



Introduction to Sublimation Printing

Document Outline

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2. Materials and examples from MakerLab
3. Making your project
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Overview of Sublimation Process

Sublimation printers look and perform exactly like regular printers, but there are four components that help us achieve the transfer successfully.

How Sublimation Printing Works

- Ink
 - The ink is manufactured so that when heat is applied,
- Printing Material
 - Typically, the printer prints to paper, but it is possible to use specially designed heat transfer vinyl as well. On each material, there is a coating so that it will receive the ink and transfer the design to the component.
- Component
 - Like the printing material, the component has a special coating so that it will accept the ink and molecularly bond to the component.
- Heat and Pressure
 - The heat combined with the pressure is what actually facilitates the transfer.

Advantages

- Produces molecular bond instead of surface level bond which is better for longevity.
- Different look on a wide variety of materials.
- Dishwasher and machine washable.
- Easier multi-color application.
- No weeding (unless using sublimation heat transfer vinyl).

Disadvantages

- Requires specialized equipment and specialized components.

Materials and Examples from MakerLab

Sublimation printing bonds to polyester and polymers. The materials listed below have a coating applied to them. You are not able to sublimate directly onto materials unless they have a polymer coating, are rated for sublimation, or are made of at least 60% polyesters.

- Ceramic mugs
- Garden flags
- Metal
 - Photo prints
 - Wall mounted indoor frames
 - Exterior signage
 - Water bottles
- T-Shirts
 - 60% polyester blend
 - Cotton – requires additional sublimation heat transfer vinyl
- Sublimation adhesive vinyl

Making Your Project

- Sourcing materials
 - Vendors
 - Amazon – search sublimation blanks and include a descriptor (e.g. mugs) as needed
 - Joann: <https://www.joann.com/craft-machines-technology/sublimation>
 - Johnson Plastics: <https://www.jpplus.com/sublimation/blanks>
 - Michaels: <https://www.michaels.com/sublimation/sublimation-surfaces/20002701>
- Plan for extra
 - We always strive to help you achieve the perfect product, but inevitably, there are unforeseen challenges and human error. It is helpful to build in the cost for extra materials and time.
- Make an appointment on our scheduler:
<https://balibrary.org/appointment/browse/24.MakerLab>
- Design your project
 - Start from scratch
 - You can use many different programs to design as long as you can print in .jpg, .bmp, .png, .tif, .sgz. We currently do not have the ability to print in .pdf.
 - Please avoid copyrighted images

- Purchase or download images. There are a number of paid and free sites to get artwork. Some you might consider are:
 - Adobe Stock (Paid)
 - DaFont (Free Fonts)
 - Etsy (Paid)
 - Pexels (Free)
 - Shutterstock (Paid)
 - Vecteezy (Paid and Free)
 - Vectorstock (Paid and Free)
- Send to the print manager
 - When your design is complete, go to File > Print > Sawgrass Print Manager
 - Select
 - Substrate
 - Print quality
 - Paper: J15120/21 S-RACE
 - Mirror (if necessary)
 - Click print

Additional Resources

Sublimation FAQ: <https://www.sawgrassink.com/getting-started/faqs>

LinkedIn Learning: <https://balibrary.org/databases#linkedin>