

## **Umicore** Electroplating

# PALLUNA<sup>®</sup> ACF-800 PURE PALLADIUM ELECTROLYTE



#### Ammonia-Free and Chloride-Free

PALLUNA® ACF-800 is a newly developed neutral pure palladium electrolyte, which has a wide operating range and can be plated directly on nickel, copper or copper alloys.

PALLUNA® ACF-800 is ammonia-free and thereby avoids unpleasant smells. Furthermore the lifetime of the anodes is significantly extended and the corrosion of the system is immensely reduced by abstaining from the use of chloride. The produced layers are ultra-bright, crack-free and show low internal stress. At the same time they are ductile and extremely corrosion resistant.

By continuous activated carbon treatment organic decomposition products in the electrolyte can be removed.



#### Advantages

- $\cdot \,$  No unpleasant smell of ammonia
- Easy electrolyte maintenance
- High plating speed
- Neutral, ammonia-free and chloride-free electrolyte
- Ductile, ultra-bright and crack-free coatings
- Very good soldering and bonding features
- For rack and reel-to-reel operation

#### Applications

- Printed circuit boards
- Contacts on plug-in cards
- Smartcards
- On bonding wire

## PALLUNA® ACF-800 pure palladium electrolyte

### **TECHNICAL SPECIFICATIONS**

Electrolyte characteristics	
Electrolyte type	Free from ammonia and chloride
Metal content	12 (5 - 30 ) g/l Pd
pH value	6.5
Operating temperature	55 - 65 °C
Current density range	Up to 25 A/dm <sup>2</sup>
Plating speed	Up to 4 µm/min at 20 A/dm <sup>2</sup>
Anode material	MMO (type PLATINODE® 187 SO)



Coating characteristics	
Coating	Pure palladium
Purity	99.9 wt.% Pd
Colour of deposit	White / light and bright
Brightness	Bright
Hardness of deposit HV 0.015 (Vickers) approx. values	Approx. 280 HV
Coating density	Approx. 12 g/cm <sup>3</sup>
Corrosion resistance	Good

Umicore Galvanotechnik GmbH

Klarenbergstrasse 53-79 73525 Schwaebisch Gmuend (Germany) Technical Support:Phone +49 7171 607-357Sales Department:Phone +49 7171 607-204



www.ep.umicore.com

The information and statements contained herein are based on our experience in the fields of research and applied technology and are believed to be accurate at the time of publication, but - unless agreed in writing - we make no warranty with respect thereto, including but not limited to any results to be obtained. This product information sheet in the English language prevails any translation.