# **Uvijet LL**

# UV curing ink system for Acuity LED 1600 hybrid printers

# **Uvijet LL**

The Uvijet LL ink range is a high quality UV curable inkjet system designed for piezo drop-on-demand printheads. The ink has been specially developed for Acuity LED 1600 II printers and offers excellent dot reproduction and will adhere to a wide range of rigid and flexible uncoated materials.

Uvijet LL inks are specifically formulated to maximize the performance of the Fujifilm Acuity LED 1600 UV curing printers. Uvijet LL inks are designed to decorate and provide excellent adhesion to a wide range of uncoated flexible and rigid media.

Performance of ink on substrate may vary across substrate manufacturers. When printing clear ink, some media may be prone to embrittlement due to the increased build.

The Acuity LED 1600 and Acuity LED 1600 II printers has been designed to print high quality short run work previously carried out by either screen or offset printing processes.



### **Uvijet LL Features:**

- LED UV curing ink system
- Designed for use on the Acuity LED 1600 hybrid printer
- · Fast cure for high production output
- Superb flexibility on roll media
- Excellent adhesion range
- Intense colors with a wide gamut

- Satin finish
- CMYK Lc Lm plus White and Clear color set
- Excellent inter-coat lay down for back lit and solid prints
- Recommended for indoor and short-term external applications

### **CURING**

Excellent cure and adhesion are achieved immediately upon print and UV curing. However, maximum adhesion, chemical, scuff and scratch resistance may not be obtained until 24 hours after initial curing. The actual level of cure will depend upon ink thickness, substrate and the UV curing lamps being used. Superior through cure may be obtained by reducing the print speed by selection of an alternative print mode to increase the overall UV dose.

### **PRE-PRODUCTION TESTS**

Uvijet LL ink is formulated to give excellent adhesion to most major brands of plastic material. Polyolefins should have a surface energy level of 42 dynes/cm or higher. However it is strongly recommended that all substrates are tested before a commercial run.

### **PLASTICS**

Some plastic substrates may contain lubricants which, like plasticizers, may impair adhesion and block resistance for a considerable time after printing.

There may also be residues from glues and adhesives used on backing sheets. This can be overcome by wiping the surface with isopropyl alcohol (IPA) before printing.

To reduce the risk of problems generated by the build-up of static electricity it is advisable to pass an earthed anti-static brush over the material prior to printing. Allow static generated from protective sheets to dissipate before printing. Ensure that the printer is cited as per recommended humidity/temperature recommendations 30-65% RH, 15-35°C, no condensation.

### **UVIJET ADHESION PROMOTERS**

For more information on the range of the primers available, please see the Uvijet adhesion promoters product information sheet.

## CHEMICAL AND ABRASION RESISTANCE

Uvijet LL inks have good chemical and abrasion resistance.

### **OUTDOOR USE**

Accelerated weathering tests have been carried out in a Xenon Arc Weatherometer set to the SAEJ 1960 Standard. Under these conditions the accelerated weathering of Uvijet LL inks equates to approximately 12 months outdoor exposure in a temperate climate. If finished prints will be subjected to outdoor exposure exceeding 12 months, the use of an overprint clear or over-laminate is strongly recommended.

### **STORAGE**

Uvijet LL ink should not be stored in direct sunlight or near heat sources and should be kept away from peroxides. For optimum shelf-life, products should be stored at moderate temperatures between 41°F and 86°F (5°C and 30°C). Storage outside of these temperatures may lead to deterioration in the performance of the products.

When stored in a cool environment the inks are expected to have a shelf-life of 12 months from date of manufacture.

Adhesion Chart	
Media Type	Adhesion Characteristics
Self Adhesive PVC	***
PVC Banner	***
Polycarbonate	*will improve with adhesion to
Styrene	*will improve with adhesion to
PETG	***
Fluted Polypropylene	*will improve with adhesion to
Polyethylene	*will improve with adhesion to
PVC Foam Board	***
Display Board	***
Semi Rigid PVC	***

Excellent ★★★ Good ★★ Fair ★
\*Uviiet Adhesion Promoter

### SPECIFICATIONS:

### **UVIJET LL INK**

- LL052 Yellow
- LL867 Magenta
- ▶ LL215 Cyan
- LL004 Black
- LL255 Light Cyan
- LL335 Light Magenta
- LL021 White
- ▶ LL391 Clear
- ▶ LL017-UV Flushing Solution Supplied in 600 ml pouches

### Also available:

products

- ZE 1000/1 (Quart size)
   Adhesion Promoter for Digital Grade Styrene, Vinyl Banner, PVC and Polycarb
- ➤ ZE 1000/4 (Gallon size) -Adhesion Promoter
- ZE 720/4 Adhesion Promoter for Coroplast
- ➤ ZE 680/4 Adhesion Promoter for PVC and Acrylic

### Fuiifilm

- Has certification to the International Environmental Standard ISO 14001.
- Is committed to minimizing the risk to users of our products, and also to minimizing the impact of our activities on the environment, from formulation through to production and supply.
- Research and development team, work to an in house Health Safety and Environmental policy, termed 'Design for Health, Safety and Environment', with the aim of proactively developing products with the least impact on health, safety and the environment.
- Regularly review and monitor our impacts and activities, setting objectives and targets as part of a continual improvement process.
- Is committed to reducing waste through better use of raw materials, energy, water, re-use and recycling.

### Safety & Handling Uvijet LL Inks

- Have a flash point greater than 131°F (55°C) and are therefore not classified as 'dangerous substance' under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).
- Comprehensive information on the safety and handling of Uvijet inks is given in the appropriate Fujifilm Safety Data Sheets available upon request.

### Environmental Information

### **Uvijet LL Inks**

- Does not contain ozonedepleting chemicals as described in the Montreal Convention.
- Are formulated free from aromatic hydrocarbons.
- Are free of any volatile solvent and can therefore be considered to have less impact on the environment, when compared with solventbased products.

The information and recommendations contained in this Technical Data Sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Technical Data Sheet out of date and users are requested to ensure that they follow current recommendations

Uvijet LL ink approved for Nordic Swan Ecolabelled printers.



