

# **Uvijet OW**



# **Uvijet OW Series**

Using Fujifilm's unique Micro-V dispersion technology to maximize pigment loading, the Uvijet range of UV curing inks delivers strong vibrant colors for Display POP applications.

The Uvijet OW range is a premium, 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.

# High quality UV curable inkjet system

### **Uvijet OW Series Features**

#### The main features are:

- Conventional UV ink system
- Specifically formulated for the Onset printer for maximum productivity
- Intense colors formulated for display POP applications
- Two finish levels High impact gloss and low glare satin
- Low print odor
- 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 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**

Accelerated weathering tests have been carried out in a Xenon Arc Weatherometer set to the SAEJ1960 standard. Under these conditions the accelerated weathering of Uvijet OW inks equates to approximately 18 months outdoor exposure in a temperate climate, such as North America.

#### **PRE-PRODUCTION TESTS**

Uvijet OW is formulated to adhere to most major brands of plastic, polypropylene, polyethylene and polystyrene materials with a surface energy level of 42 dynes/cm or higher.

Uvijet OW inks have been formulated to withstand cutting, drilling or routing finishing processes. 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. To overcome this problem the Onset can be fitted with an off-line material cleaning system to remove these impurities from the

substrate surface thus improving the quality of the finished print, plus reduce static which is likely to attract particular matter from the surrounding air flown.

#### **STORAGE**

Uvijet OW 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 OW Inks**

- Does 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 OW inks 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.

Uvijet OW 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/qq



Media Type	Adhesion Characteristics*
Display Board	***
Corrugated Board	***
Foam Board	***
Foam PVC	***
Acrylic	**
Flexible PVC	***
Self-Adhesive PVC	***
Gloss Rigid PVC	***
Coroplast	**
Polythylene	**
Paper	***
Polycarbonate	**
Polystyrene**	**
Polyester	**
Digital Dibond	***
Self-Cling	**
Vinyl Banner	***

Excellent ★★ Good ★★ Fair ★

Using Satin print modes without adhesion promoter

\*\* Polystyrene that is not corona treated provides the greatest adhesion

#### **SPECIFICATIONS:**

#### UVIJET OW SERIES INK

## Uvijet OW Color Range • 0W-215/5K Cyan

- OW-215/5K Cyan
   OW-052/5K Yellow
- ▶ 0W-867/5K Magenta
- Blue Shade
- OW-135/5K Magenta Yellow Shade
- ▶ 0W-004/5K Black
- ▶ 0W-021/5K White
- ▶ OW-255/5K Light Cyan
- OW-335/5K Light Magenta Blue Shade
- OW-103/5K Orange
- 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 Application Range

#### **Application Range**

Uvijet OW 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

#### 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 Adhesion Master ZE720, ZE680 & ZE1000

 Does not contain ozone depleting chemicals as described in the Montreal Convention.

Uvijet OW ink approved for Nordic Swan Ecolabelled printers.

# FUJiFILM

Phone: 800-877-0555 • Email: contactgraphics@fujifilm.com • Web: www.fujifilminkjet.com uvijetow 171127