

# Uvijet OL



## Uvijet OL Series

Using Fujifilm's unique Micro-V dispersion technology to maximize pigment loading, the Uvijet OL range of UV curing ink delivers strong vibrant colors for packaging and display applications.

The Uvijet OL range is a low odor, high quality UV curable inkjet system for Piezo Drop-on-Demand print heads, specifically developed for use on the Inca Onset series of wide format printers. The inks offer superb dot reproduction, bright vivid colors and provide excellent finishing characteristics.

Uvijet OL has been developed to decorate sheet-fed corrugated and display boards for applications such as free standing display units, packaging and other POP displays.

Uvijet OL has been formulated to deliver a finished print that is similar in odor to other non-UV print technologies used to print corrugated packaging. Uvijet OL has been formulated and tested to comply to DIN 1230-1:10-02 which is the sensory analysis of paper and board intended to come into contact with food stuffs. Uvijet OL is not recommended for direct or indirect food packaging.

**Low odor  
UV curable  
inkjet  
system**

### Uvijet OL Series Features

#### The main features are:

- Conventional UV ink system
- Specifically formulated for the Onset printer for maximum productivity
- Intense colors formulated for display and packaging applications
- Variable finish levels – High impact gloss to low glare satin
- Very low print odor
- Ideally suitable for decorating uneven substrates
- Excellent adhesion on display and corrugated boards

## 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 borderline 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 lamps being used. Superior cure may be obtained by reducing the print speed to increase the overall UV dose.

## OUTDOOR USE

Uvijet OL is not recommended for outdoor use.

## PRE-PRODUCTION TESTS

Uvijet OL inks have been formulated to withstand cutting, drilling or routing finishing processes. Such work should be conducted within 24 hours of being printed. Corrugated board can be used for a wide range of applications, all of which have different needs when it comes to printing on them.

Specific to corrugated board finishing processes, CAD cutting is good (e.g. Esko, Zund, Elitron); automated die cutting can be very aggressive on the ink surface, especially when sheets are being bottom feed from the printed stack causing physical abrasion to the ink surface. Substrate should be tested by the printer on a job by job basis to best understand the end-to-end production requirements.

## STORAGE

Uvijet OL should not be stored in direct sunlight or stored near heat sources and should be kept away from peroxides. For optimum shelf life 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.

## ENVIRONMENTAL INFORMATION

### Uvijet OL Inks:

- Do not contain ozone-depleting 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 solvent-based products

## SAFETY & HANDLING

### Uvijet OL Inks:

- Uvijet OL Are free from N-Vinyl-2-pyrrolidone, which is suspected of causing cancer.
- High flash point and therefore are exempt from the Highly Flammable Liquid Regulations.
- Are formulated free from lead and other heavy metals and therefore should comply to the American Toy standard ASTM F963 Safety regulations. These products are formulated to meet CONEG Packing Legislation and ROHS Electrical and Electronic Equipment Directive.

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

*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.*

Media Type	Adhesion Characteristics*
Display Board	★ ★ ★
Corrugated Board	★ ★ ★
Paper	★ ★ ★

Excellent (★★★) Good (★★) Fair (★)

\* Using Satin print modes without adhesion promoter

## SPECIFICATIONS:

### UVIJET OL SERIES INK

#### Color Range

- ▶ OL-215/5K Cyan
- ▶ OL-255/5K Light Cyan
- ▶ OL-135/5K Magenta (Pink Shade)
- ▶ OL-867/5K Magenta (Blue Shade)
- ▶ OL-335/5K Light Magenta
- ▶ OL-052/5K Yellow
- ▶ OL-004/5K Black
- ▶ QV-100/5L UV Head Conditioner

#### Application Range

Uvijet OL inks have been designed to decorate paper and board materials only.

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

#### Fujifilm

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, ISO 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 & 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 OL ink approved for Nordic Swan Ecolabelled printers.