

Product Data Sheet

Date: 03/18/02
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PRODUCT #: N8108***SUR CLEAN 92***

Acid Copper Cleaner/Microetch

DESCRIPTION: An acid, sprayable cleaner and microetch. *SUR CLEAN 92* removes a minute portion of metallic copper in addition to oxides and organic contamination. It can be used for cleaning inner layers, prior to solder mask application for SMOBC, and prior to solder leveling. It is effective in both spray and soak applications.

BENEFITS:

- **Versatile – use in spray or soak application**
- **Easily controlled - etch rate can be varied by concentration and immersion time**
- **Excellent for use in hot air leveling processes**

SPECIFICATIONS:

Density:	1.13 gm/ml, 9.4 lbs./gal.
pH (working solution) :	< 1
Flash Point (TCC):	None
Shelf life:	One year

INSTRUCTIONS:

<u>Application</u>	<u>Spray</u>	<u>Soak</u>
Concentration	10 - 25% by volume	15 - 25% by volume
Temperature	70° - 90°F	70° - 90°F
Dwell Time	30 - 90 seconds	1 - 4 minutes
Etch Rate	(see charts on reverse side)	

Add *SUR CLEAN 92* concentrate to water to form the working solution. The etch rate is controlled by concentration and immersion time. Refer to charts on reverse side to determine operating parameters. Rinse panels thoroughly.

Maintain concentration according to analysis on reverse side. The cleaner is considered spent when the copper concentration exceeds 5-6 grams per liter (may be less in soak application).

Tanks or equipment can be constructed of polypropylene, polyethylene or PVC. Heater (if needed) should be quartz or Teflon®.

CAUTIONS: *SUR CLEAN 92* is acidic; glasses or goggles and gloves should be worn when handling this product. In case of contact with eyes, flush immediately with water and obtain medical attention for skin contact, wash with soap and water. Refer to Material Safety Data Sheet for further information.

