

Metal deposits



Aurega[®] blend Cu 118 CX

Bright levelling ductile deposits in 18 carat gold

The gold process Aurega[®] blend Cu 118 CX is a cyanide electrolyte from which slightly rosé coloured alloys of gold can be deposited.

Depending on the applied current density the layer has about 15 ct. – 18 ct.

The process Aurega[®] blend Cu 118 CX can be used for decorative plating in the jewellery as well as optical frame industries. The layers are bright, ductile and slightly levelling.



Properties and benefits

- Cadmium-free due to RoHS
- Complies with REACH-Regulation
- Ductile, bright deposits
- Colour 4N
- Thickness up to 10 microns
- CuCl₂ resistant, polysulfide resistant
- Cost saving especially when plating high thicknesses
- High hardness of 400 HV₂₀ in comparison to 120 HV₂₀ in pure gold deposits

Application area

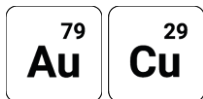
- Jewellery
- Optical frames
- Watches

Aurega blend Cu 118 CX_CNfree_E

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Technical Data

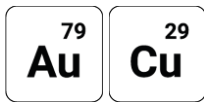
Electrolyte properties		
Parameter	Range	Optimum
Gold	4 – 6 g/l	5 g/l
Copper	50 – 60 g/l	52 g/l
Indium	0,7 – 0,9 g/l	0,8 g/l
Zinc	320 – 390 mg/l	350 mg/l
KCN _{free}	30 – 36 g/l	33 g/l
pH-value	10,4 – 10,8	10,6
Agitation		Necessary
Temperature		65 °C ±1°C
Stromdichte		0,5 – 1,2 A/dm ²
Carat at 0,6 A/dm ² , 5 g/l Au **		Approx. 18 kt
Carat at 0,75 A/dm ² , 5 g/l Au **		Approx. 16,7 kt
Carat at 1 A/dm ² , 5 g/l Au **		Approx. 15,6 kt
Current efficiency at 0,6 A/dm ² , 5 g/l Au**		71,8 mg/Amin
Current efficiency at 0,75 A/dm ² , 5 g/l Au**		70,1 mg/Amin
Current efficiency at 1 A/dm ² , 5 g/l Au**		66,0 mg/Amin
Exposition time for 1µ at 0,6 A/dm ² , 5 g/l Au**		Approx. 4,1 min
Exposition time for 1µ at 0,75 A/dm ² , 5 g/l Au**		Approx. 3,5 min
Exposition time for 1µ at 1 A/dm ² , 5 g/l Au**		Approx. 2,9 min

* Depending on agitation

** The given values of current densities and carats are based on lab testing conditions. Practical conditions depend on installations. (e.g. solution flow; cathode movement)

Current densities and related alloy deposition are depending on tank size and anode to cathode distance.





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Deposit characteristics

Appearance.....	rosé, 4N
Carat.....	approx. 15,6 – 18 ct
Gold content.....	approx. 65 – 75 %
Hardness.....	400 HV ₂₀

Products available

3406000	Aurega® blend Cu 118 CX Make up
3406050	Aurega® blend Cu 118 CX Make up 2
3406100	Aurega® blend Cu 118 CX Replenisher 1
3406200	Aurega® blend Cu 118 CX Replenisher 2
3406300	Aurega® blend Cu 118 CX Wetting agent
3406400	Aurega® blend Cu 118 CX Complexer
3061000	IWG Copper solution No. 42
3406500	IWG Indium solution No. 94
3406600	IWG Zinc solution No. 55
3406600	IWG Zinc salt No. 50
1159400	Potassium gold cyanide 68,2%
0021200	Potassium cyanide

FOR ANY FURTHER INFORMATION WE WILL BE PLEASED TO BE AT YOUR DISPOSAL
PERSONALLY UNDER+ 43 (0)2287 71073 OR OFFICE@IWGPLATING.COM

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