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umicore Electroplating

AURUNA® 5500 EF

GOLD ELECTROLYTE FOR ELECTROFORMING

Arsenic-Free Electrolyte for Fine Gold Hollow Jewellery

AURUNA® 5500 EF is particularly suitable for electroforming. The electrolyte is free of arsenic and produces hard, semi-bright, thick gold layers. It is mainly used to produce high quality hollow jewellery with layers between 150 and 200 micrometer. Mandrels may be either made of wax or metal. The excellent hardness up to 180 HV and more than 99.9 percent fineness ensure customer satisfaction, because the hollow jewellery offers outstanding stability in use. It can be polished easily, has good surface quality and convinces with its solder properties. AURUNA® 5500 EF is also ideal when thick fine gold layers are deposited on (non-) precious metals. Creative combinations allow completely new designs.

Advantages

- 24 ct fine gold electrolyte for electroforming
- Suitable for wax and metal mandrels
- Layer thicknesses between 150 and 200 micrometer
- High hardness up to 180 HV at 99.9 percent fineness

Applications

- Electroforming
- Hollow jewellery
- Noble jewellery

AURUNA® 5500 EF

GOLD ELECTROLYTE FOR ELECTROFORMING

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Neutral
Metal content	16 (12 - 20) g/l Au
pH value	5.5 (5.0 - 6.0)
Operating temperature	40 (35 - 45) °C
Current density range	0.5 A/dm^2
Plating speed	Approx. 0.3 µm/min at 0.5 A/dm^2
Deposition rate	Approx. 110 mg/Amin
Current efficiency	Approx. 90 %
Anode material	MMO (Typ PLATINODE® 187 SO)

Coating characteristics	
Coating	Fine gold
Purity	99.9 wt. % Au
Caratage	24 carats
Colour of deposit	Yellow
Brightness	Semi-bright
Hardness of deposit HV 0.015 (Vickers) approx. values	Approx. 180 HV
Max. coating thickness	Several 100 µm
Density of the coating	Approx. 19.0 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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