



Printing on Flexible Materials with the Gerber Solara ion™ & CAT | UV™

This document explains the use of flexible materials when printing on the flat bed of the Gerber Solara ion & Gerber CAT | UV.

Preparing flexible substrates

Flexible substrates are both rolled and sheet materials of many types including vinyl, banner, paper and textiles. Due to the variety of flexible substrates, Gerber recommends following the manufacturer's specifications for storage and cleaning. Included in this document are Gerber's recommendations for preparing vinyl for printing. See "Roll-to-Roll printing with the Solara ion" Application Note for more tips.

Rolled material storage tips

- The best way to keep the rolled material clean is to always store it properly in the original plastic bag and/or box.
- If the material gets dirty (often the static charge on the material attracts dirt from the rug or floor), the printed job may show imperfections such as voids, hair lines, or small unprinted areas.
- Most rolled material should be stored vertically or at an angle with support through the core tube. DO NOT store rolled material flat with the surface of the roll pressed against a hard surface.

Normalizing flexible substrates

For the best color-to-color and print-to-cut registration, "normalize" the material by unrolling the amount you are going to use onto a clean, dry surface approximately 15 minutes prior to printing. This is particularly important when using heavy rolled material, and in hot, humid weather when using thin material in the 2-3 mil range.





FLEXIBLE MATERIALS

Application Notes!

Cleaning vinyl

CAUTION: Never clean vinyl material with alcohol, only clean vinyl with distilled water.

- Wipe the vinyl material with a clean, lint-free cloth moistened with distilled water. Allow the material to dry completely before printing.
- Prior to loading material into the printer, wipe the ends of the roll with a tack cloth to remove any dirt or dust.
- Use only blank unprinted material or slew the used roll material beyond the printed area before beginning the job.

Ensuring print-to-cut success

- Materials that are to be printed and then cut should be at the same ambient temperature and humidity level for both processes to ensure success.
- Differences in temperature and/or humidity can cause changes in material size (expansion or contraction) and create imperfect print-to-cut results.

Options to improve adhesion

- Do not attempt to improve ink adhesion by changing profiles. Profiles have no effect on UV lamp power. Instead choose a higher quality print mode that requires more time to print.
- If you are running in bidirectional mode, try unidirectional mode or increase the pass mode.
- Properly prepare the material before printing for best adhesion. This may include:
 1. Cleaning with recommended solutions such as distilled water for vinyl.
 2. Allowing time for full evaporation of the cleaning solution before printing. Complete evaporation of the solution may take several minutes to several hours.
 3. Reviewing the manufacturer's product bulletins for specific cleaning and usage instructions.
- While printed jobs are immediately ready to touch or cut, you can also allow the job extra time to cure as adhesion strength increases with time.

NOTE: The optimum flexibility of printed vinyl is within the first 24 hours of printing. Apply vinyls within this time frame for best results.

