**Electronic Materials for PCBs** 

Electronic Materials for Printed Circuit Boards

Experience. Transformation.





#### **Electronic Materials for Printed Circuit Boards**

A member of the global DIC Group, Sun Chemical is the world's largest supplier of printing inks, pigments and advanced materials which has been a major supplier of inks and resists to the printed circuit board industry for over 50 years.

With offices worldwide, Sun Chemical is truly a global supplier to the PCB manufacturing industry. In addition to our head offices in the UK and USA, Sun Chemical has main offices in Germany, Italy and China to support you with a global network of established, experienced and knowledgeable distributors and agents.

Utilizing our comprehensive R&D facilities in Europe and Japan, we work closely with PCB manufacturers and OEMs to ensure our products continue to meet the needs of today and tomorrow. Sun Chemical's unmatched experience and expertise can help you:



- Soldermasks
- Conductive Inks
- Temporary Peelable Masks and Etch / Plating Resists
- Marking / Legend Inks
- Inkjet Materials

Product	Series	Description
LPI Soldermask	XV501, IMC3000	XV501T and IMC3000 Series are liquid photoimageable solder resists for contact exposure with UV light sources. The soldermask can be applied by screen print, spray, or curtain coat applications and are available in various colours. Compatible with all final finishes (ENIG, LF-HASL, Immersion Tin etc.) and meet the requirements of many major OEMs for Thermal Cycling, Thermal Storage & E-Corrosion.
LPI Soldermask for Direct Imaging	IMC5000	IMC5000 is a liquid photoimageable solder resists for exposure with Direct Image systems (LED, UV, Laser). The soldermask can be applied by screen print or spray applications and is available in various colours. Compatible with all final finishes (ENIG, LF-HASL, Immersion Tin etc.).
LPI Soldermask for LED	IMC6000	IMC6000 LED White is a low colour change liquid photoimageable solder resist for LED lighting applications, and for use with contact exposure with UV light sources. The soldermask can be applied by screen print or spray applications.
LPI Soldermask	IMC7000	IMC7000 is a range of soldermasks developed using alternative Photo-Initiators which are not classed as SVHC's by ECHA. Versions are available for Screen Print, Spray, and Curtain Coat application methods and for either contact exposure or direct imaging.
InkJet Soldermask	EMD8500	EMD8500 Series Inkjet solder masks are LED free radical curing products designed for the selective printing on to printed circuit boards. The products are dual curing to provide a robust film with good adhesion to a wide range of substrates including FR4, and Copper. The product is intended for jetting through Piezo Drop-On-Demand (DOD) print heads at elevated temperatures.

#### **Soldermask**

### **Legend Inks**

Product	Series	Description
LPI Legend Ink	XV501	XV501T are liquid photoimageable legend ink for contact exposure with UV light sources. The legend ink can be applied by screen print or spray applications and are available in various colours. Compatible with all final finishes (ENIG, LF-HASL, Immersion Tin etc.).
Thermal Cure Legend Ink	XZ80, XZ100	XZ80 and XZ100 Series are single or 2-component, screen defined, thermal curing legend inks. The inks have excellent printability, adhesion, and hardness, along with very high resistance to scuffing, heat, and many chemicals and solvents used in subsequent processing. Available in various colours and compatible with all final finishes (ENIG, LF-HASL, Immersion Tin etc.).
UV Cure Legend Ink	XV1300	XV1300 Series inks are high-definition screen printing legend inks suitable for use over UV solder resists and many types of base laminate material. They are designed to give rapid cure when exposed to ultraviolet radiation.
InkJet Legend Ink	EMD8200	EMD8200 Series inkjet legend ink for use in notation and coding applications. The product is intended for jetting through Piezo Drop On Demand (DOD) print heads at elevated temperatures. The ink has been developed to have good adhesion to a wide range of substrates including circuit board resists and laminate. The ink is highly pigmented offering outstanding opacity and colour strength.
InkJet Soldermask	EMD8500	EMD8500 Series Inkjet solder masks are LED free radical curing products designed for the selective printing on to printed circuit boards. The products are dual curing to provide a robust film with good adhesion to a wide range of substrates including FR4, and Copper. The product is intended for jetting through Piezo Drop-On-Demand (DOD) print heads at elevated temperatures.

#### **Conductive Inks & Dielectrics**

Product	Series	Description
SunTronic	Various	Within our SunTronic range of Conductive Carbon, Conductive Silver and Dielectric inks we have versions for rigid/flex circuits, flexible circuits, membrane switches, printed antennas, edge connectors, cross overs and many other applications. Please speak to your Sun Chemical representative for more information.

## **Etch & Plating Resists**

Product	Series	Description
LPI Resist	XV750	XV750 is a single component, high resolution photoimageable etch & plating resist. Acid & alkali resistant, XV750 is compatible with most electroplating media. Excellent adhesion and conformation to copper and other metal surfaces. XV750 can be applied by screen print, roller coat, or spray.
Thermal Cure Resist	XZ Series	XZ Series is a single component, screen defined, thermal cure etch & plating resist. Compatible with both acid & alkali etching chemistry.
UV Cure Resist	XV Series	XV Series is a single component, screen defined, UV curing etch resist. Compatible with both acid & alkali etching chemistry.
Peelable Resist	EPR5000	EPR5000 is a thermal cure screen defined, temporary solder & plating resist. Can be easily peeled after processing.

In addition to those mentioned in this document, Sun Chemical Electronic Materials also offer a vast range of other materials for PCB, Photovoltaic, Printed Electronics, and BioSensor production. Please speak to your local Sun Chemical representative for more information.

# Experience. Transformation.

#### A partner who transforms with you.

Today's environment requires more than change. It demands transformation — and a partner who's willing to transform with you. Sun Chemical, a member of the DIC group, is a leading producer of packaging and graphic solutions, color and display technologies, functional products, electronic materials, and products for the automotive and healthcare industries. Together with DIC, Sun Chemical is continuously working to promote and develop sustainable solutions to exceed customer expectations and better the world around us. With combined annual sales of more than \$8.5 billion and 22,000+ employees worldwide, the DIC Group companies support a diverse collection of global customers. As you move forward into a world of stiffer competition, faster turnarounds, more complex demands and sustainable products, count on Sun Chemical to be your partner.

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