



Product Data Sheet

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PRODUCT #: N8612

AT-3000

Copper Antitarnish

DESCRIPTION: *AT-3000* is a concentrated antitarnish compound which prevents tarnishing of copper and copper alloys. It reacts chemically with clean copper surfaces to form an invisible barrier that resists handling and environmental effects. *AT-3000* can be used after electroless copper, prior to photoresist application, and in the SMOBC process. It also can be used as an additive to photoresist stripping solutions to prevent copper oxidation. When used following electroless copper deposition, *AT-3000* enhances the adhesion of dry film photoresists.

BENEFITS:

- Improves adhesions of photoresists
- Eliminates oxidation of copper

SPECIFICATIONS:

Density:	1.01gm/ml, 8.4lbs./gal.
pH:	2.3
Flash Point (TCC):	119°F
Shelf life:	One year

INSTRUCTIONS: **Bath Treatment**

Concentration:	0.5-2% by volume with DI water
Temperature:	70°-100°F
Dwell Time:	2-5 minutes

Add liquid concentrate to deionized water and mix well. Panels should be agitated while in the solution to allow the solution to flow through the holes. Rinse panels thoroughly after immersion. *AT-3000* will not remove oxides present on copper surfaces. Panels must be thoroughly cleaned prior to treatment, and rinsed, preferably with deionized water.

Additive to Alkaline Resist Strippers

Add 100 ml of *AT-3000* per 100 gallons of resist stripping solution. If more anti-tarnish protection is needed, add in 100 ml per 100 gallon increments, not to exceed 2000 ml per 100 gallons.

To remove the complex formed on the copper surface by *AT-3000*, solutions of sodium persulfate, nitric acid or cupric chloride can be used.

Tanks can be constructed of polypropylene or polyethylene. Heaters should be quartz or Teflon®.

CAUTIONS: *AT-3000* is acidic. Contact with skin and eyes should be avoided. Wear goggles and gloves when handling this product. In case of contact with eyes or skin, flush immediately with water. Vapors are irritating; use with adequate ventilation. Refer to Material Safety Data Sheet for further information.

DISPOSAL: Neutralize and dispose of in accordance with all local, state and federal regulations.

This product should be used only for its intended purpose. The information stated above is based on our laboratory tests and experience, and is accurate to the best of our knowledge. Since actual use is beyond our control, the recommendations or suggestions are made without warranty, expressed or implied.