

DESCRIPTION

RH2PB is a black rhodium for pen plating. It is great selection for doing two -tone designs or detail work such as black inlay , but most commonly used as a product to highlight black diamonds by applying to the prong area. The formulation is 100% arsenic free both in the metal deposited and in the chemical itself.

- Black rhodium for pen
- Excellent to highlight black diamonds
- 100% Arsenic free

DEPOSIT DATA

Purity (%)	99.9
Hardness [HV 0.01]	800 - 900
Density [g/cm ³]	12.4
Thickness from-to [µm]	0.02 - 0.10
Aspect	Shiny
Color	Black

PRODUCT FORM

Metal concentration	2 g Rh/100 ml
Product pH	Acidic
Format	Ready to use liquid
Color of the product	Dark red - Brownish
Storage time	2 years
Volume	100 ml

PRODUCT USAGE**RANGE****OPTIMAL**

Voltage [V]	8 - 10	9
Working temperature [°C]	18 - 25	20 - 23
Treatment time [sec]	Some second	
pH	< 1	
Pen type	Platinum coated tip	

METAL CONCENTRATION

METAL	OPTIMAL
Rh	2 g Rh/100 ml

COLOR COORDINATES

L *	59.6
a*	-0.4
b*	2.2
c*	2.2

Note: Color coordinates here reported have been measured on a white underlayer and they are to be intended as PURELYINDICATIVE being strongly dependent on underlayer color , on thickness of the deposit and on specific design(shape)of the surface.

USER GUIDE**READY TO USE SOLUTION PREPARATION**

RH2PB is a ready-to-use plating solution at the concentration of 2 g/l. No preparation is required.

EQUIPMENT AND TOOLS

In order to maximize the quality deposition for rhodium obtained with RH2PB it is advisable to use the pen plating machine: PENPLATSYS connected with its anodic output with PENPLAT pen provided with platinum based collar (please, refer to its specific manual of use). It is recommended to set the machine voltage close to 9 as reported on the operating conditions Table on the previous page. For what concern felt tips, it will be possible to use of different types: standard or thin tips as well as white or brown ones. Those brown are generally faster in deposition than white; while the latter are giving less probability of burnt or dark layers due to prolonged contact times between tips taking plating solution and surfaces to be decorated.

PLATING SOLUTION MAINTENANCE

Use RH2PB until the solution is completely exhausted, without adding any type of replenisher solutions.

PRETREATMENTS

RH2PB can be deposited directly on silver, palladium, gold, nickel and its alloys. Vice versa a precious metal intermediate-strike deposition is, on the contrary, necessary before to plate other metals (i.e. Copper and copper alloys). In order to maximize the performance for RH2PB, items designated to undergo to a pen plating operation must go through the same cleaning procedures as recommended for standard immersion rack-plating operations. As pre-treatment it is suggested to run a preliminary degreasing through a cycle of ultrasonic degreasing treatment-solution followed by a wash step into running water. Then proceed with the electrolytic degreasing step by using the alkaline degreasing solution SGR1 Once the items has been washed again in demineralized water, then proceed in activate and neutralize the surface of the same by dipping them into the slightly acidic solution NEUT1 for 3 – 4 times subsequently at room temperature, in order to be sure that no any alkaline residues coming from the degreasing previous steps are dragged into the rhodium solution (which would lead to a reduction of its life). After the neutralization, wash them in demineralized running water and finally keep the items immersed into a D.I. water filled - Becker or small tank until they will not be treated by rhodium pen application. Once they are ready to be pen plated, withdraw them from the D.I. water temporary tank by the using of a suitable tweezer.

POST TREATMENTS

The electrolyte should be removed from the surface as quick as possible. Rinse off the plating solution residues in a recovery rinse (static rinse). Rinse the parts in DI running water and dry.

SAFETY INFORMATION

AVOID ANY DRAG IN OF CYANIDES IN RHODIUM PLATING SOLUTION TO AVOID THE DEVELOPMENT OF HIGHLY TOXIC FUMES!

Being an acidic solution, the electrolyte is corrosive therefore is an irritant to the skin, eyes and mucous membranes. Caution should be exercised when using the product, avoiding contact with the eyes and skin. Use gloves and safety goggles. Keep away from cyanide based chemicals. For further information please refer to the relative MSDS.

DISCLAIMER

All recommendations and suggestions in this bulletin concerning the use of our products are based upon tests and data believed to be reliable. Since the actual use by others is beyond our control, no guarantee expressed or implied, is made by Legor Group, its subsidiaries of distributors, as to the effects of such use or results to be obtained, nor is any information to be construed as a recommendation to infringe any patent.