



UPLC GEN2 BARRIER GREY AND BLACK

Union Ink™ Sport Low Cure UPLC1550 Barrier Grey and UPLC8550 Barrier Black have flexible cure temperatures that achieve 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. These products are especially useful when printing over dye-sublimated polyester with "camo" or "digi-hex" designs. UPLC white and color inks may be printed on top of these inks as over-prints or they may be printed alone.

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 providing high opacity on dark fabrics when used as an under base
- Works well on manual or automatic presses

Printing Tips

- Use 86-110t/in (34-43t/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 printing under a white or color over-print it is typical to print two strokes of the barrier grey or black, flash until dry to the touch, and then print white or colors over the barrier under base, flashing as needed.
- 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 temperature over time process, a lower oven temperature setting with a slower belt speed, while maintaining recommended ink cure temperature is always best to protect fabrics.

Compliance

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

Sustainability



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 Count: 86-110t/in Tension: 18-25n/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 Durometer: Medium: 60-70, 60/90/60 Profile: sharp, square Stroke: 2 stroke, medium speed Angle: 10° -20°</p>	<p>Additives K2912 VISCOSITY BUSTER LC Stir ink in bucket (pre-shear) before deciding to use reducer. K2940 HUGGER CATALYST</p>	<p>2023, 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. Use within one year of receipt. Keep container well sealed.</p>	