

Uvijet XK

Flexible Multi-faceted UV curable inkjet system

The Uvijet XK range is a premium, high quality UV curable inkjet system, for Fujifilm Dimatix Superwide Piezo Drop-on-Demand print heads, specifically developed for use on the SpyderX series of wide format printers.

Using Fujifilm's unique Micro-V dispersion technology to maximize pigment loading, the Uvijet XK range of UV curing inks delivers strong vibrant colors and the versatility for printing both rigid and flexible Sign & Display applications.

The XK range of inks offer superb dot reproduction, bright vivid colors and provide excellent finishing characteristics. SpyderX Uvijet XK inks were developed working in partnership with sister company and printhead manufacturer Fujifilm Dimatix to develop optimum ink chemistry for the printheads. SpyderX utilizes Fujifilm Dimatix QClass printheads that are reliable, trusted and are used in several inkjet platforms.



Uvijet

Features:

- Conventional UV ink system
- Specifically formulated for the SpyderX printer for maximum productivity
- Intense colors formulated for display POP applications
- Provides the flexibility required for finishing
- Wide Adhesion range with no loss in flexibility to all media including polyethylene substrates
- Recommended for internal and short term external promotions
- Ideally suitable for decorating uneven substrates
- Excellent adhesion and flexibility

POST CURING

The chemical reactions involved in curing UV inkjet inks are not totally completed in the curing unit itself. While up to 90% of the chemical bonds needed to give adhesion, etc are completed, there is a post cure period when chemical bonds continue to be made. Until recently it was believed that post cure was completed within 24 hours. Study has shown that although much of the post cure activity does take place within 24 hours, it is now thought the total post cure period can last for a few weeks. This is important to recognize as the UV cure process, and post curing, can cause shrinkage of the ink film, which puts stress on the material. In the case of self-adhesive PVC the stress manifests itself as cracking or shattering (embrittlement) of the substrate. It is therefore important to be cautious if your results immediately after curing are border line for embrittlement as the additional post cure stress may cause more serious problems later on.

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.

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 XK inks equates to approximately 18 months outdoor exposure in a temperate climate, such as most of United States except deep Southwest and Florida.

PRE-PRODUCTION TESTS

Uvijet XK is formulated to adhere to most major brands of plastic, polypropylene, polyethylene and polystyrene materials. Uvijet XK inks have been formulated to withstand cutting, drilling or routing finishing processes. Such work should be conducted within 24 hours of being printed. Substrate should be tested by the printer on a job by job basis.

PLASTICS:

Certain plastics may be impregnated with lubricants, which, like plasticizer migration, may impair adhesion even after a considerable time period after printing. This together with contamination of the surface (e.g. finger marks) will impair adhesion further and is likely to be visible post printing.

STORAGE

Uvijet XK should not be stored in direct sunlight or stored near heat sources and should be kept away from peroxides. For optimum shelflife storage temperatures should be between 41°F to 86°F (5°C to 30° C). 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 XK INKS:

- ▶ Do not contain ozone-depleting chemicals as described in the Montreal Convention.
- ▶ Are formulated free from aromatic hydrocarbons.
- ▶ Have a high flash point greater than 141°F (61°C) and therefore are exempt from the Highly Flammable Liquid Regulations
- ▶ Formulated and manufactured without the intentional use of heavy metals, phthalates or conflict minerals. These products are formulated to meet CONEG Packing Legislation, REACH SVHC and ROHS Electrical and Electronic Equipment Directive. If necessary, certification of lead and heavy metals content can be obtained from an independent laboratory.
- ▶ Are free from any volatile solvent and can therefore be considered to have less impact on the environment when compared to solvent-based products.

Comprehensive information on the safety and handling of Uvijet inks is given in the appropriate Fujifilm Safety Data Sheets available upon request.

Media Type	Adhesion Characteristics
Display Board	★ ★ ★
Corrugated Board	★ ★ ★
Foam Board	★ ★ ★
Foam PVC	★ ★ ★
Flexible PVC	★ ★ ★
Self-Adhesive PVC	★ ★ ★
Polyethylene	★ ★ ★
Paper	★ ★
Fluted Polypropylene	★ ★ ★
Polystyrene	★ ★ ★
Aluminum Composite	★ ★ ★
Self-Cling	★ ★ ★
Vinyl Banner	★ ★ ★
PETG	★ ★ ★
Digital Acrylic	★ ★ ★

Excellent ★ ★ ★ Good ★ ★

SPECIFICATIONS: UVIJET XK INK SERIES

Color Range

- ▶ XK-215/5K Cyan
- ▶ XK-052/5K Yellow
- ▶ XK-867/5K Magenta
- ▶ XK-004/5K Black
- ▶ XK-255/5K Light Cyan
- ▶ XK-335/5K Light Magenta
- ▶ QV-100/5L Head Conditioner

Also Available:

- ▶ ZE-1000/1 Adhesion Promoter
- ▶ ZE-1000/4 Adhesion Promoter
- ▶ ZE-720/4 Adhesion Promoter for Coroplast
- ▶ ZE-680/4 Adhesion Promoter for Acrylics

Fujifilm

- ▶ Has certification to the ISO 14001 standard, demonstrating our commitment 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 & 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.

APPLICATION RANGE

Uvijet XK inks have been formulated for use with a wide variety of applications these include:

- ▶ Display POP
- ▶ Exhibition Graphics
- ▶ Backlit Displays
- ▶ Short Term Signage
- ▶ Single Sheet Posters

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