

# Citygraf

Ready to use ink for wide format graphic application

## APPLICATIONS

CITYGRAF ink series is designed for printing on many substrates: Paper, paper board, PVC, Polystyrene, Polycarbonate, PETG, treated PP sheets (Coroplast®), vinyl, etc... that are available for the large format graphic applications.

## SUBSTRATES

- Papers
- Cards
- Rigid and flexible PVC
- Top coated PE/PP
- Polystyrene
- Polycarbonate
- PETG
- Forex
- Priplak®
- Akilux®
- Vinyl
- Coroplast@

## BENEFITS

Ready to use ink.

Low residual odour.

Good flexibility which allows prints on both sides of the substrates.

The rheology of CITYGRAF series provides very good colour stability on long runs with a nearly perfect dot. It is thixotropic and very flexible and can be folded immediately after printing.

## INK ADHESION

CITYGRAF has a good adhesion right after the print even on polypropylene sheets without the use of hardener providing that the surface tension is above 42 dynes.

The adjunction of 1 to 3% ST305 hardener will improve the resistance to humidity.

Because of the large diversity of substrates, we recommend to carry out pre-production trials.

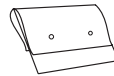
## ASPECT

Satin/Glossy with great colour intensity



## SCREEN MESH

The recommended mesh is 140 to 180 threads/cm (355 threads to 420 threads per inch)



## SQUEEGEES

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



## DRYING/CURING

UV curing ink. Optimal cure performance of 150 and 250 mJ/cm<sup>2</sup> is generally achieved with a UV curing unit of one or two 120 W/cm lamps at belt speed of 10 to 20 m/min (32 to 65 feet/min).



## CLEANING

Solvents ECO N, 93801, screen opener H5726

## THINNING

Standard thinner ST178 (1 to 5%)

In case of difficult adhesion, please use thinner AM9345. Instruction: 1 to 5%.

## PRINTING EQUIPMENT

Large format, flat-bed and cylinder multi-colour graphic

## PACKING

5 kg & 20 kg



## STORAGE

The CITYGRAF 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. Encre 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 Encre 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.

### EVALUATION OF LIGHT FASTNESS

The safest method of evaluation involves exposing the printed media in its actual atmosphere: the disadvantage of this method is the duration that must be equal to the desired time. The accelerated method allows to test the printed media in a specific device. In comparing the evolution of printing relative to standard stallions, we can deduct the strength indices (according to standard NFT 30-057):

1 = very poor - 2 = poor - 3 = moderate  
4 = pretty good - 5 = good - 6 = very good  
7 = excellent - 8 = outstanding.

Light fastness is the maintenance over time of the colour and intensity of a print. Not to be confused with the weather resistance or other factors than light which can decrease printing durability: moisture, air pollution, substrate, heat, cold, etc...

Light Fastness depends on the nature of the light (day or artificial light) and on light intensity (climate, season...). The strength of a print can vary with the thickness of ink deposit (the thinner the ink thickness, the weaker the light resistance) and the nature of the substrate. The strength of an ink depends on the components used (some binders or pigments are more resistant than others to light) and the percentage of dye or of the quantity of white pigment in the ink. Thus we should now that: Low intensity = loss of resistance.

Pastels Tons = loss of strength.

Thanks to a wise selection of the best pigment quality, Encre DUBUIT is able to provide a wide range of high resistant inks regarding color fading (blue wool scale 6-8). These pigments are used in the CITYGRAF process colors. For solid colors who are more sensitive to degrade under UV light, we have developed a specific series called 900 colors SL that have a light fastness resistance of 7/8 on the blue wool scale (Yellow 931 - Orange 933 - Red 935 - Dark Red 939)

This means that the CITYGRAF series is suitable for outdoor use for 2 years if place vertically and referred to the middle European climate.

## CITYGRAF RANGE SOLID COLOURS - 700 RANGE

ARTICLE DESIGNATION	REF.	CODE 1 KG - 1 L	CODE 5 KG - 5 L	CODE 20 KG
Mid Yellow	710		BCITYG710C	
Gold Yellow	720		BCITYG720C	
Mandarin	730		BCITYG730C	
Vermillion	740		BCITYG740C	
Dark Red	750		BCITYG750C	
Pink	760		BCITYG760C	
Violet	770		BCITYG770C	
Primary Blue	780		BCITYG780C	
Emerald Green	790		BCITYG790C	
<b>BLACK, WHITE, BASE &amp; VARNISH</b>				
Black	701		BCITYG701C	
Opaque Black	703		BCITYG703C	
White	704		BCITYG704C	
Base	095		BCITYG095C	
Glossy Varnish	090		BCITYG090C	
Mat Varnish	H5735		BCITYGH5735C	
<b>PROCESS COLOURS</b>				
Yellow 6L	438		W34758C	BCITYG2438T
Magenta 6L	422		W34757C	BCITYG2422T
Cyan	450		W34756C	BCITYG2450T
Black	410		W34759C	BCITYG2410T
Thixo Base	098 H 5847		BCITYG2098C	BCITYG2098T
<b>ADDITIVES</b>				
Standard Thinner	ST178	D178L	D178Q	
Reactive Thinner	AM9345	D9345L	D9345Q	
Hardener	ST305	BDIV305K		

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.