

# UniNet<sup>®</sup>

## iColor<sup>®</sup>

### PRINTING SOLUTIONS

## **iColor<sup>®</sup> 1-Step *Premium* Hard Surface Transfer Media Instructions**

### **Part # ICHTHARDPREM**

The iColor<sup>®</sup> 1-Step Premium Hard Surface Transfer Media is an easy to use, all-in-one premium paper for use with hard surfaces. Specifically designed for metals, aluminium, plastics and cardboard, you can also print and press onto ceramic, glass, wood, acrylics, magnetic sheeting and more! Unlike dye sublimation, iColor<sup>®</sup> 1-Step Premium Hard Surface Transfer Media does not require coated substrates. Press onto virtually anything, even dark substrates, thanks to the adjustable white overprint layer when printing from the iColor TransferRIP or ProRIP software. The result is a vivid, long lasting image.

This media was designed to serve many uses, but note that UniNet carries substrate specific media that may work better in specific situations like ceramics, wood and leather.

Designed to work with the iColor<sup>®</sup> series of specialty printers, the iColor<sup>®</sup> 1-Step Premium Hard Surface Transfer Media will also work with many popular color laser printers – please check with your printer manufacturer to be certain. White toner enabled printers are suggested for best results.

Please follow the steps below for best results. Each substrate will have a slightly different technique. Refer to the applicable section as it pertains to your project.

1. Place transfer sheet into the appropriate tray of the iColor<sup>®</sup> printer, print side up or down depending on your model (the coated unmarked side is the print side)
2. In the iColor<sup>®</sup> TransferRIP or ProRIP Software, configure for white overprinting. A white spot coverage (white overprint) of 250 - 300% with a 1 - 2 device pixel underfilling is suggested for best results.
3. Paper type should be 'Labels 2' (for images with heavier toner coverage, select an 'Ultra Heavy' setting) if printing from the iColor<sup>®</sup> 500/600 and 'Coated Glossy' if printing from the iColor<sup>®</sup> 550. Page size should be 'Letter'. Remember to set the job to mirror print to ensure it looks correct when transferred to the front of the substrate. TIP: For clear acrylics, you can also transfer to the back of the substrate - Do not mirror print and use a white underprint.
4. Print the image.
5. Set the temperature of the heat press to 300°F / 150°C for most applications. Refer to the matrix below for specifics.
6. When using a heat press: Place a piece of kraft paper on the lower plate. Align the substrate to the printed image and lay flat on the press, with the iColor<sup>®</sup> 1-Step Premium Hard Surface Transfer Media on top. You can tape the hard surface paper to the lower kraft paper for additional stability. Cover with a silicone pad (.5mm - 1mm is suggested for best results) or the foam pad that came with your media, depending on the substrate. For mug presses: Simply choose the appropriate sized sleeve, tape the transfer onto the mug with heat resistant tape (image facing the mug), insert the mug and press accordingly.
7. For most applications, press at 300°F / 150°C with medium high pressure. The duration of the press depends on the substrate used. Refer to the matrix below for specific press times and peeling method.

8. For hot peels, peel immediately after opening the press. For warm peels, do not wait longer than 30 seconds, otherwise the paper will begin to lift prematurely. Do not peel too early either, otherwise the polymer from the paper may not lift away.

Surface	Time	Temp	Press Pressure	Peeling	Notes
Acrylic	60 – 120 Sec depending on thickness	300°F/150°C	8 (Medium – High)	Warm	Place heavy object on top while on the press for 20 seconds to prevent warping if necessary. Remove, then peel warm.
Aluminum Bottle	200 Sec	300°F/150°C	8 (Medium – High)	Cool	Wait 1 min, then place substrate in warm water for 2 mins before peeling.
Anodized Metal	90 Sec	330°F/165°C	8 (Medium – High)	Cool	For any white or light colored uncoated metals including brass, silver, gold.
Metal Mug	120 Sec	300°F/150°C	Medium	Cool	Wait 1 min, then place substrate in warm water for 2 mins before peeling.
DynaSub / UniSub Metal	180 Sec	330°F/165°C	8 (Medium – High)	Cool	For any white or light colored poly coated metals including silver and gold.
Stainless Steel Bottle	100 Sec	360°F/182°C	8 (Medium – High)	Cool	Wait 1 min, then place substrate in warm water for 2 mins before peeling. Bake in convection oven at 360°F / 182°C for 20 mins. for increased durability. Handwash.
Cardboard	60 Sec	300°F/150°C	9 (High)	Hot	---
*Glass / Crystal	60 -180 Sec depending on thickness	300°F/150°C	8 (Medium – High)	Warm	Warm peel. Bake in convection oven at 360°F / 182°C for 20 mins. Handwash.
*Ceramic (mugs and tile)	180 Sec	300°F/150°C	8 (Medium – High)	Cold	Wait 1 min, then place substrate in warm water for 2 mins before peeling. Bake in convection oven at 360°F / 182°C for 20 mins. for increased durability. Handwash.
Metal & Steel	180 Sec	300°F/150°C	8 (Medium – High)	Cold	Place substrate in cold water for 1 – 2 mins before peeling.
MDF/Simulated Wood	60 Sec	300°F/150°C	8 (Medium – High)	Warm	Ensure material can withstand heat press temperature. Some MDF material cannot be used.
Magnetic Sheeting	60 Sec	300°F/150°C	9 (High)	Cool	
**Wood	60 Sec	300°F/150°C	8 (Medium – High)	Hot	Make sure paper is larger than substrate for a more uniform application. Immediately pull once press is opened.

\*Try iColor 1Step Hard Surface Transfer Media for Ceramics for higher quality transfers on glass and ceramics

\*\*Try iColor 1Step Hard Surface Transfer Media for Wood and Leather for higher quality transfers on these substrates

If you make a mistake or are not happy with the finished result, use acetone to remove the transfer (before fixing in an oven). Not suggested for plastics or other materials that can be damaged.

# TECH TIPS

There are many variables that could produce different results. Specific steps may need to be altered based on:

- Type and brand of Heat Press: The temperature and duration varies slightly based on the heat press being used. All instructions are based on using a Hotronix Fusion Press or iColor Mug Press. Clam shell and swing away presses may also yield different results.

- Type of substrate: Some substrates may require more or less press time, depending on the material and the image being pressed.
- Type of image: Photos or full color graphics may require a longer press time than vector images or text.
- Toner Coverage: Halftones in image may cause undesired results. Toner coverage should not be less than 50% otherwise there will be issues with transferring.

Halftones can be corrected by printing a white overprint or underprint using the iColor® TransferRIP or ProRIP Software to apply a white layer in one pass. This will help with toner coverage and proper adherence to the substrate.

The use of a silicon pad or foam pad is necessary when using the Hard Surface Paper. All instructions are based on a .5mm silicon pad, which is available from UniNet. Thicker pads (greater than 1mm) will require longer press times and higher temperatures. In these cases, the use of a thermometer can help to establish the best settings. It is suggested to use the foam pad that comes with the media for glass / crystal applications.

For hot peels, peel immediately after opening the press.

Use of kraft paper below and above your project is highly recommended. This way, you can easily remove your substrates from the press.

If you are using tape to secure your image to the substrate, make sure the tape is not covering any part of the transfer, as that will lead to inconsistent results.

For all applications (especially wood, where the polymer from the hard surface paper is transferred over), it is suggested that the size of your transfer paper is larger than your substrate for an easier pull and to avoid differences in the sheen.

For acrylics, the press duration is based on the thickness of the substrate.

Metals applications are the most difficult to master because of the varying types of coatings. The key is to pull before the polymer sets; too early and polymer stays in place...too late and it's difficult to remove. If a particular instruction is not working for you, try varying pressure, press time, higher or lower temp, longer or shorter dwell time. Use 400% white overprint for metals.

To see video instructions for iColor® Premium Hard Surface Paper, visit [www.icolorprint.com/video](http://www.icolorprint.com/video)

Also available:

iColor® 1-Step **LIGHT** and **SPEED TRANS LIGHT** Transfer Media for light colored garments  
 iColor® 2-Step **Standard** Transfer Media for light and dark colored garments  
 iColor® 2-Step **Select** Transfer Media for light and dark colored garments  
 iColor® 2-Step **GLITTER** Adhesive Transfer Media (for use with iColor® 2-Step **Standard** Transfer Media)  
 iColor® 2-Step **Premium** and **Premium STRETCH** Transfer Media for light and dark colored garments  
 iColor® 2-Step **Presto!** Transfer Media for textiles and hard surfaces  
 iColor® 1-Step **CLASSIC, WOOD AND LEATHER** and **CERAMIC** Hard Surface Transfer Media  
 iColor® 2-Step **Temporary Tattoo** Transfer Media  
 iColor® 1-Step **AquaClear** Transfer Media

...and more! Contact your dealer for more information.