

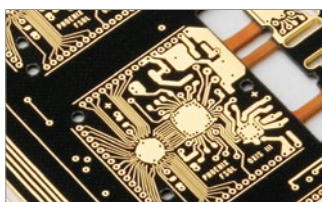


Version: 24 March 2025



# 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  $\mu\text{m}$  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

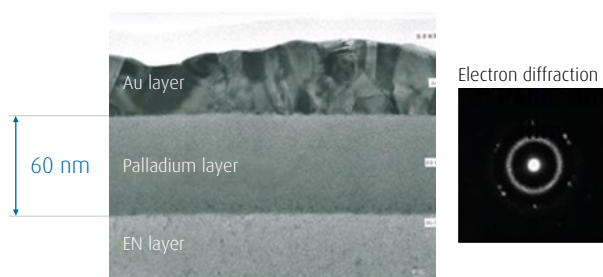
## GOLD ELECTROLYTE

### TECHNICAL SPECIFICATIONS

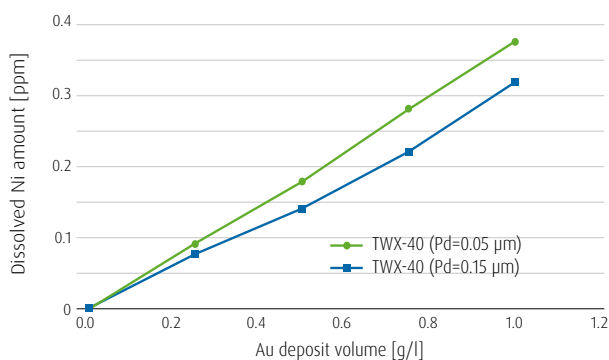
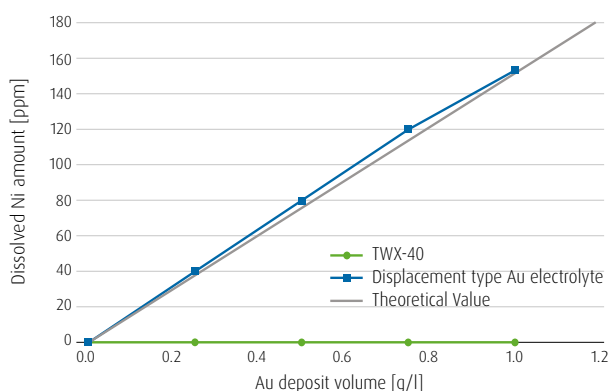
| Electrolyte characteristics |                           |
|-----------------------------|---------------------------|
| Electrolyte type            | Semi autocatalytic        |
| Metal content               | 1.2 (1.0 - 1.4) g/l Au    |
| pH value                    | 7.1 (6.9 - 7.4)           |
|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



### YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation?  
Our specialist will be happy to help you with any technical questions you might have.



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