

# IColor™ Premium 1 Step Hard Surface™ Paper Instructions

Part # ICHTHARDPREM

The IColor™ Premium 1 Step Hard Surface™ Transfer Paper is an easy to use, all-in-one premium paper for use with hard surfaces. Works great with metals, aluminium, plastics, ceramic, glass, wood, acrylics, magnetic sheeting and more! Unlike dye sublimation, the IColor™ Premium 1 Step Hard Surface™ Transfer Paper 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 paper 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.

IColor™ Premium 1 Step Hard Surface™ Transfer Paper was developed specifically for the IColor™ series of transfer printers, but **can be used interchangeably** with most other toner based printers (check with the manufacturer to be certain). **White toner enabled printers are suggested for best results.**

## INSTRUCTIONS FOR BEST RESULTS:

### 1. Place transfer sheet into the appropriate tray of your printer.

⚠ The coated, glossy side is the print side.

- IColor™ 650 / 600 / 500 / Most OKI Printers: Print side face up in Multipurpose Tray
- IColor™ 560 / 550 / 540 / 800: Print side face down in the Bypass Tray

### 2. Printer Settings:

⚠ Specific print modes for this media are available when using the IColor™ ProRIP software.

- Listed as 'UNINET IColor Hard Surface Premium'
- Page size should be 'Letter'

**Otherwise, use the following settings based on the printer:**

- IColor™ 500 / 600 / Most OKI Printers: Set media weight to 'Ultra Heavy 1' and media type to 'Labels'
- IColor™ 650: Set media weight to 'Ultra Heavy 2' and media type to 'User Type 2'
- IColor™ 550 / 540 users: Set paper type to 'Coated Glossy'
- IColor™ 560: Set Paper type to 'Labels'
- IColor™ 800: Set paper type to 'Thick to 163g'

⚠ If not already done automatically in the RIP, remember to set the job to **mirror print**, ensuring the correct orientation when transferred to the textile.

### 3. If using the IColor™ TransferRIP or ProRIP Software, configure for white overprinting.

- A white spot coverage (white overprint) of 250 - 280% with a choke of 1 - 2 is suggested for best results.
- ⚠ For clear acrylics, you can also transfer to the back of the substrate - Do not mirror print and configure for white underprinting.

**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 specific recommendations based on substrate.

**6. When using a heat press:**

- Place a piece of kraft paper on the lower plate so that you can easily remove the substrate when hot.
- Align the substrate to the printed image and lay flat on the press, with the IColor™ Premium 1 Step Hard Surface™ Transfer Paper on top.
- You can tape the hard surface paper to the lower kraft paper for additional stability.
- ⚠ Apply the tape only to a blank area of the transfer media, as the tape can disrupt the heat process and cause a blotchy transfer.
- Cover with a silicone pad (.32mm is suggested for best results, UNINET™ part # SILPADLIGHT) or the foam pad that came with the transfer paper, depending on the substrate.

**7. For mug presses:**

- Choose the appropriate sized sleeve for the press.
- Tape the transfer onto the mug with heat resistant tape (image facing the mug).
- ⚠ Apply tape to a blank area of the transfer paper to avoid a blotchy transfer.
- Insert the mug and press accordingly.

**8. 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.

**9. 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™ Ceramic 1 Step Hard Surface Transfer Paper for transfers on glass and ceramics

\*\*Try IColor™ Wood and Leather 1 Step Hard Surface Transfer Paper for 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.

The 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. May require a higher percentage of white overprint for metals.

**Optimal Humidity Level:** 45% - 65%

- Regulated with A/C, a humidifier or de-humidifier, depending on current atmospheric conditions.

**Optimal Temperature Range:** 50°F / 10°C - 75°F / 24°C

Use of this paper outside of these recommend parameters may lead to poor results.

To see video instructions for IColor™ Premium 1 Step Hard Surface™ Paper, visit [www.icolorprint.com/video](http://www.icolorprint.com/video)

#### **ALSO AVAILABLE:**

- IColor™ Premium 2 Step Transfer Paper for light and dark colored garments
- IColor™ Select and Select Ultra Bright 2 Step Transfer Paper for light and dark colored garments
- IColor™ Standard 2 Step Transfer Paper for light and dark colored garments
- IColor™ Glitter Adhesive 2 Step Transfer Paper (for use with IColor™ Standard 2 Step Transfer Paper)
- IColor™ Light and Speed Trans Light 1-Step Transfer Paper for light colored garments
- IColor™ Presto 2 Step Transfer Paper for textiles and hard surfaces
- IColor™ Temporary Tattoo 2 Step and Easy Tattoo Transfer Paper
- IColor™ Premium, Wood and Leather and Ceramic Hard Surface 1-Step Transfer Paper
- IColor™ AquaClear 1-Step Transfer Paper for candles and other substrates not resistant to heat
- IColor™ Label / Sticker Paper (Clear and White) in Letter and Tabloid size
- IColor™ Window Cling Media (Clear and White) in Banner and cut sheet options
- IColor™ Banner Paper
- IColor™ Magnetic Media in Letter and Tabloid size

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

## **IColor™ Transfer Paper Comparison Charts**

## ICOLOR TEXTILE TRANSFER PAPER

ATTRIBUTE	PREMIUM	STANDARD	SELECT UB	SELECT	PRESTO	LIGHT	SPEEDTRANS LIGHT
PROCESS	2 Step	2 Step	2 Step	2 Step	2 Step	1 Step	1 Step
DURABILITY (# of Washes @ 104 °F/40 °C)	Up to 100	50+	50+	50+	50+	15+	15+
DARK TEXTILES (BRILLANCE)	BEST	BETTER	BEST	GOOD	BETTER	FAIR	FAIR
DELICATE TEXTILES	BEST	GOOD	GOOD	GOOD	GOOD	DT RECOMMEND	NOT RECOMMENDED
STRETCHABILITY	BETTER	GOOD	BEST	BEST	GOOD	GOOD	GOOD
FINISH	MATTE	SEMI GLOSS	MATTE	MATTE	SEMI GLOSS	SATIN	SATIN
TRANSFER 'A' SHEET CHARACTERISTIC	OPAQUE	TRANSPARENT	TRANSPARENT **	TRANSPARENT	OPAQUE	OPAQUE	OPAQUE
PRESS TEMPERATURE (°F/°C)	250°F / 120°C	310°F / 154°C	320°F / 160°C	310°F / 154°C	285°F / 140°C	390°F / 200°C	375°F / 190°C
PRESS TIME	30 + 30 secs	120 + 30 secs	135 + 25 secs	120 + 25 secs	120 + 30 secs	15 secs	10 secs
SOFT HAND	BEST	GOOD	GOOD	GOOD	GOOD	BETTER	BETTER
COST	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$	\$

## ICOLOR HARD SURFACE TRANSFER PAPER

ATTRIBUTE	PREMIUM	CERAMICS	WOOD/LEATHER	PRESTO! HARD SURFACE	PRESTO! PAPER/WOOD	AQUACLEAR	2 STEP TATTOO	1 STEP TATTOO
PROCESS	1 Step	1 Step	1 Step	1 Step	1 Step	1 Step	2 Step	1 Step
DURABILITY (RESISTANT TO SCRATCHING/CHIPPING)	BEST	BEST	BEST	BEST	BEST	GOOD	BETTER	GOOD
COLOR BRILLIANCE	BETTER	BETTER	BETTER	BEST	BEST	BETTER	BETTER	BETTER
METALLIC FINISH	NO	NO	NO	YES	YES	NO	NO	NO
PRESS TEMPERATURE (°F/°C)	300°F / 150°C *	300°F / 150°C *	300°F / 150°C *	320°F / 160°C *	265°F / 130°C *	N/A	265°F / 130°C	N/A
PRESS TIME	60 SECS *	180 SECS *	60 SECS *	180 SECS *	90 SECS *	N/A	40 SECS	N/A
ACRYLIC	YES	YES	YES	YES	NO	YES	YES	YES
METAL	YES	NO	NO	YES	NO	YES	YES	YES
CERAMIC	YES	YES	NO	YES	NO	YES	YES	YES
TILE	YES	YES	NO	YES	NO	YES	YES	YES
GLASS	YES	YES	YES	YES	NO	YES	YES	YES
CRYSTAL	YES	YES	YES	YES	NO	YES	YES	YES
PAPER/WOOD/CARDBOARD	YES	NO	YES	YES	YES	NO	YES	NO
LEATHER	YES	NO	YES	NO	NO	NO	YES	NO
CANDLES	NO	NO	NO	NO	NO	YES	YES	YES
FLESH	NO	NO	NO	NO	NO	NO	YES	NO
COST	\$	\$	\$	\$\$	\$\$	\$\$	\$\$\$	\$\$

\* Temperature and press time varies based on substrate

March 2023 Revision - A newer version of this manual may be available at [www.icolorprint.com/support](http://www.icolorprint.com/support)

(Or scan this QR Code)

