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# AURUNA<sup>®</sup> 5500 EF

## GOLD ELECTROLYTE FOR ELECTROFORMING



### Arsenic-Free Electrolyte for Fine Gold Hollow Jewellery

AURUNA<sup>®</sup> 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<sup>®</sup> 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

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### TECHNICAL SPECIFICATIONS

Electrolyte characteristics		Coating characteristics	
Electrolyte type	Neutral	Coating	Fine gold
Metal content	16 (12 - 20) g/l Au	Purity	99.9 wt. % Au
pH value	5.5 (5.0 - 6.0)	Caratage	24 carats
Operating temperature	40 (35 - 45) °C	Colour of deposit	Yellow
Current density range	0.5 A/dm <sup>2</sup>	Brightness	Semi-bright
Plating speed	Approx. 0.3 µm/min at 0.5 A/dm <sup>2</sup>	Hardness of deposit HV 0.015 (Vickers) approx. values	Approx. 180 HV
Deposition rate	Approx. 110 mg/Amin	Max. coating thickness	Several 100 µm
Current efficiency	Approx. 90 %	Density of the coating	Approx. 19.0 g/cm <sup>3</sup>
Anode material	MMO (Typ PLATINODE <sup>®</sup> 187 SO)		

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