



AURUNA® 504

ROSE GOLD ELECTROLYTE



Gold-saving gold-copper coatings for decorative and technical applications

AURUNA® 504 is an alkaline electrolyte for the deposition of red gold-copper alloy coatings with a caratage of 16 - 18 carat. The process, which is based on gold(I) cyanide and free cyanide, is suitable for both decorative and technical applications. It is characterized by high electrolyte stability and easy operation.

The layers are ultra-bright, highly ductile, hard and abrasion resistant. As low-carat gold-saving coatings, they also exhibit very good corrosion and tarnish resistance.



Advantages

- Gold-saving coatings (16 18 kt)
- · High electrolyte stability
- · Tarnish and corrosion resistant
- · Hard, abrasion resistant coatings
- · Highly ductile

Applications

- Jewelry
- Watches
- · Accessories
- · Bathroom fittings
- · Lighting
- · Spectacle frames
- · Writing utensils
- Sliprings



TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Alkaline
Metal content	4 (3 - 5) g/l Au 30 (28 - 32) g/l Cu
pH value	11 (10.5 - 11.5)
Operating temperature	68 (66 - 70) °C
Electrolyte density	1.10 g/cm³ (1.07 - 1.24 g/cm³) rising with electrolyte life
Current density Rack Barrel	0.7 (0.5 - 0.9) A/dm² 0.25 (0.2 - 0.5) A/dm²
Deposition speed	approx. 0.25 μ m/min at 0.5 A/dm² approx. 0.34 μ m/min at 0.7 A/dm² approx. 0.43 μ m/min at 0.9 A/dm²
Deposition rate	approx. 68 mg/Amin at 0.7 A/dm²

Coating characteristics		
Coating	Gold copper	
Purity	67 - 75 wt.% Au 25 - 33 wt.% Cu	
Colour of deposit	Red	
Brightness	Ultra-bright	
Hardness of deposit HV 0.015 (Vickers) approx. values	approx. 320 HV	
Caratage	16 - 18 carats	
Density	approx. 14 g/cm³	

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.



Markus Legeler

Manager Sales International

Mail: markus.legeler@eu.umicore.com Phone: +49 (0) 7171 607 - 204

