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**Product Bulletin** 

Cleaner PC-29U

Product Code: 2704004 Revised Date: 10/02/2009

## Cleaner PC-29U

**Cleaner PC-29U** is a water soluble, non-foaming, sprayable, liquid acidic cleaner formulated for removing light oils, oxides, finger prints, and resist residues from the circuit boards prior to copper plating or printing.

Cleaner PC-29U will not dissolve copper per se, but just the oxides of copper.

## ADVANTAGES OF CLEANER PC-29U

- \* stable product--long life
- \* non-foaming product
- \* performs in water at various hardness levels
- \* wide operating temperature range
- \* no ventilation required when used
- \* readily soluble in cold water

#### **OPERATING CONDITIONS**

Concentrations:	5 to 15% (vol)
Temperatures:	room to 150 F (66 C)

The operating temperatures are dependent upon the soil and process time. For most operations, the operating temperatures may fall between 110 to 120 degrees F. (43--49 C)

Time:	1 to 3 minutes
Equipment:	tanks may be constructed of PVC, polypropylene, fiberglass or
stainless steel	
Heaters:	stainless steel or quartz

# CONTROL

#### TTITRATION PROCEDURE

- 1. Pipette a 10 ml sample of **Cleaner PC-29U** solution into a 250 ml Erlenmeyer flask.
- 2. Add 50 mls of water to the erlenmeyer flask.
- 3. Add 3 to 4 drops of phenolphthalein indicator.



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- 4. Swirl flask to insure mixing.
- 5. Titrate with 1.0 N sodium hydroxide until the solution turns pink.
- 6. Record mls 1.0 N sodium hydroxide used.

# % (vol) Cleaner PC-29U = .93 x mls 1.0 N Sodium Hydroxide used

## TEST KIT PROCEDURE

Use 1/2 ml sample and fill bottle 1/4 full of water, 2-3 drops of indicator.

# Concentration of Cleaner PC-29U = 1.3 x drops N-72 solution

## CLEANER PC-29U BATH LIFE:

Product should be discarded when copper level reaches 1500 ppm (1.5 gm/l).

# CAUTION

**CLEANER PC-29U** is an acidic liquid and should be handled accordingly. Avoid skin and eye contact. Wear protective clothing, gloves and goggles. Flush exposed areas immediately with clean, cold water. In case of injury contact a doctor immediately.

#### WASTE DISPOSAL

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

#### WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.