

Instructions

Gesswein® Cold White Rhodium Solution

SKU: 2100904 and 2100906

Description:

The Cold White Rhodium Solution deposits mirror shining, brilliant white, magnificent hard, abrasion resistant rhodium coatings. It is preferably used for decorative coatings and jewelry industry. It wins also through its corrosion protection characteristics. Therefore, this rhodium electrolyte is adopted in many cases as tarnish protection for silver products.

Operating data:

Rhodium content	1.0 or 2.0 g/L depending on the variant
pH-value	<1

Deposition data:

Hardness	800 – 900 HV
Layer thickness	0.5 µm for 1.0 g/L Rh 1.0 µm for 2.0 g/L Rh
Layer density	ca. 12.4 g/cm ³

Operating conditions:

Voltage	2 – 3 V
Bath Temperature	20 – 35 °C
Exposition time	2 min. (1 – max. 10 min)
Anode material	Platiniertes Titan oder MOX
Goods movement	recommended
Bath filtration	ab 10 L
Anode-/ cathode surface	1:1
Deposition rate	6 – 8 mg/Amin
Current density	0.5 – 2.0 A/dm ²

Form of delivery:

Ready for use 1 and 2 g/L Rh
Concentrate form 1 and 2 g/100ml Rh for 1 liter bath

Bath control/Regeneration:

Regeneration should be made at the latest after 20% of the Rhodium content is worked out. For 1g of Rhodium 50 ml of Rhodium Replenisher must be added.

For control of the deposition weight, we recommend an ampere minute counter. Especially for bigger baths control should take place in regular intervals. Gladly we researcher a bath analysis for you. After a longer period of use, activated carbon cleaning is recommended.

Subsequently, 20 ml/L Additive for Rhodium Bath must be added.

Recommended pre-treatment:

After electrolytic degreasing, the product should be rinsed and then immersed in a 5% sulfuric acid solution. This prevents carryover of the degreasing electrolyte into the rhodium bath.

Recycling:

The used solution contains precious metal, which we like to recycle for you. Recycling of these solutions can be profitable from 1 liter.

Storage:

Store closed and dark, in suitable and well marked containers. Do not bring in contact with cyanides or cyanide solutions because the bath contains sulfuric acid.

Risks/elimination:

Before desistance of the liquid solution in the canalization a wastewater treatment should be effected.

The specifications of the local water authority should be regarded.

Please refer to our safety data sheet.