



Code N° M5113--

Series of inks for textile direct pigment printing compatible with KYOCERA piezo printheads (KJ4B). Thanks to the new patent pending technology, it is possible to print with excellent results without pre- or post-treatment. Compared to printing done with reactive inks, water and energy consumption decreases by more than 85%.

**DIGITAL PIGMENT INK FOR TEXTILE PRINTING**

- Printing onto natural and synthetic fabrics
- Printing of fashion accessories, home linen, promotionals and curtains

**EXCELLENT RESISTANCES**

- Excellent light fastness and good general fastnesses, also without finishing

**COMPATIBLE WITH KYOCERA PRINTHEADS (KJ4B)**

- Compatible with the above-mentioned piezo printheads

**GENERAL FEATURES**

- Vivid and bright colours
- Excellent printability
- Very soft touch
- Excellent light resistance
- Good washing and water resistance
- Printable onto a wide fabrics range
- Respectful towards the environment
- Product certified ECO PASSPORT/ZDHC 3.1

**PRODUCTS OF THE SERIES**

				
<b>COLOUR</b>	<b>BLACK PLUS</b>	<b>CYAN</b>	<b>MAGENTA</b>	<b>YELLOW</b>
<b>CODE</b>	511311	511351	511330	511315
<b>PACKING</b>	10 Kg	10 Kg	10 Kg	10 Kg
<b>SHELF LIFE</b>	12 months	12 months	12 months	12 months
				
<b>COLOUR</b>	<b>ORANGE</b>	<b>BLUE</b>	<b>GREEN</b>	<b>RED</b>
<b>CODE</b>	511333	511350	511361	511332
<b>PACKING</b>	10 Kg	10 Kg	10 Kg	10 Kg
<b>SHELF LIFE</b>	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 the use. It is fundamental to apply the product under controlled conditions:

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

**DIRECT PRINTING:** this application requires “direct” printing onto the fabric, followed by thermofixing.

**TERMOFIXING:** This process can be made through different techniques:

- **FIXING IN THE PRODUCTION LINE (with re-sistance):** 160°C for 3 minutes
- **CALENDER FIXING:** 160°C for 3 minutes
- **TEXTILE OVEN FIXING** 160°C for 3 minutes

**Note:** these conditions are general, it is possible to evaluate decreases in times and / or increase in temperature prior a test on printing media according to ink deposit and media resistance.

It is recommended to follow the indicated fixing conditions, in order to get the best general fastness results, since a correct thermofixing is essential to let the ink definitively anchor to the fabric. It is recommended to thermofix the newly dried prints, so that the best results in colour intensity and brightness are assured.

The use of appropriate auxiliaries, before or after the inkjet printing, through a foulard machine, can give higher general resistances of the printings and/or a higher colour brightness and saturation.

**EVENTUAL PRE/POST TREATMENT OF THE PRINTING MEDIA**

For further info, please refer to the dedicated technical data sheet [DIGISTAR AUXILIARIES – PIGMENT INKS]



**FASTNESS**

		FASTNESS – EN ISO																										
		20315-M (ACID PERSPIRATION)						20315-M (ALKALINE PERSPIRATION)						20605	20615-M				20345 (DRY)		20345 (WET)							
COLOUR	CODE	STAINING ON DIACETATE	STAINING ON COTTON	STAINING ON POLYAMIDE	STAINING ON POLYESTER	STAINING ON ACRYLIC	STAINING ON WOOL	CHANGE IN COLOUR	STAINING ON DIACETATE	STAINING ON COTTON	STAINING ON POLYAMIDE	STAINING ON POLYESTER	STAINING ON ACRYLIC	STAINING ON WOOL	CHANGE IN COLOUR		STAINING ON DIACETATE	STAINING ON COTTON	STAINING ON POLYAMIDE	STAINING ON POLYESTER	STAINING ON ACRYLIC	STAINING ON WOOL	CHANGE IN COLOUR	LENGHT direction	CROSS direction	LENGHT direction	CROSS direction	
BLACK PLUS	511311	5	4	4	5	5	5	5	5	4	5	5	5	5	5	7-8	5	5	5	5	5	5	5	5	4	4	3	3
YELLOW	511315	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	4	4	4	4	
MAGENTA	511330	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7-8	5	5	5	5	5	5	5	3	4	4	5	
CYAN	511351	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7-8	5	5	5	5	5	5	5	4	4	4	4	
RED	511332	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7-8	5	5	5	5	5	5	5	4	4	4	4	
ORANGE	511333	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5-6	5	5	5	5	5	5	5	4	4	4	4	
BLUE	511350	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7-8	5	5	5	5	5	5	5	4	4	4	4	
GREEN	511361	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7-8	5	5	5	5	5	5	5	4	4	4	4	

\*numbers in pink have been rounded up

FASTNESS - EN ISO	20315-M	PERSPIRATION FASTNESS (acid and alkaline) Method: UNI EN ISO 105 E04:2013	min 1, MAX 5
	20605	ARTIFICIAL LIGHT FASTNESS (Xenon arc fading test) Method: UNI EN ISO 105 B02:2014 except for par.8.3.6	min 1, MAX 8
	20615-M	DOMESTIC AND INDUSTRIAL WASHING FASTNESS (40°C) Method: UNI EN ISO 105 C06:2010	min 1, MAX 5
	20345	RUBBING FASTNESS (DRY and WET) Method: UNI EN ISO 105 X12:2016	min 1, MAX 5

THE FASTNESS VALUES INDICATED IN THE TABLE ARE REFERRED TO THE PRINTING (MODE C) OF COLOURS APPLIED ONTO COTTON FABRIC IN OPTIMAL CONDITIONS OF USE

**STORAGE**

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

**SPECIAL INSTRUCTIONS**

- Use CLEANER NFS both in the capping station and in the wiper's rinse water, to be changed after 2/3 weeks
- Clean the belt with CLEANER NFS and the dedicated cloth every evening
- Replace filters at least once per year
- Set recirculation and shooting accordingly to the machine's manual
- The inks have been formulated so that they are consistent with printers assembled with KYOCERA piezo printheads. The right functioning depends not only on the printhead, but also on other elements inherent to the printer itself. To get the updated list of the consistent printers, please contact our technical assistance.
- It is recommended to always make printing, drying and transfer 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 and printing procedure.

**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 endeavor 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 from 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.