Rhodega® blend Ru eco

Economic brilliant white deposits

The rhodium-ruthenium process Rhodega® blend Ru eco is an economical acidic electrolyte from which brilliant white deposits with an appearance close to pure Rhodium can be deposited. The layers contain 70-80 % Rhodium and 30-20 % Ruthenium depending on the bath composition.
A typical field of application is for plating on jewellery, optical frames, watches and electric contacts.

Properties and Benefits

- RoHS compliant
- REACH compliant
- Very white layers
- outstanding contact resistance
- high resistance to abrasion, higher than pure rhodium
- good tribological characeristics
- Cheaper than pure rhodium
- L* = 90, a = +0,5, b = +3

Application area

- Jewellery
- Optical frames
- Watches
- Electric contacts

Technical Data

Electrolyte properties		
Parameter	Range	Optimum for 75% Rh and 25% Ru
Rhodium	0,8 – 1,2 g/l	1,0 g/l
Ruthenium	0,2 – 0,3 g/l	0,25 g/l
Sulfuric acid	33 – 37 g/l	35 g/l
Wetting agent	0 – 2 ml/l	1 ml/l
Temperature	40 – 50 °C	45 °C
Current density	1 – 10 A/dm²	
Anode/Cathode-ratio	At least 2:1	2:1
Agitation	4 – 10 cm/s	
Current efficiency at 1A/dm²	3 mg/Amin	

Dependent on the Rhodium/Ruthenium ratio in the bath the deposited alloy can be adjusted in the Rhodium/Ruthenium content. A Higher Ruthenium content in the bath leads to a higher Ruthenium content in the alloy. The total of Rh and Ru should be close to 1,25 g/l.
The whiteness of the deposit will be slightly reduced with increasing Ruthenium content.

Deposit characteristics	
Appearence	brilliant white
Purity (Rh + Ru)	99,99%
Specific gravity	approx. 12,4 g/cm³
Hardness	ca. 600 – 900 Hv_{20}

Products available

3520200	Rhodega® blend Ru Rhodium solution 40 g/l Rh
3520300	Rhodega® blend Ru Ruthenium solution 50 g/l Ru
3520900	Rhodega® blend Ru Wetting agent

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