

## Black Rhodium Bath JE23GO! RS NDG

### Description

The Black Rhodium Bath JE23GO! RS deposits dark anthracite-grey, particular decorative Rhodium coatings. The layers are very abrasion resistant, colour consistent and uniform. The electrolyte is preferably used for decorative coatings in the jewelry and eyewear industry. The Black Rhodium Bath JE23GO! RS is characterized by easy handling and usability. It works at room temperature so a time and energy expensive heat up can be dropped. Coatings up to 0.5 µm can be deposited.

### Operating data

Rhodium content 1.0 g/l and 2.0 g/l Rh  
 pH-Value <1  
 Density 1.02 – 1.07 g/cm<sup>3</sup>

### Deposition data

Color, L-Value            48 - 50  
 Hardness                    300 – 370 HV  
 Layer thickness            max. 0.5 µm  
 Layer density                approx 10.5 g/cm<sup>3</sup>

### Operating conditions

Voltage	2.5 – 3.5 Volt
Bath temperature	20°C (RT)
Exposition time	5 min. (3 – 15)
Anodes	Platinised titanium or mixed-metal-oxide MOX
Anode/Cathode	1 : 1
Current density	1.0 – 1.5 A/dm <sup>2</sup>
Agitation	Advantageous
Bath filtration	from 10 Liter
Deposition rate	6 – 8mg/A min

### Form of delivery

- Ready for use (1 g Rh/Liter)
- Ready for use (2 g Rh/Liter)

### Bath control/regeneration

Regeneration should be made at the latest after 20% of the Rhodium content is worked out. For 1 g of Rhodium 50 ml of Rhodium replenisher JE23-RS must be added. For control of the deposition weight we recommend an ampere minute counter. Even by bigger baths control should take place in regular intervals. If required we accomplish a bath analysis for you. The Black Rhodium Bath should not be treated with charcoal. Otherwise the function would be destroyed. The Black Rhodium electrolyte may lose its color when it has been in long use. This indicates probably a worked out rhodium content.

### Recommended pre-treatment

After electrolytic degreasing rinse well and dip in 3 – 5% sulfuric acid. So a contamination of the rhodium bath will be avoided. After a further rinsing the Rhodium deposition can be done. For silver items, we recommend first applying a layer of fine gold, then rinsing again and then rhodium plating.

### Recycling

The used solution contains precious metal, which we like to recycle for you. Recycling of these solutions can be profitable from 10 liters.

### Storage

Store closed and separated from food products and forage in convenient and special marked boxes. Do not bring in contact with cyanides or cyanide solutions, because the solutions contain acid sulfur.

**Risks/Disposal**

Before drain off the hydrous solutions in the canalization a liquid waste treatment should take place. The specifications of the local responsible water authority are to be regarded.

**Please regard our safety data sheet!**