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AURUNA[®] 3407 EF

GOLD ELECTROLYTE FOR ELECTROFORMING



Cyanid-Free Gold Electrolyte

AURUNA[®] 3407 EF is cyanide free and mainly used for electroforming with wax and metal cores. The electrolyte allows to produce high-quality hollow jewellery with thick gold layers between 150 and 200 micrometer on mandrels made conductive.

The layers have an excellent hardness up to 160 HV and a fineness of 99.9 percent. Therefore, the produced pieces are very stable in use. The surfaces are semi-bright and show good quality. They can easily be polished as well as soldered.

The electrolyte convinces user dues to an additional surplus. It does not contain any toxic additives as grain refiners like arsenic, thallium or lead.



Advantages

- Cyanide-free gold electrolyte for the production of hollow jewellery
- Suitable for mandrels made of wax and metal
- Layer thicknesses of 150 to 200 micrometers, hardness up to 160 HV
- No arsenic, thallium or lead as grain refiner

Applications

- Electroforming
- Hollow jewellery

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TECHNICAL SPECIFICATIONS

| Electrolyte characteristics | |
|-----------------------------|--|
| Electrolyte type | Neutral |
| Metal content | 20 (19 - 21) g/l Au |
| pH value | 8.2 (8.0 - 8.4) |
| Operating temperature | 35 (30 - 40) °C |
| Current density range | 0.3 A/dm ² |
| Plating speed | Approx. 0.2 µm/min at 0.3 A/dm ² |
| Deposition rate | Approx. 122 mg/Amin |
| Current efficiency | Approx. 90 % |
| Anode material | Pt-Ti (Typ PLATINODE® Pt-Ti) |

| 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. 160 HV |
| Max. coating thickness | Several 100 µm |
| Density of the coating | Approx. 19.3 g/cm ³ |

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