Uvijet KV

Uvijet KV inks are exclusively designed for the production of decorative print in deep draw thermoforming applications. Uvijet KV inks have been developed to be printed on Fujifilm Acuity UV inkjet printers (2545, 2565, 3545, 4004, 4006, 4008, 4224, 4226, 4228 and 5004, 5006, 5224, 5226).

Uvijet KV jets exactly like a normal UV ink, but during the forming process becomes thermo-plastic, elongates, and finally cools to its original properties. Its elongation is excellent.

**Uvijet KV Features:**
- Developed for deep-draw thermoforming
- Outstanding adhesion range
- Excellent finishing properties including bending, creasing, routing and guillotining
- Cured by conventional UV lamps for immediate use
- High elongation
- CMYK color set for near photographic print quality
- Recommended for both internal and external applications
- Anti-reflective low satin finish
- Forms perfectly between 302°-392°F (150°-200°C)
INK PROPERTIES
The Uvijet KV ink range is a high quality UV curable inkjet system designed for piezo drop-on-demand printheads. The inks offer superb dot reproduction, light-fast colors with excellent adhesion and elongation on a wide range of materials commonly used in thermoforming applications.

APPLICATION RANGE
Uvijet KV inks are formulated specifically to maximize the benefits of Fujifilm’s Acuity Select and Select HS UV curing printers. Uvijet KV inks are designed to decorate rigid plastic materials commonly used in thermoforming.

Some forming applications on clear materials may require a white back-up print. In these cases, Fujifilm recommends KV021 White which has also been designed specifically for thermoforming applications.

In some cases the use of Uvijet KV can lead to excessive sticking to the mold after forming, especially with thin materials. Where this occurs, a silicone release agent (ZEA09), should be wiped on the mold prior to forming in order to optimize release.

PRE-PRODUCTION TESTS
Uvijet KV ink has been engineered primarily for thermoforming applications; its use as a general purpose graphic ink needs to be carefully assessed.

CURING
Excellent cure and adhesion are achieved immediately upon print and UV 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 output of the UV curing lamps being used. Superior through cure may be obtained by reducing the print speed to increase the overall UV dose.

CHEMICAL AND ABRASION RESISTANCE
Uvijet KV inks have good water and abrasion resistance.

PLASTICS
Certain plastics may contain lubricants which, like plasticizers, migrate impairing adhesion and block resistance.

There may also be residues from glues and adhesives used on backing sheets. This can be overcome by wiping the surface with isopropyl alcohol (IPA) before printing.

To reduce the risk of problems generated by the build-up of static electricity it is advisable to pass an earthed anti-static brush over the material prior to printing. Allow static generated from protective sheets to dissipate before printing. Ensure that the printer is cited as per recommended humidity/temperature recommendations 40 - 70% RH, 64°F to 86°F (18°C to 30°C).

OUTDOOR USE
Accelerated weathering tests have been carried out in a Xenon Arc Weatherometer set to the SAEJ960 standard. Under these conditions the accelerated weathering of Uvijet KV inks equates to approximately 12 months outdoor exposure in a temperate climate. If finished prints will be subjected to outdoor exposure exceeding 12 months, the use of an overprint clear or overlaminate is strongly recommended.

STORAGE
Uvijet KV 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 41°F to 86°F (5°C to 30°C). Storage outside of these temperatures may lead to deterioration in the performance of the products.

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

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.

SPECIFICATIONS:

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Excellent ⭐⭐⭐⭐⭐  Good ⭐⭐⭐⭐  Fair ⭐⭐

FOR ACUITY SELECT & SELECT HS PRINTERS

Uvijet KV ink approved for Nordic Swan Ecolabelled printers.