Using Fujifilm’s unique Micro-V dispersion technology to maximize pigment loading, the completely new 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 series inkjet printers and offers excellent dot reproduction, strong vibrant light-fast colors and the versatility for printing both rigid and flexible Sign & Display applications using uncoated materials.

Uvijet KL is also Greenguard certified, so prints can be used safely in schools, hospitals and retail environments. Uvijet KL ink system also maintains print quality and approval consistency from manufacturing through to installation and customer sign off.

Features:

- High performance LED cure UV ink system
- Excellent color gamut
- Good to fair adhesion to rigid plastic substrates
- Excellent inter-coatability for back lit and solid prints
- High satin finish
- Recommended for indoor and external applications
Curing
Excellent cure and adhesion are achieved immediately on 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 lamp being used. Superior cure may be obtained by reducing the print speed 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 dyes/cm or higher. However it is strongly recommended that all substrates are tested before a commercial run. Also consider adhesion promoters as needed.

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 sited as per recommended humidity/temperature recommendations 40-70% RH, 64°F to 86°F (18°C to 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 SAEL 1960 Standard. Under these conditions the accelerated weathering of Uvijet KL inks equates to approximately 18 months outdoor exposure in a temperate climate, such as most of United States except deep Southwest and Florida.

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 41°F to 86°F (5°C to 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 140°F (60°C).
- Are 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 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 teams, 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.

Specifications:
Uvijet KL ink series
- Available in 5 liter sealed pouches.
- KL021 White
- KL391 Clear
- Available in 1 liter sealed containers.
- QV100 Head Conditioner
- Available in 5 liter 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 suitability of this product for the intended use prior to production.

Excellent ★★★★★ Good ★★★★★ Fair ★★★ Poor ★★★

Note: Some media may require an adhesion promoter for optimal performance.

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.