="" type="checkbox"/> |
| TACK-DRY | Hot air convection oven 80°C / 30 minutes | Tack-free to the touch | Passed <input checked="" type="checkbox"/> |
| IMAGING | ORC HMW 680GW - 7 kW 100 mJ / cm ² (Under Artwork) Horizontal Developer - 1% Na2CO3 30°C (86°F) / 60 secs., 28 psi | Stouffer 21 step: 12 - 16 (clear on copper) | 14 |
| RESISTANCE TO SOLDERING (*) | 260°C (500°F) / 10 sec x 3 cycles Rosin-based flux | No discoloration, peeling, or blistering | Passed <input checked="" type="checkbox"/> |
| SOLVENT RESISTANCE (*) | Immersion in PM Acetate 20°C / 30 mins. | No swelling, softening, or blistering | Passed <input checked="" type="checkbox"/> |
| FLEXIBILITY (*) | TAI-0-0025 | No cracking | Passed <input checked="" type="checkbox"/> |
| PENCIL HARDNESS (*) | TAI-0-0020 | 3H or greater | 8H |
| ADHESION (*) | TAI-0-0021 | 100/100 on copper | Passed <input checked="" type="checkbox"/> |

(*) - Final cu: WARRANTY EXTENSION 150°C (302°F) in a convection oven

This product has been retested by the Taiyo America Quality Control department and has been granted a warranty extension.
 Warranty period ends:
12/02/20

Verified By: [Signature] P.C. SUPERVISOR 4/7/20
 Name, Title, Date