

# UVILED

Fast UV curing ink – Very high gloss Excellent adhesion on different types of glass (coated, non-coated...)

# **APPLICATIONS**

This ink series is designed for printing on pretreated packaging and container glass:

- Drinking bottles
- Pre-treated cosmetic containers
- Pre-treated restaurant glass such as drinking glass, ashtrays...
- Pre-treated glass for indoor use, such as slot machines,mirrors, glass for furniture

#### **SUBSTRATES**

- Glass
- Ceramic
- Drinking bottles (frosted glass, raw glass)
- Pre-treated or non-pre-treated cosmetic containers
- Drinking glasses
- Pre-treated restaurant glass such as drinking glasses, ashtrays...

## **BENEFITS**

300 cycle's dishwasher resistance.

Suitable for high printing speeds.

Good adhesion, high gloss, good hardness, great resistance to scratch and chemical agents on flamed glass, coated glass (epoxy, water based, UV, PU).

Before use, add 4% hardener AM9192 and stir well.

Mixture pot life is around 10 hours if kept in a dark, dry and well-aired environment at a temperature between 15-25 °C (59-77 °F). Water resistance is obtained after 24 hours. Because of a large diversity of substrates, we recommend that you carry out pre-production trials.

For good adhesion, a uniform surface energy > 44mn/m is generally necessary.

#### **INK ADHESION**

The glass surface must be free of graphite, silicone, dust or grease or other residues (such as fingerprints).

On glasses that have undergone «cold end» treatment, a flame treatment should be performed. On coated glass, a flame pre-treatment immediately before printing generally increases the adhesion of the ink on the media.

To obtain optimal adhesion and resistance, always dry at 150 °C during 30 minutes.

# ASPECT

Very high gloss



# **SCREEN MESH**

Mesh 140 to 180 threads/cm (355 threads to 450 threads/inch)



#### **SQUEEGEES**

Single, double or triple durometer polyurethane blades with hardness between 65 and 75 shore.



#### DRYING/CURING

UVILED is a very fast curing UV-/LED-ink but the ink film can also be cured with a regular UVcuring unit.

### UV LED curing:

Intensity-peak of 385 or 395 nm is required with a minimum lamp power of 10 watts/cm<sup>2</sup>.

Make sure that the distance between the LEDs and the substrate corresponds to the indications given by the manufacturer of your equipment.

#### Mercury lamp curing:

UVILED inks work well with one 300 watts/in (120 watts/cm) or two 200 watts/in (80 Watts/ cm) focused medium pressure mercury vapor lamps with millijoules (mJ) and milliwatts (mW) of:

- 200 mJ/cm<sup>2</sup> at 600 mW/cm<sup>2</sup> min. for most colors and varnishes.
- 300 mJ/cm<sup>2</sup> at 600 mW/cm<sup>2</sup> min. for opaque colors (blacks, whites, metallics, etc...)

The curing speed of the ink is generally dependant upon the kind of UV-curing unit (reflectors), number, age, and powers of the UV-lamps or LEDs, the distance between LED and substrate, the printed ink film thickness, colour shade, substrate in use, as well as belt speed of the UV-curing unit.



INDUSTRIAL MARKING TDS REF. UVILED - 08 Due to their higher UV-near visible absorption spectrum, UVILED inks are very sensitive to daylight UV rays and to UV light emitted by some fluorescent tubes. Special cautions have thus to be taken to avoid direct exposure of the products.

In the same way, all interference radiations, even indirect, from the LED-UV curing module toward the screen and/or the substrate being printed have to be avoided.

Be aware of skylights, windows and overhead lights curing the ink in the screen; light filters are recommended. Leaving a container uncovered may result in the ink's surface forming a "skin", caused by reaction with ambient lighting.



CLEANING Solvents H, ECO N or 93801

#### THINNING

ST178: 1 to 5%

# **PRINTING EQUIPMENT**

Semi-automatic or automatic machines

# PACKING

1 kg & 5 kg



# **STORAGE**

The UVILED ink series are guaranteed to be stable in their original, unopened packaging; they have a shelf life of 24 months. Storage should be at a temperature between 15 and 25 °C (59-77 °F)

# **COLOUR MATCHING**

DUBUIT offers a full in-house colour matching service from 1 kg. Please provide as much information as possible regarding the type of substrate, colour, mesh used...

## **MULTIFLEX PIGMENT CONCENTRATES**

It is possible to enhance the power of colours by adding the Multiflex pigment concentrates. Be aware, however, that the addition of an excessive amount of pigment concentrates may affect the polymerization; please do not use concentrates alone.

# **FLUORESCENT SHADES**

They have to be used on white background. The pot life of these inks is about three months from the date shown on the packaging. The light resistance is limited in time, especially in outdoor exposure.

#### **ADDITIVES AND SPECIAL PRODUCTS**

Do not forget that additives must not be incorporated systematically in the inks, but must be used with caution as their dosage and their field of use can often present risks. The special products we deliver are of consistent quality. Encres DUBUIT cannot guarantee the work using these products. Indeed, they cannot influence neither the working methods nor the operating parameters.

# **HEALTH AND SAFETY**

The vast majority of printing inks and related products formulated by Encres DUBUIT contain no substances of very high concern. Our products comply with the requirements of Directives 2011/65/EU (RoHS 2), 2015/863/EU (RoHS 3) and 94/62/EC (heavy metal concentration levels present in packaging). For more information about our regulatory compliance, please consult our Eco System document, available on request.

The UVILED Series should not be used for printing food packaging material that is not recognized as an appropriate barrier (plastic, cardboard, paper and labels affixed to these media).

Encres DUBUIT guarantees the quality of our products. However, we cannot guarantee the final result, because we exercise no control over 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 well as an overprinted ink; 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 first a full-scale production to ensure compatibility. Please refer to our General Conditions of Sales.







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UVILED RANGE			
SOLID COLOURS - 700 R	ANGE		
ARTICLE DESIGNATION	REF.	CODE 1 KG - 1 L	CODE 5 KG - 5 L
Mid Yellow	710	BUVILED710K	
Gold Yellow	720	BUVILED720K	
Mandarin	730	BUVILED730K	
Vermillion	740	BUVILED740K	
Dark Red	750	BUVILED750K	
Pink	760	BUVILED760K	
Violet	770	BUVILED770K	
Primary Blue	780	BUVILED780K	
Emerald Green	790	BUVILED790K	
<b>BLACK, WHITE, BASE &amp; VARNISH</b>	4		,
Mixing Black	701	BUVILED701K	
Opaque Black	703	BUVILED703K	
Mixing White	702	BUVILED702K	
Opaque White	706	BUVILED706K	
Base	095	BUVILED095K	
Varnish	090	BUVG090K	
Varnish For Powder	091	BUVILED091K	
ADDITIVES			
Standard Thinner	ST178	D178L	D178Q
Hardener	AM9192	E9192	

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