Product Information





UV- LED Curing Ink System for Acuity LED 40 series Inkjet Printers

Media Type	Adhesion Characteristics	Media Type	Adhesion Characteristics
Polycarbonate	111	Dibond	11
Styrene	111	PVC Foam Board	111
Acrylic	11	Display Board	111
APET	111	Semi Rigid PVC	111
Priplak	✓	Self-adhesive PVC	111
Correx	✓	PVC Banner	111

Key: Excellent ✓ ✓ ✓ Good ✓ ✓ Fair ✓

Features

- High performance LED cure UV ink system
- Good to fair adhesion to rigid plastic substrates
- High satin finish
- Excellent colour gamut
- Excellent inter-coatability for back lit and solid prints
- Recommended for indoor and external applications

Ink Properties

The Uvijet KL ink range is a high quality LED UV curable inkjet system designed for piezo drop-on-demand printheads. The ink has been specially developed for the Acuity LED 40 printers and offers excellent dot reproduction, light-fast colours and will adhere to a range of rigid and flexible uncoated materials.

Colour Range

KL004 Black

KL052 Yellow

KL867 Magenta

KL335 Light Magenta

KL215 Cyan

KL255 Light Cyan

Supplied in 2 litre sealed pouches

KL021 White KL391 Clear Supplied in 1 litre sealed pouches

QV017 UV Flush

Available in 1 litre containers.

Application Range

Uvijet KL inks are specifically formulated to maximise the performance of the Fujifilm Acuity LED 40 printers. Performance of ink on substrate may vary across substrate manufacturers.

THE END USER MUST DETERMINE THE SUITABILITY OF THIS PRODUCT FOR THE INTENDED USE PRIOR TO PRODUCTION.

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 KL ink is formulated to give good adhesion to most major brands of plastic materials. 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. For information on adhesion promoters refer to the Uvijet Fusion Primer range.

Plastics

Some plastic substrates may contain lubricants which, like plasticisers, 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 sited as per recommended humidity/temperature recommendations 40-70% RH, 18-30 °C.

Chemical and Abrasion Resistance

Uvijet KL inks have good chemical and abrasion resistance.

Print Head Warranty

Fujifilm warrant that Uvijet KL inks have been formulated to be compatible with the ink supply system of presses and will not cause damage to the print heads, providing these inks are used in accordance with the operating and servicing recommendations in the Acuity LED 40 manual and Fujifilm's ink storage conditions.

In the unlikely event that Fujifilm inks are proven to be the cause of a breakdown, then Fujifilm will replace the defective parts. In the case of a claim, any defective part will be subject to analysis in our quality assurance laboratory to determine the cause and extent of damage due to ink performance. This warranty is in addition to that set out in Fujifilm's standard terms and conditions of supply.

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 KL inks equates to approximately 24 months outdoor exposure in a temperate climate such as Northern Europe.

Storage

Uvijet KL 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 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.

Safety and Handling

Uvijet KL Inks:

 Have a flash point greater than 60°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 KL inks is given in the appropriate Safety Data Sheets.

Environmental Information

Uvijet KL Inks:

- Do not contain ozone-depleting chemicals as described in the Montreal Convention.
- Are formulated free from aromatic hydrocarbons.

Are free from any volatile solvent and can therefore be considered to have less impact on the environment when compared to solvent-based products.

FUJIFILM Speciality Ink Systems Limited:

- Has certification to the International Environmental Standard, ISO 14001.
- Has certification to the Quality Management Standard, ISO 9001.
- Has certification to the Occupational Health and Safety Standard, OHSAS 18001.
- Is committed to minimising the risk to users of our products, and also to minimising 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.



Uvijet KL has gained UL GREENGUARD Gold Certification. This helps manufacturers create - and helps buyers identify - interior products and materials that have low chemical emissions. GREENGUARD Certification is part of UL Environment, a business unit of UL (Underwriters Laboratories). GREENGUARD Certification. More detail here: ul.com/gg.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of Fujifilm Speciality Ink Systems Limited and its associated companies, 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 Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

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