



UNION INKS

Product Information

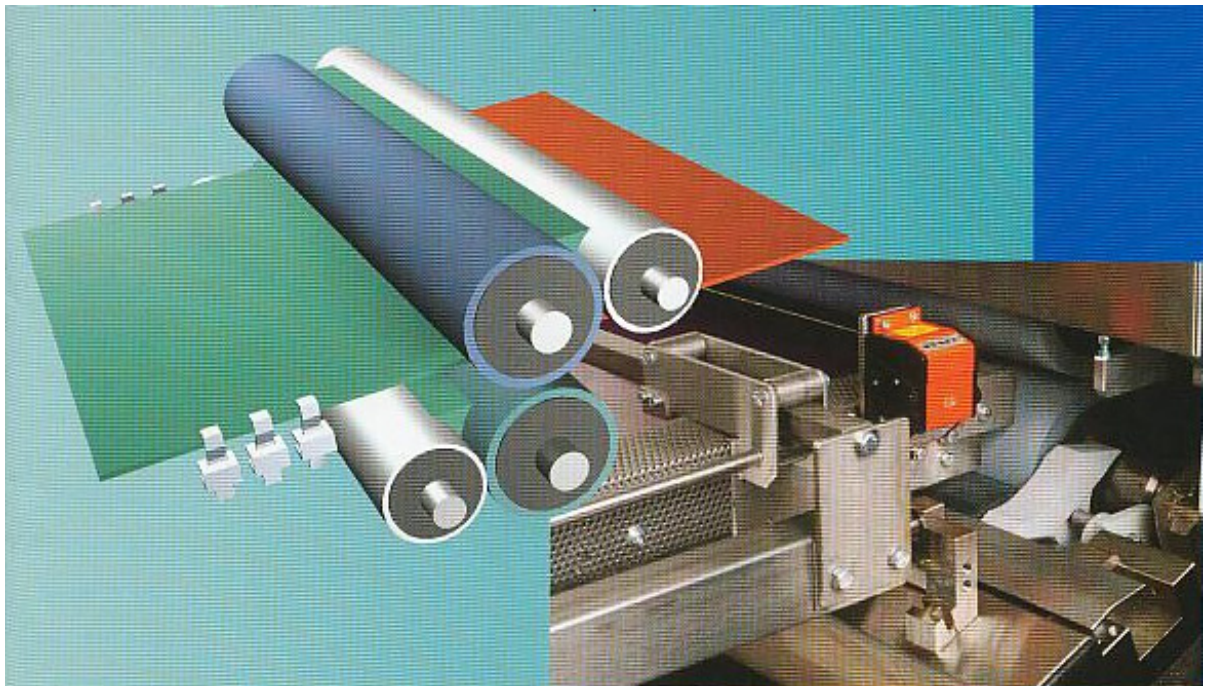
Roller Coating Type (滾塗型)

LIQUID PHOTOIMAGEABLE ETCH RESIST – NON FILLER TYPE

(線路用) 液態感光阻劑

(俗稱：濕膜)

99 – 260 B



LIQUID PHOTOIMAGEABLE ETCH RESIST – NON FILLER TYPE

99-260B

APPLICATION AND END-USE DESIGN

Photoimageable Etch Resist (NON – FILLER TYPE) 99-260B is a contact exposure photoimageable etch resist, formulated for use as a cost effective alternative to dry film resists for the production of high-density circuit boards. The ink film after drying is tack free.

It can be applied by roller coating and is suitable for use with acid etchants such as Ferric Chloride (FeCl₃) and Cupric Chloride (CuCl₂). After etching, it can be removed in Sodium Hydroxide solution.

PROPERTIES

- Colour: Purple
- Viscosity: 50 – 60 seconds using Sheen Cup No. 5
- Solid Contents: 60 – 65%
- Recommended dry film weight: 10 – 25 microns
- Excellent definition: 50 microns line / track is achievable.
- Reducer: PMA can added if necessary.

PROCESSING NOTES

• DOUBLE SIDE ROLLER COATER

CCL pass between the upper and the lower roller. 99-260B is coated on both sides of the CCL. The film weight thickness is controlled by the number of pitch of the roller and the roller gap-pressure clearance of the doctor blade.

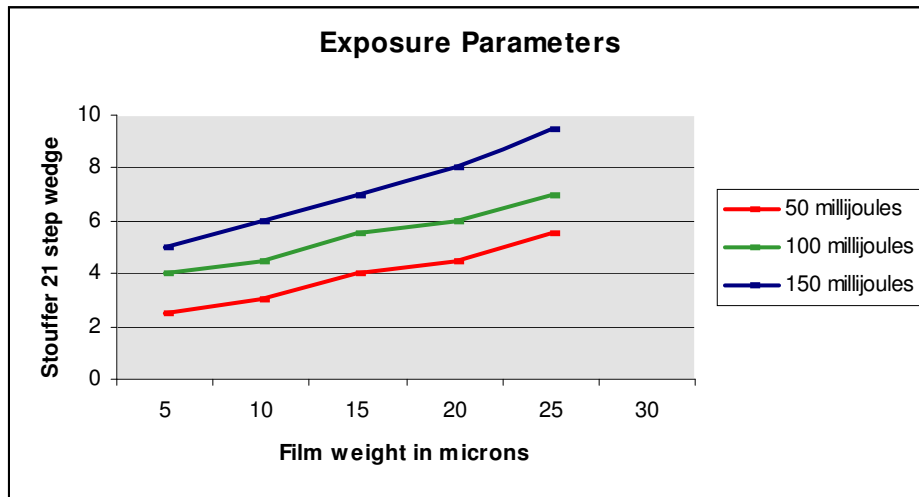
• DRYING

After coating, dry the printed CCL in the oven. Drying takes about 3 - 6 minutes at 80 - 90 °C depending on the thickness. Just after drying by the oven, prevent stacking the CCLs, as this will cause sticking together. Stack only after the boards are cool down to room temperature.

• EXPOSURE

Typical exposures are as follows: - UV integrator (UV light volume): 80 - 100 mj / cm²
Step Wedge: solid 6 - 8 on Stouffer 21 step wedge.

This is about 20 - 25 counts on a 5 KW exposure unit and about 10 - 12 counts on a 7 KW exposure unit. If UV exposure is not enough, 99-260B will break down during development or etching. It is recommended that measurement by UV integrator or step wedge is correctly established to ensure correct exposure and optimum performance of 99-260B LPER.



- **DEVELOPMENT**

Developer : 1% solution of sodium or potassium carbonate
 Spray Pressure : 1.5 - 2.5 kg / cm²
 Spray Time : 20 - 60 seconds depending on the thickness
 Temperature : 27 - 32 °C.

Boards should be rinsed with fresh water after developing.

- **STRIPPING**

The resist strips easily in 4-5% sodium hydroxide solution at 40 - 50 °C. It does not dissolved in the stripping solution and therefore filtration of stripping solution is necessary to avoid blocking of spray nozzles.

- **STORAGE**

Store at 25 °C in a dry store. Avoid subjecting containers to high temperatures as this shortened shelf life.

- **SHELF LIFE**

Six months from date of manufacture when stored in cool dry conditions.

PROCESS NOTES

Direct or prolonged exposure to light sources with UV contents should be avoided. Commercially available fluorescent lamps may be used in work areas, provided that they are fitted with a diffuser. Avoid contact with skin and eyes. If the ink comes into contact with the skin, promptly wash off with water and soap, do not use solvents. Work area has to be effectively ventilated.

WARNING

The 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.