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PLATUNA[®] N1

PLATINUM ELECTROLYTE - FOR TECHNICAL APPLICATIONS



Bright and white coatings for electrical contacts

For wearables and cell phones, sales arguments such as a long service life and compatibility with fast charging devices are becoming increasingly crucial. But gold-plated charging contacts and connectors cannot meet these expectations because they corrode through contact with salt water, sweat, etc. RHODUNA[®] Alloy (rhodium-ruthenium) has therefore been established for years. Due to the current high price, however, we are looking for alternatives.

PLATUNA[®] N1 is a pure platinum plating solution, which deposits white and bright coatings. The layers itself maintain good electrical properties, high abrasion resistance and excellent corrosion resistance. The hardness of the platinum coating is approx. 500 HV, and the purity reach up to 99.9 wt.%. A platinum layer also offers a huge cost advantage at current precious metal prices.



Advantages

- Less expensive than Rhodium Alloy layers
- High protection against corrosion
- Bright, white and brilliant coatings
- Wide operating range
- The coatings are RoHS compliant
- For technical applications
- Crack free up to 2 µm
- Suitable for rack, barrel and reel-to-reel plating

Applications

- Smartwatches
- Headphones (In-Ears)
- Mobile phones
- Fitness tracker
- Plug contacts
- Pogo-Pins

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TECHNICAL SPECIFICATIONS

Electrolyte characteristics		Coating characteristics	
Electrolyte type	Strongly acidic	Coating	Pure platinum
Metal content	4 (2 - 12) g/l Pt	Purity	99.9 wt.% Pt
pH value	< 1	Colour of deposit	White
Operating temperature	35 (30 - 60) °C	Brightness	Bright
Current density range	3 (2 - 20) A/dm ²	Hardness of deposit HV 0.015 (Vickers)	approx. 500 HV
Plating speed	up to 1 µm/min	Max. coating thickness	2 µm
Anode material	MMO 187 SO	Density	approx. 21 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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