



# UNION INKS

## Product Information

### ***ALKALI SOLUBLE PLATING/ETCHING RESIST***

**99-425**

TIL NO : 702A

#### PROPERTIES

99-425 Alkali Soluble Plating/Etching Resist is to be used for the production of double sided plated through hole circuits whenever used as Plating Resist and of copper circuits when used as Etching Resist. This resist :-

- offer excellent print definition.
- withstand acid as well as alkaline plating processes up to PH 9.
- can therefore be used either as plating or as etch resist providing excellent reproduction fidelity in both cases.
- elimination of chlorinated solvents stripping costs and allows better working conditions.
- flash point : 70<sup>0</sup> C TOC.
- shelf life : over two years if tightly sealed.
- viscosity : 120 - 250 poise (Brookfield Viscosimeter, Spindle N0. 7, Speed 50 rpm @ 30<sup>0</sup> C.

#### 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.

Type of fabric and mesh count have to be selected according to expected print definition or required ink deposit. Increasing fabric threads number, ink thickness is lowered, also reducing resistance to plating baths. 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

Ink drying can be achieved :-

- in hot air dryers @ 80<sup>0</sup> C approximately for 15-20 minutes.
- in infra-red dryers, time is reduced according to kind, power and distance of installed lamps.
- at room temperature drying is achieved in 1-2 days according to specific environment conditions.

Please note that if the ink is to be used as a plating resists, the boards must be baked at 120<sup>0</sup> C for 10 minutes and ink film will be more difficult to strip if it is overbaked.

## 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. Wash off with a strong spray of water.

## WASHING UP

Uniwash 99-SW113 is recommended.

## SHELF LIFE

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

## WARNING

These informations are 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.