



HDB DIGITAL SYSTEM™



Product Features

Hybrid direct-to-garment printers offer today's garment decorator the ability to fulfill small to medium multi-color print jobs more economically. Hybrid printers combine an inkjet-type printer with a screen printed underbase, enabling clear and crisp images to be digitally printed onto garments. Hybrid printing typically prints up to four times faster than traditional DTG printing.

International Coatings' HDB Digital System™ is a complete screen print ink system designed to be used with direct-to-garment digital inks. It provides an underbase that allows digital garment ink to be printed faster, and with sharper resolution, better color and wash fastness. HDB is an easy-to-use 3-component /step system:

- 1) HDB primer coat for either cotton or low bleed, followed by
- 2) HDB Synthesis Receiver Base™ (part A and B), and
- 3) HDB Optimum Clear™



Product Benefits

Dark and Light Garments: HDB Digital System™ was formulated to enable digital ink to be printed onto dark garments. It can also be used on light colored garments by simply leaving out the primer coat.

Cost Savings: Screen printing a white HDB underbase yields substantial savings. HDB typically costs a quarter of what digital white inks cost.

Variable Substrates: International Coatings offer HDB Digital Systems™ for cotton and low-bleed fabrics. The HDB low-bleed system enables polyester, synthetic and performance fabrics to be digitally printed easily and cost-effectively.

Time Savings: Hybrid printing can be up to four times faster than traditional DTG printing. With the HDB Digital System™, digital ink is printed wet-on-wet on the HDB underbase, eliminating the need to flash.



Product Availability

HDB Digital System™ inks are available through International Coatings' network of distributors. Contact International Coatings at 1 (800) 423-4103 (within the U.S. only) or 1 (562) 926-1010, or visit www.iccink.com, for more information.



Connect With Us

Email: icinfo@iccink.com



**International
Coatings™**

Textile Screen Printing Inks



HDB DIGITAL SYSTEM™



RECOMMENDED FABRICS

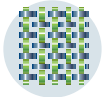
100% Cotton*
50/50 Cotton/Polyester*
*Primer coat dependent



INK APPLICATION Synthesis Receiver Base™ Parts A and B, once mixed together, should be used from the container without any modifications



ADDITIVES
Do not modify



SCREEN MESH
110-230 t/in (44-90 t/cm)
monofilament



EMULSION
Any direct or indirect emulsion or capillary film in the 35 to 70 micron range



SQUEEGEE
70 Durometer
Sharp edge



CURE TEMPERATURES 320°F (160°C) for up to 3 minutes.
Dependent on dryer speed and temperature settings



CLEAN-UP
Any eco-friendly plastisol screen wash



PRODUCT PACKAGING
Synthesis Receiver Base™: 1 gallon kit
White Primers: quart, gallon, pail
Optium Clear™: quart, gallon, pail



STORAGE OF INK CONTAINERS
65° to 90°F (18° to 32°C)
Avoid storage in direct sunlight
Keep containers well sealed



SDS
Refer to SDS prior to use

FEATURES

The HDB Digital System™ is a 3 part/step easy to print system to be used in conjunction with direct-to-garment digital inks. An HDB primer coat is printed first (for both cotton and low bleed fabrics). Our HDB Synthesis Receiver Base™ (Part A and B) is then printed, followed by our HDB Optimum Clear™.

Synthesis Receiver Base™ is a two-component (Parts A & B) system that must be mixed together before printing can begin. (See important information below).

The HDB Digital System™ is designed for dark and light colored garments. Dark garments require application of the primer; light garments do not require the primer coat.

IMPORTANT MIXING INFORMATION

Synthesis Receiver Base™ Part A and B **must** be mechanically mixed for 5 minutes, making sure that the mixture temperature stays below 95°F (35°C) during the mixing process. After mixing, the combined parts must sit for a minimum of 15 minutes before use. Once mixed, the ink should be covered in the container when not in use. Mixed ink has a working life of 5 days, if stored properly in a closed container. Storage areas should be kept at no higher than 80°F (27°C).

Mixing ratio of Part A to Part B is as follows: 89 grams of Part A to 11 grams of Part B. Mix only the amount needed for the print run. Remember to mechanically mix the two parts together and let the mixed ink sit for at least 15 minutes before use.

IMPORTANT PRINTING INFORMATION

For maximum opacity cotton - 1 print stroke of **HDB White Cotton Primer™**, flash cure to touch, 1 print stroke of mixed **Synthesis Receiver™** ink, then proceed directly to digital printing. **DO NOT FLASH** before digital printing. After the digital print ink has been applied, flash so that it is dry to the touch. Then apply the **Optimum Clear™** over the print and cure.

For maximum opacity 50/50 - 1 print stroke of **HDB White Low Bleed Primer™**, flash cure to touch, 1 print stroke of mixed **Synthesis Receiver™** ink, then proceed directly to digital printing. **DO NOT FLASH** before digital printing. After the digital print ink has been applied, flash so that it is dry to the touch. Then apply the **Optimum Clear™** over the print and cure.

For less opacity on Cotton or Light Colored Cotton - 2 print strokes of the mixed **Synthesis Receiver™** ink, then proceed directly to the digital printing. **DO NOT FLASH Synthesis Receiver Base™** before digital printing. After the digital printing ink has been applied, flash so that it is dry to the touch. Then apply the **Optimum Clear™** over the print and cure.

For maximum wash durability, the ink film should be cured at 320°F (160°C) for 3 minutes, although favorable results might be obtained when curing at 320°F (160°C) for 2.5 minutes. Be sure to test before running production to determine the most optimal curing parameters. Also, follow the digital printer manufacturer's recommendations for curing their inks. We have generally found their recommended cure times to be closer to 2.5 minutes.

Always test for ghosting, dye migration or bleeding on any 100% cotton or 50/50 fabric before beginning production. Test dryer temperatures and wash test printed product before and during a production run. Always wait 24 hours before washing.

LEGAL DISCLAIMER

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