

# UPLC SPORT LC COLORS

Union Ink™ UPLC Sport Colors 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 UPLC Sport Colors 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

# Compliance

# Sustainability

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



Reduced **Energy Use** 

# **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

# **Printing Tips**

- Use 86-230t/in (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  ${\rm Ink^{\scriptscriptstyle TM}}$  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-sheer
- 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.

# **Recommended Parameters**



### **Fabric Types**

Poly blends, 100% Polyester



#### Flash & Cure

Flash: 150° F (66° C)

Cure: 270°-320° F (132° -160° C)



#### Clean Up

Non-phthalate press wash



## Mesh

Count: 86- 230t/in (34 -90t/cm)

Tension: 18-35n/cm3



## **Pigment Loading**



#### **Health & Safety**

Find safety information here: www.avient.com/resources/safety-datasheets

or contact your local CSR



# Squeegee

Durometer: Medium: 60-70, 60/90/60

Profile: sharp, square

Stroke: 2 stroke, medium speed

Anale: 10° -20°



## **Additives**

K2912 VISCOSITY BUSTER LC Stir ink in bucket (pre-shear) before deciding to use reducer. K2940 HUGGER CATALYST



# **Stencil**

Standard Emulsion Off Contact: 1/16" (2mm) Emulsion Over Mesh: 15-20%



# Storage

65°-90° F (18°-32° C) Avoid direct sunlight. Use within one year of receipt. Keep container well sealed.



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