Encres DUBUIT
INNOVATIVE INKS

UVHDPLAST

Glossy UV ink
Non CMR

APPLICATIONS
UVHDPLAST is designed for printing on various plastic materials, especially used in the container and packaging industry: rigid or semi-rigid flame treated containers in PET, treated PP and treated PE (cosmetic bottles, cartridges, cans, capsules...).

The surface energy must be at least 42 Dynes/cm². When printing several colours, it is recommended not to wait more than 24 hours between each.

SUBSTRATES
- Flame treated PE bottles
- Flame treated PP rigid and semi-rigid bottles
- PET, PETG, PETP

BENEFITS
- Fast-curing ink
- High Gloss
- Great resistance to abrasion and numerous chemical agents, detergents, cosmetics...

INK ADHESION
For special requirements such as extra water resistance, we recommend the addition of 3 to 5 % hardener ST 305. Pot life is then reduced to 4 to 8 hours depending on the colours.

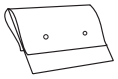
On some very difficult substrates when adhesion is critical use 4 % AM9192 hardener. Mixture pot life is around 10 hours if kept in a dark, dry, and well-aired environment at a temperature between 15-25 °C (59-77 °F).

ASPECT
Very Glossy

THINNING
- Standard Thinner ST178 (1 to 5%)

PRINTING EQUIPMENT
Semi-automatic or automatic machines equipped with flame treatment

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



SQUEEGEES
SR1 or HR1 type (simple layer) - 85 or 75 shore

CLEANING
Solvents H, ECO N or 93801

DRYING/CURING
Mercury lamps:
A steam UV medium pressure mercury lamp (120-200 W/cm) prints approximately 4500 pieces/ hour.

White, opaque, and metallic colours cure more slowly (about 3000 pieces/hour).

- Recommended dose: 175-250 mJ/cm² irradiance of 600 mW/cm²

UV drying speed depends on the quality of the UV drying unit (power and lamp age, state of the reflector, focus...), the ink deposit, the colour of the substrate and the number of UV drying units.

UV LED drying
UVHDPLAST can be cured under UV LED under the following conditions:
- UV LED oven with a minimum power of 12W / cm²
- Wavelength 395nm

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

UV Accelerator 44213
If necessary, reactivity can be optimized by incorporating the additive «UV Accelerator 44213» in the ink in a proportion between 5 and 10%. It performs as well for UV LED curing as for conventional UV curing (mercury lamp)

Be careful, however, when using this additive. It can cause the ink film to harden.

In this case, you can use a simple photoinitiator up to 1 to 3% :
- PI Color 40873 for colors
- PI White 43389 for white

PACKING
1 kg & 5 kg

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STORAGE

The UVHDPLAST 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

Our color matching department works with an Xrite software and a spectrocolorimeter. It allows us to carry out any of your colour matching from 1kg. It is then necessary to give us as much information as possible about the type of substrate and its color, the screen mesh used, as well as a wet sample of the desired final shade.
If you have an Xrite software, we can also send you the IFSX files of the formulation guide. These formulation guides are also available in Excel files.

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 UVHDPLAST 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).

STANDARD SHADES	CODE 1 KG - 1 L	CODE 5 KG - 5 L
UVHDPLAST Yellow 1010	BPLAST1010K	
UVHDPLAST Golden Yellow 1020	BPLAST1020K	
UVHDPLAST Orange 1030	BPLAST1030K	
UVHDPLAST Vermilion 1040	BPLAST1040K	
UVHDPLAST Red 1050	BPLAST1050K	
UVHDPLAST Pink 1060	BPLAST1060K	
UVHDPLAST Violet 1070	BPLAST1070K	
UVHDPLAST Blue 1080	BPLAST1080K	
UVHDPLAST Green 1090	BPLAST1090K	
BLACK, WHITE, VARNISH & BASE		
UVHDPLAST Base 1095	BPLAST1095K	
UVHDPLAST Varnish 10090	BPLAST10090K	
UVHDPLAST Mixing White 1002	BPLAST1002K	
UVHDPLAST Opaque White 1006	BPLAST1006K	
UVHDPLAST Super Opaque White 2006	BPLAST2006K	
UVHDPLAST Black 1001	BPLAST1001K	
UVHDPLAST Opaque Black 2003	BPLAST2003K	
ADDITIVES		
Standard Thinner ST178	D178L	D178Q
Hardener AM9192	E9192	
Hardener ST305	BDIV305K	
UV Accelerator 44213	B44213K	
PI Color 40873	B40873K	
PI White 43389	B43389K	
Levelling Agent ST155	BDIV155K	

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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