



Johnson Matthey  
Chemical Products

## Rhodium sulphate plating solution RJ100S



### Product name

Rhodium sulphate plating solution

### Chemical formula

$\text{Rh}_2(\text{SO}_4)_3$

### Product code\*

UK - 153100

CN - 3010005L

\* This product can be ordered worldwide under the UK and CN product codes.

### CAS Number

10489-46-0

### Product family

Pgm compound solution (aqueous)

### Process

Electroplating

### Market

Jewellery, Electronics

This sulphate based concentrate has been specifically developed for decorative applications. It will produce bright, white lustrous deposits up to maximum thickness of 2.5  $\mu\text{m}$ .

### Bath preparation

Typical requirements for 1 litre solution

**Demineralised or distilled water:** 800 ml

**Concentrated sulphuric acid:** 20 ml  
(added cautiously to the water with stirring)

**RJ100S:** 20 ml

### Metal preparation

All components must be thoroughly degreased using trichloroethylene or a similar solvent. Immediately prior to plating the parts should be immersed in dilute sulphuric acid (5% v/v).

### Shipping & Handling

Please refer to the relevant Safety Data Sheet for further information.

### Plating Conditions

**Rhodium content:** 1.5 - 2.5 g/l  
**Sulphuric acid content:** 10 - 50 ml/l  
**Temperature:** 20°C - 50°C (optimum 40°C)  
**Cathode current density:** Up to 10 A/dm<sup>2</sup>  
(optimum 2 A/dm<sup>2</sup>)  
**Current efficiency:** 15 - 20 % at optimum current density

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