

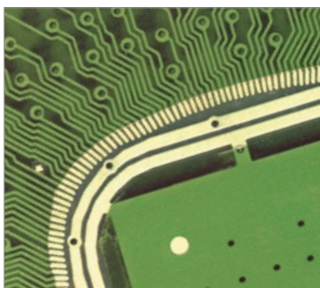


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# AURUNA<sup>®</sup> 5100

## PURE GOLD ELECTROLYTE

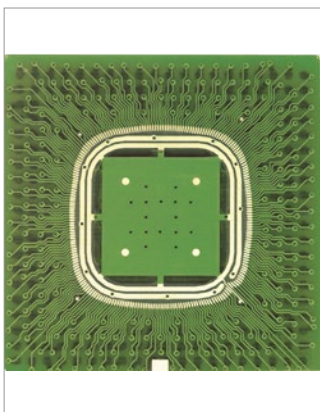


### Pure Gold Coatings with Very Good Bonding and Soldering Properties

AURUNA<sup>®</sup> 5100 is a neutral fine gold electrolyte for depositing matt, lemon-yellow coatings. It's specifically developed for applications requiring excellent bonding and soldering properties.

In addition to good ductility, the layers from AURUNA<sup>®</sup> 5100 also exhibit a low hardness and a low contact resistance. Even under production conditions, the layers have a high gold purity of 99.99 wt. % Au.

The coatings meet the requirements of ASTM B488-01, Type III, Code A/B.



### Advantages

- Neutral electrolyte for pure gold coatings with very good thickness distribution
- High current efficiency
- Resist-friendly operating conditions
- Excellent bonding and soldering properties
- Low contact resistance
- Classification according to ASTM B488-01 Type III, Code A/B
- Compatible with standard BGA requirements
- Easy maintenance and high stability of the electrolyte

### Applications

- Rigid and flexible printed circuit boards
- Semiconductors
- BGA applications
- Ceramic and metallic substrates

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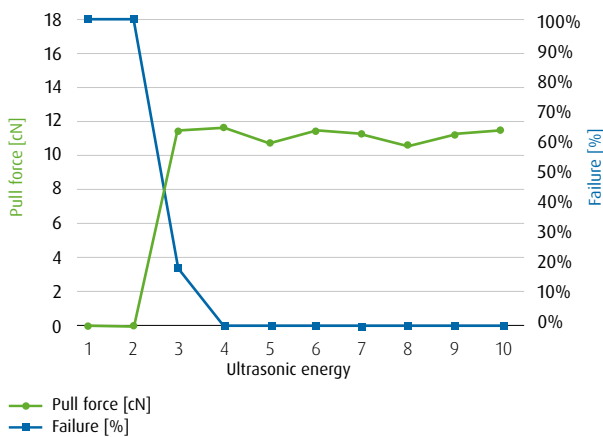


### TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Neutral
Metal content	5 (4 - 8) g/l Au
pH value	6.0 (5.8 - 6.2)
Operating temperature	65 (60 - 70) °C
Current density range	0.2 (0.1 - 0.5) A/dm <sup>2</sup>
Plating speed	Approx. 0.13 µm/min at 0.2 A/dm <sup>2</sup>
Anode material	Pt-Ti (type PLATINODE <sup>®</sup> Pt/Ti)

Coating characteristics	
Coating	Fine gold
Purity	99.99 wt.% Au
Colour of deposit	Lemon-yellow
Brightness	Matt
Hardness of layer HV 0.015 (Vickers)	85 HV
Density of deposited layer	Approx. 19 g/cm <sup>3</sup>

### Thermosonic Bonding - Larger Process Range



Thermosonic device: K&S 4124 (60 kHz)  
 Au wire type: 25 µm  
 No. of pulls : 50  
 Bond distance: 1.7 mm  
 Loop height: 0.5 mm  
 Wire deformation: < 1.6

Umicore Galvanotechnik GmbH  
 Klarenbergstrasse 53-79  
 73525 Schwaebisch Gmuend (Germany)

Technical Support: Phone +49 7171 607-357  
 Sales Department: Phone +49 7171 607-204

[www.ep.umicore.com](http://www.ep.umicore.com)



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