



Metal deposits



Rhodega® blend Ru

Brilliant white deposits

The rhodium-ruthenium process Rhodega® blend Ru is an acidic electrolyte from which brilliant white deposits with an appearance close to pure Rhodium can be made. The rhodium-ruthenium 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 characteristics
- Cheaper than pure rhodium
- $L^* = 90$, $a = +0,5$, $b = +3$

Application area

- Jewellery
- Optical frames
- Watches
- Electric contacts

Rhodega blend RuLE

our know-how
is your success

iwgplating.com





Metal deposits

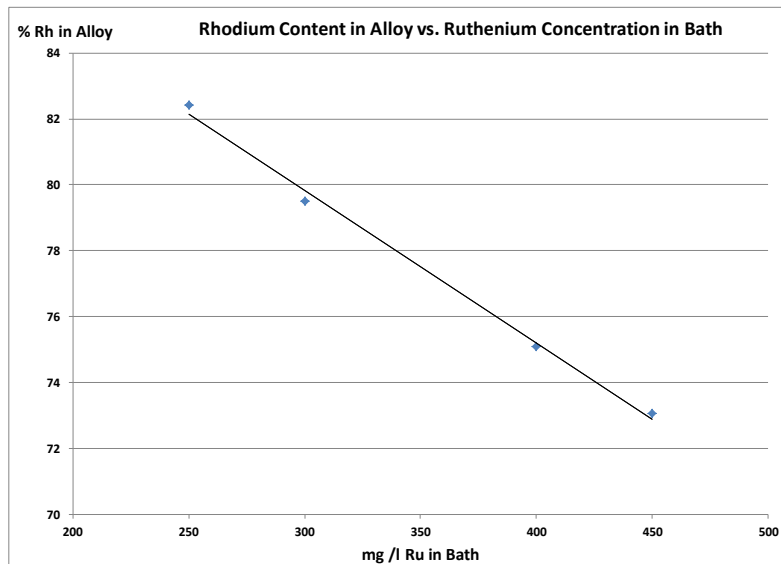


Technical Data

| Electrolyte properties | | |
|--|-------------------------|-------------------------------|
| Parameter | Range | Optimum for 75% Rh and 25% Ru |
| Rhodium | 1,4 – 1,8 g/l | 1,6 g/l |
| Ruthenium | 0,3 – 0,5 g/l | 0,4 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 – 5 A/dm ² | 1 A/dm ² Minimum |
| Anode/Cathode-ratio | At least 2:1 | 2:1 |
| Agitation | 4 – 10 cm/s | |
| Current efficiency at 1A/dm ² | 3 – 5 mg/Amin | |

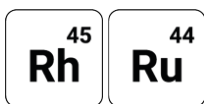
Dependent on the Rhodium/Ruthenium ratio in the bath the deposited alloy can be adjusted in the Rhodium/Ruthenium content. A Higher Ruthenium content in the bath leads to a higher Ruthenium content in the alloy. The total of Rh and Ru should be close to 2,0 g/l.

1,6 g/l Rh / 0,4 g/l Ru (4:1) results in an alloy approx. 75 % Rh, 25 % Ru.



The whiteness of the deposit will be slightly reduced with increasing Ruthenium content.

Rhodega blend Ru_E



Metal deposits



Deposit characteristics

| | |
|------------------------|--------------------------------|
| Appearance..... | brilliant white |
| Purity (Rh + Ru) | 99,99% |
| Specific gravity | approx. 12,4 g/cm ³ |
| Hardness | ca. 600 – 900 Hv ₂₀ |

Products available

| | |
|---------------|--|
| 3520000 | Rhodega® blend Ru Ready to use |
| 3521010 | Rhodega® blend Ru Make up 1:10 |
| 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

Rhodega blend RuLE

our know-how
is your success

iwgplating.com

