



Product Data Sheet

Date: 02/10/05
Supersedes: 12/04/01
PRODUCT #: N8603 & N8602

ULTRASTRIP and ULTRASTRIP BAT

Aqueous Resist Strippers

DESCRIPTION:

A highly concentrated, long lasting, high performance non-caustic stripper for removal of aqueous dry film photoresists. It can be used on both inner and outer layers and produces large particles suitable for filtration. **ULTRASTRIP** contains copper brightening agents to provide a bright, uniform surface. It contains NO glycol ether solvents for a safer working environment.

ULTRASTRIP BAT contains antitarnish agents which preserve the copper surface for automatic optical inspection and better etching characteristics.

BENEFITS:

- **Highly concentrated for good loading characteristics**
- **Moderate pH for good metal finish**
- **Contains copper brightening agents**
- **Filterable particles for extended bath life**
- **Suitable for a wide variety of photoresists**

SPECIFICATIONS:

	<u>ULTRASTRIP</u>	<u>ULTRASTRIP BAT</u>
Density:	1.02 gm/ml, 8.5 lbs./gal.	1.02 gm/ml, 8.5 lbs./gal.
pH at 10% :	11.3	11.3
Flash Point:	> 210°F (SCC)	> 210°F (SCC)
VOC Content (EPA Method 24):	4.6 lbs./gal.	4.7 lbs./gal.

INSTRUCTIONS:

Concentration: 10% optimum, 5 - 15%
Temperature: 120° - 140°F

Analyze new solution according to procedure on reverse. Maintain the pH above 10.5 with additions of **ULTRASTRIP** concentrate. Add 20% of the original make up volume of concentrate used. For example, for a 100 gallon sump at 10% original concentration, add 2 gallons **ULTRASTRIP** concentrate. The solution should be considered spent when replenishments exceed the original make up volume, or when resist re-deposits on boards. An alternate method of replenishment is to have a tank of solution at working concentration and add it to the sump to maintain volume lost by evaporation and drag out.

Stripping speed and particle size will vary with type and thickness of photoresist, temperature, concentration, type of equipment and application. Specific information on strip times, particle size and capacity is available from RBP Technical Service.

Filtration is recommended to remove resist particles and extend bath life. In spray applications it may be necessary to add **ANTIFOAM BB** at 0.1% by volume to eliminate excess foam.

Tanks or equipment can be constructed of stainless steel, PVC, or polypropylene. Heaters should be stainless steel or Teflon.

CAUTIONS: **ULTRASTRIP** is alkaline; contact with skin and eyes should be avoided. Goggles and gloves should be worn when handling this product. In case of contact with eyes, flush with water for at least 15 minutes and obtain medical assistance. For skin contact, rinse immediately with water, and wash with soap and water. Use in a well-ventilated area.

DISPOSAL: **ULTRASTRIP** contains amine compounds that are metal complexing agents. Spent solutions should be segregated from waste streams being treated for heavy metals removal.

Dispose of precipitated metals in accordance with all local, state and federal regulations.

ANALYSIS: **Equipment required:** 2 ml pipette 50 ml burette
250 ml flask or 250 ml beaker pH meter (optional)

Reagents required: 0.1N Hydrochloric acid standard solution
Methyl Orange indicator solution

Procedure:

1. Pipette a 2 ml sample of the working solution into a 250 ml flask or beaker.
2. Add 50-100 ml distilled water. Mix.
3. Add 10-15 drops of methyl orange indicator solution.
4. Titrate with 0.1N hydrochloric acid until the color changes from yellow to red.
Record mls used.

OR

Titrate to a pH end point of 4.0, using a pH meter. Record mls used.

Calculation: mls of HCl X N of HCl X 4.4 = Percent **ULTRASTRIP**

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.