

## Red Gold Plating Bath JE224

### Description:

The red gold plating bath JE224 is a neutral gold electrolyte with a stable pH value that works without free cyanide. The electrolyte is used for deposition of 18-carat red gold-copper coatings. It is suitable for technical and decorative applications as the deposited layers are very hard and abrasion resistant. Despite gold-saving coatings with low carat, the electrolyte has very good corrosion and tarnish resistance. Under optimal conditions, high-gloss and adhesive gold layers up to max. 10 µm layer thickness can be achieved.

### Operating data:

Gold content: 4 g/L (3,5-4,5)  
Copper content: 3 g/L (2,5-3,5)  
pH 7,5 (7,2-8,0)  
Density > 1,07 g/ml

### Deposition data:

Hardness: 380 - 400 HV  
Layer thickness: max. 10 µm  
Alloy composition: 75% Au, 25% Cu

### Working conditions:

Tension: 1,6 V (1,4-1,8)  
Bath temperature: 57 °C (55-60)  
Anode material: platinized titanium/mixed oxid  
Goods movement: required  
Anode-/cathode surface: 2:1  
Deposition rate: approx. 45 mg/Amin  
Power density: approx. 0,3 A/dm<sup>2</sup> (0,1-0,5)  
Bath filtration: from 10 Liter

### Form of delivery:

Ready for use with 4 g/L Au  
Regeneration Solution JE224

### Bath control/Regeneration:

Regeneration must take place at the latest after gold recovery of 20 %. For 1 g of deposited fine gold, 10 ml of potassium gold I-cyanide solution (100 g/L Au) and 10 ml of regeneration solution JE224 must be added.

To check the deposited precipitate weight, we recommend using an ampere minute counter. The pH value and density should be checked regularly and corrected accordingly. If the pH value is too high add diluted phosphoric acid and if it is too low pH carefully add 10 % potassium hydroxide solution. The bath should be checked at regular intervals. We are happy to carry out a bath analysis for you.

### Recycling:

The used solution contains precious metal, which we work up for you. The recovery of this solution can be profitable from 10 liters.

### Storage:

Store closed and dark, in suitable and well-marked containers. Do not bring in contact with cyanides or cyanide solutions.

### Risks / Elimination:

Before desistance of the liquid solution in the canalization a wastewater treatment should be affected. The specifications of the local water authority should be regarded. We will gladly dispose the solution professionally for you.

**Please consider our safety data sheet!**

### Jentner Plating Technology

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Management Service

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