

UNION INK™ UPLC GEN2 LOW CURE SERIES



Union Ink™ UPLC Series has a flexible cure temperature that achieves ink film fusion as low as 270°F for printing on polyester garments produced with unstable dyes or are prone to shrinkage when exposed to heat. The Gen2 Low cure inks shear down to a very creamy body and produce a highly opaque, low-gloss to matte finish, with soft hand and better fiber control than most low cure poly inks. These inks have demonstrated a superior dye blocking without an underbase delivering maximum coverage and color consistency.

Highlights

- Excellent bleed resistance at a wide temperature range, low cure (270°F/132°C) with maximum cure of 320°F/160°C
- Shears down quickly to a creamy, smooth body
- Soft hand and excellent stretch with a superior opacity on dark fabrics
- Produces great to excellent half tones
- Non-migrating pigments provide for color value stability over a wide range of under base options as well as direct to fabric.
- Works well on manual or automatic presses

Printing Tips

- Use 86–230t (34-90t/cm) mesh screens for best performance and opacity
- For best results, use a print-flash-print technique to ensure sufficient ink deposit on dark fabrics.
- For challenging polyester fabrics, use Union Ink™ UPLC1550 Low Cure Barrier Grey or UPLC8550 Barrier Black as a base layer to achieve maximum bleed resistance.
- Adjust flash cure temperature and dwell time so ink is just dry to touch. Avoid excessive flash temperatures to protect fabric and migration of dyes. Depending on flash unit, a 3 - 5 second flash is adequate.
- A behavior for high-opacity low cure inks is to "body-up" or gain viscosity when at rest. Be sure to "Pre-shear" or agitate this ink before use to achieve optimal flow before printing. Be careful to not use high-speed drills or similar equipment that will create friction-heat that can cause the ink to begin to cure. Store ink buckets up off of cold floors to reduce pre-shear time.
- Adjust your print parameters to allow this ink to clear fully on the second stroke using medium to low pressure for best dye blocking and opacity. As this ink shears down, less pressure will be required. Adjust accordingly.
- Curing is a time and temperature process. Using a lower temperature, at a lower belt speed will provide the best result without damaging the fabric.

Compliance

- Internationally compliant
- Non-phthalate
- <https://www.avientspecialtyinks.com/services/compliance-support>

Precautions

- The information provided in this document is given in good faith and does not release you from testing inks and fabrics to confirm suitability of substrate and application process to meet your customer standards and specifications

Recommended Parameters

<p>Fabric Types Poly blends, 100% Polyester</p>	<p>Flash & Cure Flash: 150° F (66° C) Cure: 270°-320° F (132° -160° C)</p>	<p>Clean Up Non-phthalate press wash</p>
<p>Mesh Counts: 86- 230t/in (34 -90t/cm) Tension: 18-35n/cm3</p>	<p>Pigment Loading N/A</p>	<p>Health & Safety Find safety information here: www.avient.com/resources/safety-data-sheets or contact your local CSR</p>
<p>Squeegee Medium: 60-70, 60/90/60 Profile: sharp, square Stroke: 2 stroke, medium speed Angle: 10° -20°</p>	<p>Additives UPLC0001 LC Viscosity Reducer Attempt to stir, fold, and cut ink in bucket in order to pre-shear before deciding to use reducer. Nylobond 10-15%</p>	<p>2021, Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Avient makes no warranties or guarantees respecting suitability of either Avient's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. AVIENT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.</p>
<p>Stencil Standard Emulsion Off Contact: 1/16" (2mm) Emulsion Over Mesh: 15-20%</p>	<p>Storage 65° -90° F (18° -32° C) Avoid direct sunlight</p>	