Gold Plating Bath RED JE218

Description
With the Gold 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

Operating conditions

Voltage	1,3-1,9 Volt (max. 2,2)
Bath temperature	60°C (58-65)
Anode material	Platinized Titanium
Anode/Cathode surface	Ca. 1 : 1
Motion of goods	required
Power density	0,3 - 0,7 A/dm^2
Bath filtration	Up to 10 liter
Deposit rate	60–75mg/Amin Approx. 0,25µm/min
Basin material	PP, PPH

Deposition data

Hardness	340 – 390 HV
Layer density	15,3 g/cm^3
Colour	4 N – 5N
Precious metal content	14 – 18 kt.
Layer thickness	> 50 µm

With the high ductility of the gold layers it is possible to deposit thick coatings. If the current density is lower, the precious metal content of the gold layer is higher and the colour is more yellow.

Form of delivery
- Ready to use liquid
- Concentrate form from 20 liters

Higher current densities produce a more intense red colour.

Bath preparation
For 100 liters bath ready to use are required:
- 50 liters Make-up solution JE218
- 0,73 kg Potassium gold cyanide 68,2 %

Consumption values
To supplement the consumption of 100 g gold the following must be added:
- 150 g Potassium gold cyanide 68,2%
- 50 g Replenisher salt for JE218
- 75 g Potassium cyanide
- 250 ml Replenisher solution for JE218

Please note: The Replenisher salt JE218 must be necessarily pre-dissolved with the Potassium cyanide. For this dissolve first 75 g Potassium cyanide in approx. 0,5 liter distilled water and after this add 50 g Replenisher salt JE218. The Potassium gold cyanide must be also dissolved in hot distilled water. After full dissolution all components can be added.

Bath control / 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. If required we like to do a bath analysis for you.

Recovery / Recycling
The used solution contains precious metal, which we work up for you. The recovery of this solution can be profitable off 10 liter.

Jentner Plating Technology GmbH | Johann-Staib-Str. 2 | 75179 Pforzheim, Germany | Tel.: 07231 41 80 94-0 | Fax: -77 | www.jentner-plating.com

For the recovery of the precious metals can we advise our recovery machine. Talk to us!

Storage/Warehousing

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

Risks/ Disposal

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

Please consider our Safety data sheet!

Jentner Plating Technology GmbH | Johann-Staib-Str. 2 | 75179 Pforzheim, Germany | Tel.: 07231 41 80 94-0 | Fax: -77 | www.jentner-plating.com