

Electroless Copper Plating Chemical Kit

CAT. NO. 41600A

This kit is a key component of the MG Chemicals Professional Prototyping Process, which allows professional electronic engineers to prototype circuit boards with copper plated through holes themselves, avoiding having to send their designs to prototyping companies.

In the prototyping process, after drilling and de-burring the through holes in the copper clad board, the holes must be "activated" before they can be electroplated with a normal copper electroplating process. Through-hole activation entails making the walls of the through holes conductive, because only conductive surfaces can be electroplated. The electroless plating process achieves this by applying a thin layer of copper to the inside of every hole. This layer is not sufficient to carry the circuit in the completed circuit, but it is enough to electroplate to.

Some of the chemicals in this process pose significant safety hazards and disposal challenges; and for that reason this process is for professional use only.

See the instructions for the MG Chemicals Professional Prototyping Process to understand the entire prototyping procedure.

This kit contains sufficient chemicals to plate through-holes on five 5" x 3" double sided copper clad boards (150 inches total surface area). Once mixed, solutions last for two days.

Kit Contents:

- 1 x Alkaline Cleaner (Cat. No. 41601-250ML)
- 1 x Micro Etch Part A (Cat. No. 41602-250ML)
- 1 x Micro Etch Part B (Cat. No. 40603-250G)
- 2 x Catalyst Part A (Cat. No. 41604-1L)
- 1 x Catalyst Part B (Cat. No. 41605-250ML)
- 1 x Accelerator (Cat. No. 41606-250ML)
- 1 x Plating Solution Part A (Cat. No. 41607-250ML)
- 1 x Plating Solution Part B (Cat. No. 41608-250ML)
- 1 x Plating Solution Part C (Cat. No. 41609-250ML)



For use with,

Electroless Copper Plating Hardware Kit (Cat. No. 41600B)

Kit Contents:

- 5 x 1 gallon High Density Polyethylene Tanks
- 5 x 1 gallon High Density Polyethylene Lids
- 1 x 3/8" x 8 3/4" Copper Bar
- 1 x 8 Gauge Copper Hook
- 1 x Air pump
- 1 x 1/4" x 2' Poly Tubing
- 1 x package of [Nitrile Gloves](#) (Cat. No. 416-G)

This kit contains 5 tanks, one for each step in the MG Chemicals Electroless Copper Plating Process, each labeled with dilution instructions and immersion times, along with a hanging bar and hook, a package of nitrile gloves suitable for resisting the acid solutions in this process, and an air pump and tube to keep the solution in step 5 agitated. This kit is reusable.

This kit is designed to be used for boards that are 5" x 3" or smaller. If you intend to plate larger boards, you will need to design your own tank system.

Note:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. M.G. Chemicals Ltd. Does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.