

## Gold plating bath RED JE218

### Description

With the Gold Red plating bath JE218 a very bright, decorative and ductile gold layer can be deposited. A very nice shade between 4N (rose) and 5N (red) will be achieved. A uniform colour, distribution and consistency are further advantages of this user-friendly Gold process. The precious metal content of the gold layers is 14 – 18 ct. In this range the gold deposits have a very good resistance to tarnishing and corrosion.

### Operating data

Gold content	5 g/l Au
Copper content	55 (50 – 60) g/l Cu
Cyanide content	26 – 30 g/l free KCN
pH-value	11 (10,5 – 13)

### Operating conditions

Voltage	1,3 – 1,8 Volt (2,2 Volt)
Bath temperature	60°C (58 - 65°C)
Anodes	Stainless steel, MOX Platinized Titanium
Anode-/ Cathode surface area	Ca. 1:1
Agitation	Work or solution movement. Not air.
Current density	0,3-0,7 A/dm <sup>2</sup>
Bath filtration	Larger than 10 Litres
Deposition rate	60 - 75 mg/Amin prox. 0,25µm/min

### Deposition data

Hardness	340 - 390 HV
Layer density	15,3 g/cm <sup>3</sup>
Colour	4 N – 5N
Precious metal content	14 – 18 kt.

With the high ductility and brightness of the gold deposit it is possible to deposit a thicker Gold layer than using flash plating solutions

If the current density is lower, the precious metal content of the gold layer is higher and the colour is more yellow. Higher current densities produce a more intense red colour.

### Form of delivery

Ready to use liquid.

### Bath control/replenishment (regeneration)

Baths larger than 5 liters volume can be regenerated, saving costs.

Regeneration should be made at the latest after 20% of the Gold content is used. The addition of the required chemicals must be based on an analysis. The gold-, copper-, brightener- and cyanide-content must be controlled.

Analysis should take place at regular intervals. This can be arranged with a local analytical company or ourselves.

### Recycling

The used solution contains precious metal, which can be recycled by us. Recycling of these solutions can be profitable from a volume 10 litres.

For the recycling of precious metals we recommend our precious metal recycling unit. Please ask for details.

### Storage

Store in closed containers and separated from food products in suitable special marked boxes. Do not bring in contact with acids or acidic solutions, as the solution JE218 contains cyanide.

### Risks/Disposal

Used solutions should be disposed of by a specialist company who will treat it before discharging. Check with the local water authority for permitted discharge levels.

Please read our  
Safety data sheet!