



Code N° M5004--

Series of disperse dye inks for direct printing, compatible with DX3, DX4, DX5 and DX7 piezo printheads.

DISPERSE DYE DIGITAL INK

- Ideal for direct printing onto synthetic fibres (polyester)

EXCELLENT GENERAL FASTNESS

- High light fastness of the prints
- Good duration of outdoor exposure
- High rubbing fastness (if post-treated)

COMPATIBLE WITH DX3, DX4, DX5 and DX7 PRINTHEADS

- Compatible with the above-mentioned piezo printheads

GENERAL FEATURES

- Extremely vivid and bright colours
- Excellent outlines definition
- Quick printing drying
- No "ghosting" effect during fixing
- High penetration of the ink, allowing a better two-side effect

PRODUCTS OF THE SERIES

COLOUR	BLACK PLUS	CYAN	LIGHT CYAN	MAGENTA	LIGHT MAGENTA	YELLOW
CODE	500411	500451	500452	500430	500431	500415
PACKING	1 litre	1 litre	1 litre	1 litre	1 litre	1 litre
SHELF LIFE	12 months	12 months	12 months	12 months	12 months	12 months
COLOUR	MAGENTA PLUS	WARM YELLOW	ORANGE	BLUE		
CODE	500434	500417	500433	500450		
PACKING	1 litre	1 litre	1 litre	1 litre		
SHELF LIFE	12 months	12 months	12 months	12 months		

INSTRUCTIONS

It is recommended to let the product reach operative conditions in terms of temperature and humidity at least 24 hours prior to use, taking care of not stirring it, and apply the product under controlled conditions:

- **RECOMMENDED TEMPERATURE RANGE:** 20-25°C
- **RECOMMENDED HUMIDITY RANGE:** 40-60%

The ink is ready to use and it is recommended to use it through the external feeding system (**INK FEEDER, CODE M4087..**), so that a steady printing quality is assured.

The application process of these inks requires the following steps:

1. **INKJET PRINTING**
2. **DRYING**
3. **HEAT FIXING or VAPORIZING**
4. **FINAL WASHING (optional)**

There are three different **HEAT FIXING** methods:

- **THERMOSOL:** dry heat into oven with forced ventilation: 170-190°C during 2-3 minutes
- **CALENDER or FLAT PRESS:** 180°-200°C during 1-2 minutes
- **VAPORIZING:** saturated vapour, 170°-175°C during 10 minutes (**upon test of the most suitable fixing conditions**)

The **FINAL WASHING** is generally made, by following three steps:

- **PREWASHING IN COLD WATER**
- **STRIPPING** in water at 70°C with hydrosulphite and caustic soda during about 10 minutes
- **RINSING IN COLD WATER**

Often, the above-mentioned operations (except for final washing) are condensed in one single step, thanks to the use of specific plotters, which are dedicated to the textile field, and are equipped with specific fixing units in the production line.



PRINTING SUBSTRATES PRE-TREATEMENT

In order to obtain particularly sharp images with a high details definition, a pretreatment of the fabric is required, generally made by soaking through foulard machine having a squeezing ratio 80 to 90%.

After the application of the product, the fabric is dried at a temperature not higher than 120°C and stored in a dry place, away from direct sunlight.

The printed fabric is then fixed and subsequently undergoes the final washing (in order to improve the touch and the colour fastness), consisting in a passage into cold water, a subsequent washing in a washing bath containing approximately 2 g/l hydrosulphite and 2g/l caustic soda, then a final rinsing in cold water.

AUXILIARIES – FLUIDS FOR PLOTTER MAINTENANCE

- **DIGISTAR CAPPING FLUID (CODE 408703):** this product has moistening and anti-scaling properties, available in 250 ml container with dosing pipette for application on “capping station”.
- **DIGISTAR CLEANER (CODE 408501):** this product is used for cleaning the ink feeding circuits.

For further information, see the related technical data sheet.

FASTNESS

THE FASTNESS VALUES INDICATED IN THIS TABLE ARE REFERRED TO THE PRINTING OF PURE COLOURS APPLIED ONTO FABRIC

COLOUR	CODE	FASTNESS – EN ISO		
		105B02	105C02	105E04
BLACK PLUS	500411	5-6	4-5	4-5
CYAN	500451	7	5	4-5
LIGHT CYAN	500452	6-7	4-5	5
MAGENTA	500430	7	4-5	5
LIGHT MAGENTA	500431	6-7	4-5	5
YELLOW	500415	7	4-5	4-5
MAGENTA PLUS	500434	6-7	4-5	4-5
WARM YELLOW	500417	7	4-5	4-5
ORANGE	500433	6-7	4-5	5
BLUE	500450	6	5	5

			FASTNESS RANGE
FASTNESS - EN ISO	105B02	LIGHT FASTNESS	min 1, MAX 8
	105C02	FASTNESS TO 40°C WASHING WITH SOAP	min 1, MAX 5
	105E04	PERSPIRATION FASTNESS	min 1, MAX 5

STORAGE

It is recommended to keep the product away from light and heat sources at a **temperature lower than 25° C.**

SPECIAL INSTRUCTIONS

- It is recommended to always make printing, drying, fixing and washing tests onto the substrates which are meant to be used, so as to exactly determine features, working time and effects to be obtained.
- Extreme drying conditions near the printer carriage could compromise the quality of the prints.
- Require safety data sheets, available for all products, and always follow the contained instructions regarding all the specific information and the environmental safety.
- The ink performance is strictly connected to the used plotter model, the printing procedure, the kind of material and the applied pre-treatment.

IMPORTANT NOTE

The information given in this technical sheet is not intended to be exhaustive and any person, using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us to the suitability of the product for the intended purpose, does so at his own risk.

While we endeavour to ensure that all advice we give about the product is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product.

Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of the product.

The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.