

Uvijet LM

Low Migration UV Curing Ink System for Inca Onset Series Printers

PRODUCT INFORMATION

Uvijet LM has been developed to decorate sheet-fed corrugated and display boards for applications where the printed item is intended to be used for indirect food contact for **secondary packaging**. A suitable functional barrier must still be present as part of the primary packaging layer.

Uvijet LM must not be used for primary packaging applications eg. fruit boxes.

Uvijet LM can also be used effectively on paper and display boards.

Features

- Excellent flexibility on display and corrugated board
- Fast cure for high production output
- Low print odour
- Adjustable print finish (satin - high gloss)
- 5 kg open top containers for ease of use

Ink Properties

The Uvijet LM ink range is a high quality UV curable inkjet system designed for piezo drop-on-demand printheads. Using Fujifilm's unique Micro-V dispersion technology to maximise pigment loading, the Uvijet range of UV curing inks deliver vibrant, solid colours demanded by the major brands. Uvijet LM has been specially developed for the Inca Onset flatbed printers and offers superb dot reproduction, bright colours and gloss functionality.

Printing Material

Within the corrugated segment there are a wide variety of top coat liner grades available. It has been proven that the quality and grade (gsm) of these can have a significant impact on the overall performance of the printed item i.e. quality, odour, finishing results and overall print appearance. It is recommended that the most suitable material is determined during the demonstration process.

Post Print Finishing

Automated die cutting can be very aggressive on the ink surface, especially when sheets are being bottom fed (often inverted) from a printed stack, this can cause physical abrasion/rub to the ink surface.

Care should be taken to understand the end-to-end production requirements during the demonstration phase prior to purchase.

Ink will require 24 - 48 hours to fully post cure.

Development of Uvijet LM

Uvijet LM has been formulated to:

- DIN 1230-1:10-02 which is the sensory analysis of paper and board intended to come into contact with food stuffs.
- Article 3 of EC Regulation 1935/2004 – Legislation applicable to printing inks for paper & board. Must not prevent the final package from meeting the requirements of the Regulation – safety, taste, odour.
- EC Regulation on GMP 2003/2006 - Good manufacturing practice for materials & articles intended to come into contact with food (specifically references printing inks)
- EuPIA Guidelines - comprehensive guidance on Good Manufacturing Practice, use of low migration materials and prevention of migration
- Swiss Ordinance SR 817.023.21
- Nestle Guidance Note on packaging Inks 08-2016

Colour Range

LM215 Cyan
 LM867 Magenta (Blue Shade)
 LM052 Yellow
 LM004 Black
 Available in 5 kg containers

QV017 UV Flush
 Available in 5 litre containers

Application Range

Uvijet LM has been designed to decorate paper and board materials only.

Supply chain responsibility

The manufacturer of the packaging and the filler are responsible for the properties of the food packaging and its compliance with legal requirements. This involves a written Declaration of Compliance issued by the manufacturer of the packaging and/or the filler.

The printing ink manufacturer's responsibility is to supply products that are fit for the intended purpose as defined between members of the packaging chain.

Fujifilm are not liable for any aspects of the production of food packaging once the inks have left the manufacturing site.

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

Co-use with Other Inks

For information regarding Uvijet LM and its co-use with other ink ranges, please contact your local Fujifilm technical support.

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 through cure may be obtained by reducing the print speed to increase the overall UV dose.

Outdoor Use

Uvijet LM is not recommended for outdoor use.

Storage

Uvijet LM 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.

When stored in a cool environment Uvijet LM inks are expected to have a shelf-life of 12 months from date of manufacture.

Fujifilm Speciality Ink Systems Limited:

- Has certification to the International Environmental Standard ISO 14001.
- 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.
- The 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.

Safety and Handling

Uvijet LM Inks:

- Have a flash point greater than 55°C and are therefore not classified as 'dangerous substance' under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).
- For optimum shelf life, all 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 product.

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

Environmental Information

Uvijet LM 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.



Uvijet LM 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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