Product Information





Uvijet KH

UV Curing Ink System for the Acuity B1 Series Printers

The Uvijet KH ink range is a high quality, UV curable inkjet system developed for the display POP and signage markets. The inks provide superior resistance to the post print processes printed items may require, such as cutting, creasing and routing. Uvijet KH has been specifically designed to achieve excellent adhesion on rigid plastic materials of all grades.

| Media Type | Adhesion Characteristics | Media Type | Adhesion Characteristics |
|----------------------|--------------------------|----------------|--------------------------|
| Display Board | 111 | Polypropylene | 111 |
| Foam Centred Board | 111 | Paper | 111 |
| Foam PVC | 111 | Polycarbonate | 111 |
| Acrylic | 111 | Polystyrene | 111 |
| Flexible PVC | 111 | Polyester | 111 |
| Self- Adhesive PVC | 111 | Digital Dibond | 111 |
| Gloss Rigid PVC | 111 | Self- Cling | 111 |
| Fluted Polypropylene | 111 | | |

Key: Excellent ✓ ✓ ✓ Good ✓ ✓ Poor ✓

Features

- Excellent adhesion range
- Fast cure for high production output
- Wide colour gamut
- Recommended for both internal & external applications
- 5 kg cubitainer for ease of use

Ink Properties

Using Fujifilm's unique Micro-V dispersion technology to optimise pigment loading, Uvijet KH UV curing inks deliver vibrant, lightfast colours that last. The ink has been specifically developed for the Acuity B1 Series printers and offers superb dot reproduction and adhesion to a wide range of materials, particularly challenging rigid plastic materials of all grades.

Colour Range

KH215 Cyan

KH867 Magenta Blue Shade

KH052 Yellow

KH004 Black

KX017 UV Flush*

KX-HC HEad Conditioner

*KX017 UV Flush and KX-HC Head Conditioner is compatible with the KH ink range

Available in 5 ltr cubitainers.

Application Range

Uvijet KH has been designed to decorate a wide range of materials including challenging rigid plastic materials of all grades. Uvijet KH will also adhere to all flexible materials, although ink flexibility criteria should be assessed by the customer.

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

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/cure speed to increase the overall UV dose.

Pre-production Tests

Uvijet KH 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 KH inks have been formulated to withstand cutting, drilling or routing finishing processes. Such work should be conducted within 24 hours of being printed. However it is strongly recommended that all substrates are tested before proceeding with a commercial run.

Plastics

Certain plastics may be impregnated with lubricants which, like plasticisers, migrate impairing adhesion and block resistance for a considerable period after printing. This can be overcome by wiping the surface with isopropyl alcohol (IPA) before printing.

Print Head Warranty

Fujifilm warrant that Uvijet KH 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 B1 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 SAEJ1960 standard. Under these conditions the accelerated weathering of Uvijet KH inks equates to approximately 24 months outdoor exposure in a temperate climate, such as the UK.

Where prolonged outdoor use is required, it is strongly recommended to obtain verification of the actual durability of the material from the manufacturer or substrate supplier prior to use to ensure that the choice of material will not adversely affect the durability of Uvijet digital inks.

Storage

Uvijet KH 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 KH inks are expected to have a shelf-life of 12 months from the date of manufacture.

Safety and Handling

- Have a flash point greater than 60°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

- 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 Management System Standard OHSAS 18001:2007.
- 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.
- 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.

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.

FUJIFILM SPECIALITY INK SYSTEMS LIMITED

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