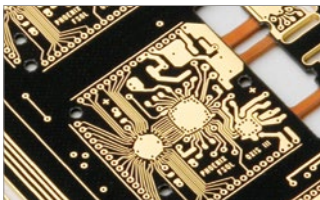




Version: 10 April 2017

GOBRIGHT® TWX-40

GOLD ELECTROLYTE



Semi Autocatalytic Gold Electrolyte

Gobright® TWX-40 is a special gold electrolyte specifically designed for plating on electroless palladium deposits. The electrolyte is able to deposit uniform gold layers up to 0.3 µm independent of pad sizes and PCB surface potential. Due to its semi autocatalytic reaction corrosive attack on the intermediate nickel layer is almost excluded. As a result an improvement in solder joint reliability and gold wire bondability can be achieved.



Advantages

- Can be used for different solderable and bondable PCB final finishes: ENEPIG, ENIG, EPIG and ISIG
- Does not cause Ni corrosion, even with higher gold layer thicknesses
- Homogeneous perfect gold thickness distribution, independent of circuit layout and potential
- Excellent solder joint reliability
- Very good gold wire bondability
- Can be directly deposited on nickel or palladium without intermediate activation

Applications

- LED application
- Medical technology
- Aerospace technology

GOBRIGHT® TWX-40

GOLD ELECTROLYTE

TECHNICAL SPECIFICATIONS

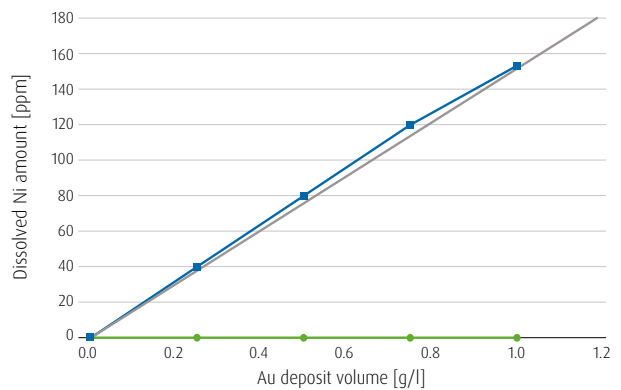
Electrolyte characteristics	
Electrolyte type	Semi autocatalytic
Metal content	1.2 (1.0 - 1.4) g/l Au
pH value	7.1 (6.9 - 7.4)
Operating temperature	78 (76 - 84) °C
Plating speed	0.12 µm/15 min at 78°C

Coating characteristics	
Coating	Fine gold
Purity	99.9 wt.%
Colour of deposit	Yellow

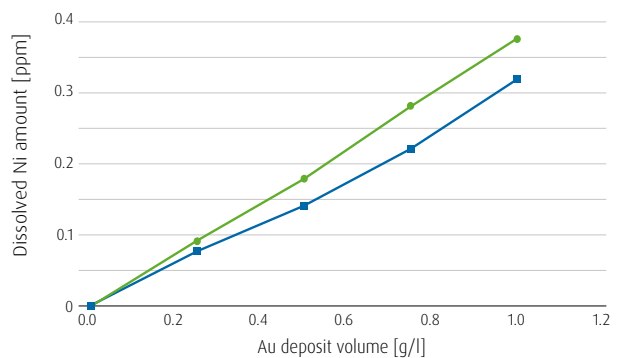
TEM Analysis of ENEPIG Metallisation



Dissolved Ni Amount - TWX-40 vs. Displacement Type Gold Electrolyte



● TWX-40
■ Displacement type Au electrolyte
 — Theoretical Value



● TWX-40 (Pd=0.05 µm)
■ TWX-40 (Pd=0.15 µm)

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