



## EPIC™ RIO COLOR MATCHING

WILFLEX™ Epic Rio is a low cure non-phthalate finished ink mixing system formulated for a perfect balance of color accuracy and opacity for peak press performance and color design. It is an easy-to-use color mixing system with 18 intermixable colors that enable printers to produce accurate PANTONE® simulations. EPIC RIO is the most opaque color system in the line of Wilflex mixing color systems. Its opacity helps printers get to color quicker even when using fine mesh screens, saving ink and money.

### HIGHLIGHTS

- ✓ Accurate and vibrant color match. PANTONE® approved
- ✓ Easy and accurate color mixing with finished inks that are balanced for viscosity
- ✓ Excellent color reproduction over base plates and white, light garments
- ✓ Wet-on-wet printing at high production speeds with good resistance to build-up
- ✓ Best color fastness to crocking test
- ✓ Matte finish

### PRINTING TIPS

- ✓ Use consistent, high-tensioned screen mesh and sharp edged squeegees for best print results
- ✓ When blended according to formulations, colors are vibrant, accurate and opaque allowing printers to achieve color easier over a range of grounds and mesh counts
- ✓ Excellent color reproduction using 160-305 t/in (62-120 t/cm) mesh on white, light garments and over a base plate. Use finer mesh and save ink without sacrificing color accuracy. When direct printing over dark garments, print-flash-print using soft squeegee and lower mesh count
- ✓ RIO Mixing Colors is not a low-bleed ink; when printing on fabrics that are prone to bleed underbase with an approved WILFLEX low bleed white and/or blocker
- ✓ Exhibits good color retention in high-speed wet-on-wet production with minimal build up. Use fine mesh for best wet-on-wet printing
- ✓ Adjust flash cure temperature and dwell time so ink is just dry to touch. Depending on flash unit, a 2 - 3 second flash is adequate
- ✓ Curing is a time and temperature process, a lower oven temperature setting with a slower belt speed while maintaining recommended ink cure temperature is always best to protect fabric, control dye migration and reduce energy consumption
- ✓ RIO Colors can be cured between 260°F - 320°F (127°C - 160°C)
- ✓ Use Epic Finesse to extend the ink for blending colors in halftones or when garment colors allow ink opacity to be decreased. Suitable for use at 270°F (132°C)
- ✓ For cold-peel transfers, use a coated release paper or polyester film. Print colors using 70 duro squeegee and 110-230 t/in (43-91 t/cm) mesh followed by powdering. Gel at 212°F (100°C) for 60 sec. Apply transfer with heat press at 300°F (150°C) for 10-12 sec at medium pressure. For transfers on polyester, back with a low bleed white and/or blocker. Verify process.

### COMPLIANCE

- ✓ Non-phthalate
- ✓ For individual compliance certifications and conformity statements, please visit: [www.avient.com/wilflex-compliance](http://www.avient.com/wilflex-compliance)

### PRECAUTIONS

The information above 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



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V3.01 (Modified: 04/22/2021)

## PRODUCT INFORMATION BULLETIN



### RECOMMENDED PARAMETERS



#### Fabric Types

100% cotton, 100% polyester, triblends, polyester blends, cotton/poly blends, cotton/lycra blends



#### Mesh

Count: 110-305 t/in (43-120 t/cm)  
Tension: 25-35 n/cm2



#### Squeegee

Durometer: 60/90/60, 70/90/70, 60-90  
Profile: Square, Sharp  
Stroke: Medium flood, Medium-Fast stroke  
Angle: 10-15%



#### Stencil

2 over 2  
Off Contact: 1/16" (.2cm)  
Emulsion Over Mesh: 15-20%



#### Flash & Cure

Flash: 220°F (105°C)  
Cure: 260°F - 280°F (127°C - 138°C)  
Entire ink film



#### Pigment Loading



#### Wilflex™ Additives

Epic Viscosity Buster-1% max  
Epic Finesse Base



#### Storage

65-90°F (18-32°C)  
Avoid direct sunlight  
Use within one year of receipt



#### Clean Up

Ink degradant or press wash



#### Health & Safety

Find SDS information here:  
[www.avient.com/resources/safety-data-sheets](http://www.avient.com/resources/safety-data-sheets)  
or contact your local CSR

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