

# DYE SUBLIMATION

## Magic® DS100 Hybrid

### Ink Jet Dye Sublimation Transfer Paper

*Making all Great Images Count*



[www.magicinkjet.com](http://www.magicinkjet.com)

#### MARKET APPLICATIONS

- Ink jet dye sublimation paper that results in high quality sublimation transfers onto both rigid and textile surfaces, yielding a wide gamut of vibrant colors.

#### PRODUCT DESCRIPTION

- 106 gsm specialty paper that enhances release of ink during the ink jet dye sublimation process.

#### FEATURES & BENEFITS

- Works with most brands of ink jet printers equipped with dye sublimation inks.
- Results in high quality transfers with minimal cockle, quick dry times, no out-gassing, and no blow-through. (Note: Surfaces for sublimation need to be specialty-coated or polymer-coated to accept the inks. Sublimation will not work on 100% cotton material.)
- Prints a wide gamut of vibrant colors
- Can be used on textiles, metals, plastics, ceramics and porcelains as long as they are poly-coated and have a surface that will accept the dye sublimation inks.
- 95-100% ink release under optimal temperature, pressure, and heat press dwell time.

#### GENERAL AVAILABILITY

<u>DS100</u>	<u>Part #</u>
17" x 250'	20398
24" x 10'	70373 (core =2")
24" x 250'	20399
54"X 250'	20403
60" x 250'	20410
64" x 250'	70395
72" x 250'	70238 (core=2")

Cores = 3 inch, except as noted`

#### MEDIA COMPATIBILITY

Print mirror image. Allow print to dry prior to transfer.

Magic® DS100 Hybrid paper has been tested and run successfully on most brands of ink jet printer systems equipped with dye sublimation inks. Roland®, Mutoh®, Epson®, and Mimaki® printers have all provided excellent results with various manufacturers' dye sub inks.

It is always advised that the compatibility of the paper with a specific printer and heat press equipment be determined before proceeding with a large job.

\* For complete Magic® product set, refer to Magic Printer Compatibility Chart under Technical Support on [www.magicinkjet.com](http://www.magicinkjet.com).

\* For additional product details – including printer settings and printing guidelines – see Application Guide under Tech Support of [www.magicinkjet.com](http://www.magicinkjet.com)

\* For ICC profile availability, see [www.magicinkjet.com](http://www.magicinkjet.com)

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**Disclaimer:** Information presented in this product sellsheet is intended to offer a useful reference in selecting media for your output. No media warranties are implied unless specifically mentioned. Printer and / or ink changes may affect results. The most current product information may be found at [www.magicinkjet.com](http://www.magicinkjet.com).

**Date:** March 2010

# MAGIC® PRODUCT APPLICATIONS GUIDE

InteliCoat



## DS100 HYBRID INK JET DYE SUBLIMATION PAPER

MAGIC® DS100 HYBRID is an ink jet dye sublimation paper that results in high quality sublimation transfers to both rigid and textile substrates. This paper brings new technological advances in release properties that allows one transfer paper to be used for all applications. This paper prints a wide gamut of vibrant colors, enhances the release of ink during the sublimation process and presents value over current papers being used in the market today. Some of the key product features include minimal paper cockle, quick dry times, no out-gassing, 95-100% ink release, and no blow through.

### PHYSICAL PROPERTIES

Caliper . . . . .	.5.0 mil
Basis Weight . . . . .	106 g/m <sup>2</sup>
Whiteness . . . . .	103
Optimum Printing Environment . . . . .	.70°F / 21°C (30-70% RH)
Recommended Ink Load . . . . .	250-275%

### PRINTING GUIDELINES

**Printing:** Image side is wound to the outside of the roll. Printing is performed in "mirror" image. Allow print to dry prior to transfer.

**Printer & Ink Compatibility:** Magic DS100 HYBRID paper has been tested and run successfully on most brands of ink jet printer systems equipped with dye sublimation inks. Roland, Mutoh, Epson, and Mimaki printers have all proven to provide excellent results with various dye sub ink manufacturers. It is always recommended to determine the compatibility of the paper for use on your printer and heat press equipment.

**Printer Settings:** A Heavy Coated Paper print mode is recommended for all printer brands and models. Do not oversaturate the paper. It will result in bleed and will not enhance transfer color. The image may look "washed out" prior to sublimation. Colors will intensify when transferred. Use ICC color profiles to optimize your particular printer/ink/RIP setup.

**Material Storage:** To protect unused material, it is recommended to store material in its original packaging, in the poly bag at 59-86°F / 15-30°C and 30-70% RH.

### SUBLIMATION GUIDELINES

**Sublimation Process:** Sublimation ink has the ability to convert from a solid to a gas without going through the liquid form. Sublimation key ingredients are heat, pressure, and dwell time. When the heating process is completed, the image on the paper has been fully transferred to the item and has become part of the surface. No surface protection is needed. During the sublimation process, the "pores" of the item open up and accept the ink/image. When the item is removed from the heat press, the pores close and the inks revert to a solid state resulting in a permanent, durable image that can not be rubbed or washed off. Magic DS100 HYBRID dye sub paper provides 95-100% transfer efficiency on a variety of heat transfer presses.

**Heat Press Conditions:** Sublimation conditions will vary depending on the heat transfer press being used. Internal testing found excellent results using 400°F and a 30-45 second dwell time at 40-50 psi pressure. It is recommended to determine optimal temperature, pressure, and dwell time conditions for your heat press.

**Compatible Sublimation Surfaces:** Surfaces for sublimation need to be specialty-coated or polymer-coated to accept the inks. Sublimation will not work on 100% cotton material. To achieve the best results, dye sublimation should be performed on white or light-colored surfaces. Magic DS100 HYBRID dye sub paper can be used on textiles, metals, plastics, ceramics and porcelains as long as they are poly-coated and have a surface that will accept the dye sublimation inks.

**Sublimation Applications:** Dye sublimation can be used in several applications. Most common applications include ceramic tiles, and coasters, as well as clothing and fabric items such as T-shirts, flags, tote bags, and mousepads.

### RECYCLE & DISPOSAL



paper

Disposal by recycling of paper is the preferred method. Where recycle markets do not exist, disposal by land fill or an approved incinerator is acceptable. See the Magic Recycle Technical Bulletin @ [www.magicinkjet.com](http://www.magicinkjet.com).

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For more information call 1-800-628-8604  
or visit our web site at [www.magicinkjet.com](http://www.magicinkjet.com)

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\* Most updated version of this guide can be obtained on our website.

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