



# UNION INKS

## Product Information

### *UV CURABLE SOLDER MASK GREEN* **99-6880G**

TIL NO: 711

#### PROPERTIES

UV Curable Solder Resists for wave soldering of copper pads / circuits. This resist: -

- Features exceptional print definition for its thixotropic properties.
- Excellent resistance to flowed soldering alloys.
- Withstands most aggressive solvents and fluxes.
- Grant outstanding mechanical properties (hardness, adhesion, resistance to shearing).
- Offers utmost di-electric properties.
- Is nearly odourless and has low irritation index.

#### TECHNICAL DATA

- Finish in semi gloss green for easy inspection.
- Specific weight: 1.30 at 25 degrees C.
- Viscosity (Brookfield Viscosimeter, spindle 7 speed 50rpm at 28 degrees C): 120 - 140 poise.
- Solids content: 100 %
- Flash point: 100 degrees C
- Curing speed: about 4-5 metres per minute with 3x200W/inch UV lamps.
- Shelf life: 6 months from manufacturing date at room temperature of 25 degrees 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

Stencils may be either direct, indirect or direct/indirect with either polyester monofilament 90-48 to 120-34/cm or stainless steel 300-325 meshes.

#### PRINTING

Carefully stir ink prior to use. Use well sharpened squeegees, 70 - 75 shore hardness.

#### CURING

Using UV dryers equipped with 3 x 200 watts per inch metal halide or mercury vapour lamps, ink printed with polyester 100-40 per cm, curing is achieved at about 4.5 to 5 metres per min. or the energy required to cure is about 1800 millijoules using UV Integrator Model UV or about 3200 - 3500 millijoules on UVA spectral response.

In case of over-printing on UV Solder Resists, it is advisable to under cure the solder resists (7-8m) or about 1200 millijoules to get better inter-coat adhesion. The complete curing of Solder Resist will take place at the same time when curing the marking ink. Avoid over-curing that could make the ink film brittle.

## WASHING UP

Uniwash 99-SW113 is recommended.

## PROCESS NOTES

Direct or prolonged exposure to light sources with UV contents should be avoided. Commercially available fluorescent lamps may be used in the work area, 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

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.