

UVS SERIES

Main characteristics

UVS is a ready to use, high gloss UV ink for flame treated rigid and semi-rigid cartridges and containers. It is suitable for a wide range of substrates in both industrial and graphic applications, notably treated Polyethylene (PE), Polypropylene (PP), PVC and PET. Its special rheological properties will enable this ink to reach smooth surface block areas, as well as high definition fine letters. Its low viscosity allows use of fine meshes, notably 165 to 200/cm.

Substrates

Flame treated Polypropylene (PE), Polyethylene (PP) rigid silicone cartridge and containers. Some PET containers (surface tension greater than 38 dynes/cm), as well as bottles, self-adhesive PVC plates can also be printed.

Printing application

UVS is a ready to use ink. However, in order to obtain best possible adhesion on all substrates, it is better to add 10 to 20% of base 095 in the ink before printing. Flame treatment should be applied inline just before printing the first layer. If not the case, pay attention to storage conditions of the container between flame treatment and printing of first layer.

Intercoat Adhesion

For optimum adherence the colors should be printed inline. If not, do not allow more than 24 hours between each coat. Pay attention to the storage conditions, so that no dust remains in between the 2 ink layers. The addition of some hardener, cure promoter or anti scratch agent will damage Intercoat adhe-



Thining

The UVS is ready to use. Nevertheless, its viscosity can be adjusted by adding, either the diluent ST178 to lower the viscosity, or thixo base 098 in order to obtain a better definition. For very fine printing, it is possible to make the ink more thixotropic by addition of the thixo base 098.



Drying

Standard curing conditions are: one 120 watts / cm (300 watts / inch) lamp, or two 80 watts / cm (200 watts / inch) lamps. UVS series can cure up to 20 meters/ min in standard working conditions.



Storage

The standard UVS inks have a guaranteed shelf life of 1 year from their date of manufacture, undiluted, in the original container. Special color matches are guaranteed one year from the date of blending. The above guarantee is applicable to inks stored in a dry, dark well-aired environment between 10 - 30°C (50 - 86°F).



Screen

Low elongation, monofilament polyester meshes are best used with this series. A mesh count of 355 to 420 threads per inch (140 - 165 threads per cm). Tension should range from 18 to 25 Newton/cm on a rigid metallic frame.



Resistances

UVS series will pass tape test on most substrates it is designed for. It has an excellent theoretical resistance to contact with the following products : Acids, Bases, Solvents. In the majority of cases, the water resistance of UVS is excellent. However, it can be



Product features

- Fast curing speed
- High gloss finish
- Good resistances
- Very opaque, high intensity colors
- Excellent adhesion
- Outstanding definition
- Smooth surface aspect

ENCRES DUBUIT

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Cleaning

Encres Dubuit's Solvent H or Eco N are effective for cleaning screens used with most UV inks.



Squeegee

A medium 75 shore durometer polyurethane squeegee is preferred. Inks can be printed with hardness ranging from 60 to 90, depending on the final ink deposit to achieve. In some cases, V shape squeegee will sometimes improve fine letters printing results.



Standards and legislation

The standard UVS inks are supplied in the ECO SYSTEM colors.

For full detail about our inks' compliance with current standards, please refer to the document ECO SYSTEM Label by Encres Dubuit. Please contact us at :

quality@encresdubuit.com

Material safety data sheet available at :

<http://www.edubuit.com/msds/> or

export@encresdubuit.com



Additives

Adhesion Promoter AM9268

Proportion: 1-3%.

Broadly used to increase water resistance and reduce ink sensitivity to humidity, this hardener also acts as an adhesion promoter on difficult substrates (i.e. poor treatment or pearlised substrates). Mix inks fresh daily, and stir immediately and thoroughly. Maximum effect of hardener on adhesion and water resistance will be reached 24 hours after curing.

Cure Promoter ST 307

Proportion: 1% to 3% maximum

Improves speed of cure. Very useful when printing thick ink deposit or large block areas. The ink surface hardness will be increased, and glossiness will improve if curing conditions and production speed remain unchanged. The use of ST 307 may affect Inter-coat adhesion, depending on printing

conditions and ink series. Monitor carefully cure and adhesion throughout the production run.

Leveling agent ST 155

Proportion: 0.5% to 1% maximum.

This additive will eliminate bubbles, pinholes, and will help reaching a smooth surface aspect.

PRODUCT SELECTION CHART

STANDARD SHADES	
MID YELLOW	710
GOLD YELLOW	720
MANDARIN	730
VERMILLON	740
DARK RED	750
PINK	760
VIOLET	770
PRIMARY BLUE	780
EMERALD GREEN	790

BLACK	701
OPAQUE WHITE	704
BASE	095

Color Matching

Dubuit offers a full in-house color matching service from 1 kg.

Please provide as much information as possible regarding the type of substrate, color, mesh used...

Dubuit guarantee the quality of our products. We cannot however guarantee the finished results because we exercise no control over an individual operating procedures. Our responsibility is limited solely to the exchange of ink or varnish. The quality of a substrate to be printed can vary, as can an ink being overprinted; therefore the above information is given in good faith based on the state of our art and prior experience. This statement also applies to our technical assistance. When using our inks and varnishes on a new substrate or when changing operating procedures, we strongly recommend testing before use in a production situation to ensure full compatibility. **Please refer to our General Conditions of Sales.**