



## RHODUNA® J1 Rhodium Electrolyte

### Brilliant white rhodium electrolyte for decorative applications

RHODUNA® J1 deposits brilliant white, very light and bright surface finishes. This makes the electrolyte ideal for use in decorative applications, such as jewelry, watches or spectacle frames. Special features are its high deposition rate and excellent throw pdf-rowing power. Furthermore, RHODUNA® J1 deposits layers 0.1 - 0.3 µm thick without cracking.

Rhodium is deposited directly onto silver, gold, copper and copper alloys, nickel and nickel alloys. The electrolyte is suitable for rack and barrel plating.



### Electrolyte characteristics

Electrolyte type	Strongly acidic
Metal content	2 (1.6 - 2.4) g/l Rh
pH value	< 1
Operating temperature	35 (20 - 40) °C
Current density range	1 A/dm <sup>2</sup>
Plating speed	0.025 µm/min at 1 A/dm <sup>2</sup>
Anode material	Pt-Ti (type PLATINODE® Pt/Ti) or MMO (Typ PLATINODE® 187)

### Coating characteristics

Coating	Rhodium
Purity	99.99 wt.% Rh
Colour of deposit	brilliant white

Brightness	bright
Hardness of deposit	approx. 800 - 900 HV
Max. coating thickness	approx. 0.3 µm

## Advantages

- Extremely light and bright coatings
- Good deposition rate
- Low porosity
- Excellent throw pdf-rowing power
- Layers 0.1 - 0.3 µm thick without cracking
- Suitable for rack and barrel plating

## Applications

- Jewelry
- Watches
- Spectacle frames
- Writing utensils

## Your contact person



**Markus Legeler**

Manager Sales International

T: +49 7171 607 204

F: +49 7171 607 316

[markus.legeler@eu.umicore.com](mailto:markus.legeler@eu.umicore.com)