



UNION INKS

Product Information

ALKALI SOLUBLE ETCHING RESISTS

99-200

TIL NO: 701

PROPERTIES

99-200 Alkali Soluble Etching Resist is a screen printable resist ink and is to be used as etching resist in printed circuit boards production. The cured ink film has excellent hardness and this makes it most suitable for fine line printing as well as for double side printing. This ink:

- Offers excellent print definition and reproduction fidelity for its thixotropic properties.
 - Withstands acid etching solutions (ferric and cupric chloride).
 - Features excellent adhesion and mechanical resistance.
- The ink film is easily removed or dissolved in 3-5% sodium hydroxide or caustic soda solutions.
- Flash point: 60° C TOC.
- Shelf life: over two years if tightly sealed.
 - Viscosity: 120 - 250 poise (Brookfield Viscometer, Spindle NO. 7, Speed 50 rpm @ 30° C.
 - Is available in 99-200K Black or 99-200B Blue.

SURFACE PREPARATION

Oxidation or other contaminants like grease or oil may lower ink adhesion. It is therefore necessary to clean the surface by wet mechanical brushing followed by thorough drying to get good ink adhesion.

SCREENS

Stainless steel (250-325 mesh) or polyester monofilament fabrics (90-110 threads per cm) can be used with direct and indirect stencils.

Types of fabric and mesh count have to be selected according to expected print definition or required ink deposit. Stencils have to be solvent resistance.

THINNING

No thinning is normally required. However, to counter balance possible release of solvent during printing and re-establish proper ink viscosity, Reducer 99-T40 can be added up to 5% maximum. Let thinned ink rest for a few minutes before used.

PRINTING

Carefully stir ink prior to use. Use well sharpened squeegees, 75 - 80 shore hardness.

DRYING

Drying at room temperature takes approximately 30 – 60 minutes depending on environmental conditions and ink deposits. With forced air dryer, 5 minutes at 60 – 70 °C are required, paying attention not to exceed 90 – 100 °C for 10 minutes as this will make ink removal more difficult. In a Infrared dryer, time is reduced to less than 2 – 3 minutes depending on kind, power and distance of installed lamps.

STRIPPING

Ink film is easily dissolved by spraying or dipping the circuit board in caustic soda based (NaOH) solutions up to 3-5% either cold or warm at 40 deg. C. Process time in soda solution takes about 5-10 seconds. Washed off with a strong spray of water.

WASHING UP

Uniwash 99-SW113 is recommended.

SHELF LIFE

This ink has a shelf life of more than one year provided that they are stored in their original sealed container.

WARNING

This information is given in good faith, but without any guarantee as the printing conditions of our inks are beyond our control. In the event of complaints, the ink supplier may replace free of charge the unused ink, declining any other responsibilities.