

## GP03P

READY TO USE GOLD PEN PLATING SOLUTION 0.4G/100ML PINK GOLD COLOR

### DESCRIPTION

GP03P is a pink gold pen plating solution which deposits a brilliant pink color to the surface applied. It is a perfect solution for two-tone plating applications where a pink color is required. It can also be used to highlight specific details or cover solderjoints on pink gold items. This pink gold pen plating solution is nickel, lead, and cadmium free, and being a traditional cyanide based alkaline chemical. GP03P

- Gold pen plating solution
- Pink gold color
- Great for two-tone plating applications
- Good color repeatability
- Worthy tarnish resistance
- Nickel, lead, and cadmium free

### DEPOSIT DATA

Density [g/cm <sup>3</sup> ]	19.6
Hardness [HV 0.01]	90 - 100
Purity (%)	100.0
Thickness from-to [µm]	0,1 - 0,3
Color	Pink

### PRODUCT FORM

Product pH	Alkaline
Format of the solution	Ready to use liquid
Plating solution color	Blue
Storage time	2 years
Volume	100 ml

### PRODUCT USAGE

#### RANGE

#### OPTIMAL

Voltage [V]	See "Supplementary Information" section	
Working temperature [°C]	20 - 30	25

**METAL CONCENTRATION**

METAL	OPTIMAL
Au (g/l)	4.0

**COLOR COORDINATES**

L *	83.7
a*	12.3
b*	13.7
c*	18.4

**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**

GP03P is a ready-to-use pen plating solution. No preparation is required. It is important to check once the product has been received, the integrity of its packaging.

**EQUIPMENT AND TOOLS**

In order to maximize the quality deposition for gold obtained with GP 03P 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). About 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 the gold pen plating solution until it is completely exhausted, without the additions of any replenisher-additives.

**PRETREATMENTS**

Work items designated to undergo a pen plating operation, must go through the same cleaning procedures as recommended for standard bath plating operations. GP03P can be deposited directly onto silver, palladium, gold, nickel and its alloys. An intermediated deposit or precious metal plating strike is necessary before depositing onto other metals (i.e. Copper and copper alloys). 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 to 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 pen plating 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**

Electrolyte should be removed from the surface as quick as possible. Rinse off the bath rests in a recovery rinse (still rinse). Rinse the parts in running water and dry.

**SUPPLEMENTARY INFORMATION**

About the voltage to be set: the best voltage for using GP03P is to be chosen upon the kind of tip used on the pen:

- White tips: 8 -10 V
- Brown tips: 7 - 9 V
- PENGRAF: 3 - 5 V

About the temperature: work at room temperature, in the range of 20 - 30°C.

**SAFETY INFORMATION**

Being an alkaline 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 acidic chemicals. For further information please refer to the relative MSDS.

**DISCLAIMER**

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