

# Palladium Bath JE42 V or D

# **Description:**

Palladium Bath JE42 V or D is a weakly alkaline electrolyte for the deposition of bright, decorative, light palladium layers.

The Palladium Bath can be used as a pre-palladium for diffusion barrier, or as a final layer up to 0.5  $\mu m$  thickness for decorative applications.

# **Operating data:**

2 g/L Pd
Pre-palladium/Adhesive layer
7,0 (6,8-7,2)
1,080 g/ml (1,075-1,085)
Final layer
8,5 (8,0-9,0)
1,075 g/ml (1,070-1,080)

#### **Deposition data:**

Hardness	230-250 HV
Layer thickness	max. 0,5 μm
Fineness of the	
palladium layer	99,9 % palladium

# Working conditions:

<u>v</u>	
Voltage	1,8 - 2,5 V
Bath temperature	25 - 30 °C
Exposition time	3 - 8 min.
Anode material	mixed oxide
Goods movement	required
Anode- /cathode	
surface	1:1
Deposition rate	2,5 mg/Amin, pH 7,0
	15,6 mg/Amin, pH 8,5
Deposition speed	approx. 0,07 μm/min
	dependig on pH and
	current density
Current density	approx. 0,5 A/dm <sup>2</sup>
Bath filtration	from 10 liters

# Form of delivery:

Ready for use 2 g/L Pd

#### Bath control/Regeneration:

**Very important!** The bath is very sensitive to cyanide contamination. Any drag-in of cyanide must be avoided. Cyanide contamination is manifested by cracking and streaky, matte coatings. Metallic impurities (Cu, Ni, and Zn) interfere in total from 10 mg/L and lead to dark/streaky and dull coatings.

The palladium content should be kept at the recommended concentration of 1,8 - 2 g/L, depending on the intended use.

Bath inspection should be carried out at regular intervals. For sure we make a bath analysis for you.

To replenish 1 g of palladium, add:

- 10 ml Palladium Solution JE42
- 2,5 ml Palladium Replenisher Type JE42-1
- 2,5 ml Palladium Replenisher Type JE42-2

# **Recycling:**

The used electrolyte contains precious metal, which we gladly recycle for you. The recycling of these solutions can be rentable from 20 liters.

# Storage:

Store closed and dark, in suitable and well marked containers. Do not bring in contact with cyanides or cyanide solutions.

# **Risks/elimination**

Therefore 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 consider our safety data sheet!



Management Service Zertifiziert nach: ISO 9001:2015