

IColor™ Ceramic 1 Step Hard Surface Paper Instructions

Part # ICHTHARDCER

The IColor™ 1 Step Ceramic Hard Surface Transfer Paper is an easy to use, substrate specific paper for use with ceramic, glass, crystal and acrylics. It features a thinner polymer that is easier to pull and does not leave a background on the substrate. IColor™ 1 Step Ceramic Hard Surface Transfer Paper does not require coated substrates like sublimation does. Press onto light and 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.

The IColor™ 1 Step Ceramic Hard Surface Transfer Paper was designed to serve as a substrate specific paper, but note that UNINET carries general use hard surface paper, as well as other substrate specific paper which may work better in specific situations such as wood and leather.

The IColor™ 1 Step Ceramic 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 (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 your printer.
 - The coated, glossy side is the print side.
 - IColor™ 650 / 600 / 500 / Most OKI Printers: Print side face up in the Multipurpose Tray
 - IColor™ 560 / 550 / 540 / 800: Print side face down in the Bypass Tray

2. Printer Settings:

If using the IColor™ TransferRIP or ProRIP Software, Make sure you are working within the overprint queue in the ProRIP software or 'B' Configuration if using the TransferRIP software.

- A Specific print modes for this media are available when using the IColor™ ProRIP software.
 - Listed as 'UNINET IColor Hard Surface Ceramic'
 - o 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 5' 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'
- A If not already done automatically in the RIP, remember to set the job to **mirror print**, ensuring the correct orientation when transferred to the substrate.

- 3. A white spot coverage (white overprint) of 250 280% with a choke of 1 2 is suggested for best results.
 - A 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 specifics 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™ Ceramic 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 (.32" / 8mm thickness 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)	Cool	Place heavy object on top while on the press for 20 seconds to prevent warping if necessary. Remove, then peel once cool.
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	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.
Ceramic Tiles	180 Sec	300°F / 150°C	9 (High)	Cold	Wait for substrate to cool completely before peeling. Bake in convection oven at 360°F / 182°C for 20 mins. for increased durability.
Ceramic Tiles (Full Bleed)	300 Sec	300°F / 150°C	9 (High)	Cold	Wait for substrate to cool completely before peeling. Bake in convection oven at 360°F / 182°C for 20 mins. for increased durability.

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 .32 in / 8 mm silicon pad, which is available from UNINET. Thicker pads 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.

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.



If a particular instruction is not working for you, try varying pressure, press time, higher or lower temp, longer or shorter dwell time. Larger graphics may require a longer press time.

To prevent humidity from affecting your paper, store in a resealable bag. Adding a desiccant pack will help to absorb any moisture. Use of a de-humidifier will help reduce excess moisture.

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™ Ceramic Hard Surface Paper, visit <u>www.icolorprint.com/video</u> (Coming Soon)

ALSO AVAILABLE:

- IColor™ Premium and Premium Stretch 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™ Classic, 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	PREMIUM STRETCH	STANDARD	SELECT UB	SELECT	PRESTO	LIGHT	SPEEDTRANS LIGHT
PROCESS	2 Step	2 Step	2 Step	2 Step	2 Step	2 Step	1Step	1 Step
DURABILTY (# of Washes @ 104 °F/40 °C)	Up to 100	Up to 100	50+	50+	50+	50+	15+	15+
DARK TEXTILES (BRILLANCE)	BEST	BEST	BETTER	BEST	GOOD	BETTER	FAIR	FAIR
DELICATE TEXTILES	BEST	BEST	GOOD	GOOD	GOOD	GOOD	NOT RECOMMENDED	NOT RECOMMENDED
STRETCHABILITY	BETTER	BEST	GOOD	BEST	BEST	GOOD	GOOD	GOOD
FINISH	MATTE	MATTE	SEMI GLOSS	MATTE	MATTE	SEMI GLOSS	SATIN	SATIN
TRANSFER 'A' SHEET CHARACTERISTIC	OPAQUE	OPAQUE	TRANSPARENT	TRANSPARENT **	TRANSPARENT	OPAQUE	OPAQUE	OPAQUE
PRESS TEMPERATURE (°F/°C)	250°F / 120°C	285°F / 140°C	310°F / 154°C	310°F / 154°C	310°F / 154°C	285°F / 140°C	390°F / 200°C	375°F / 190°C
PRESS TIME	30 + 30 secs	45 + 10 secs	120 + 30 secs	120 + 25 secs	120 + 25 secs	120 + 30 secs	15 secs	10 secs
SOFT HAND	BEST	BEST	GOOD	GOOD	GOOD	GOOD	BETTER	BETTER
COST	\$\$\$	\$\$\$	\$\$	\$\$	\$\$	\$\$	\$	\$

^{**} Select 800 Ultra Bright has an opaque 'A' sheet

ICOLOR HARD SURFACE TRANSFER PAPER

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

^{*} Temperature and press time varies based on substrate

March 2022 Revision - A newer version of this manual may be available at www.icolorprint.com/support

(Or scan this QR Code)



