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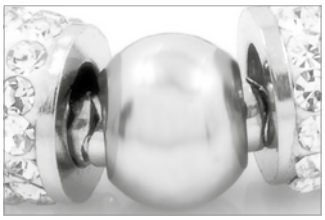
umicore Electroplating

PALLUNA® 459

PALLADIUM ELECTROLYTE



The intermediate layer as the perfect diffusion barrier for jewelry

PALLUNA® 459 deposits brillant, bright and extremely low-pore pure palladium layers. It can be used as pre-palladium, as a diffusion barrier before rhodium plating or gold plating or as a final layer for decorative applications.

The palladium electrolyte is very easy to use. Due to the excellent throwing power, expensive precious metal can be saved, making this electrolyte economically attractive.

Advantages

- Light-white pure palladium coatings
- Corrosion resistant
- Ductile layers for decorative applications
- Bright, low-pore coatings
- Excellent throwing power
- Easy handling of the electrolyte
- Crack-free layers up to 0.5 µm possible
- Suitable for rack and barrel

Applications

- Jewelry
- Writing implements
- Watches
- Spectacle frames
- Accessories

PALLUNA® 459

PALLADIUM ELECTROLYTE

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	ammoniacal
Metal content	1.5 - 2 g/l
pH value as pre-palladium as final layer	 7 - 7.2 8.5 - 9
Operating temperature	25 - 30 °C
Current density range	approx. 0.5 A/dm^2
Plating speed	up to 0.07 µm/min
Anode material	MMO (type PLATINODE® 167)

Coating characteristics	
Coating	Palladium
Purity	99.9 wt.% Pd
Colour of deposit	white
Brightness	Bright, brilliant
Hardness of deposit HV 0.015 (Vickers) approx. values	230 - 250 HV
Max. coating thickness	0.5 µm
Density	11.8 g/cm^3

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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