wilflex™

Product Information Bulletin

18600PFXPSB Epic™ Performance Base

Wilflex™ Epic Performance Base is a non-phthalate plastisol ink designed to print onto a variety of specialty fabrics, including performance athletic stretch polyester and polyester blended fabrics.

Highlights

- Non-phthalate
- Compliant with CPSIA 2008 (Consumer Product Safety Improvement Act) Section 101, Lead Content in Substrates (<300 ppm lead); 16 CFR, Part 1303, Lead in Paint (<90 ppm lead); and CPSIA 2008, Section 108, Phthalates (<.1% DEHP, DBP, BBP, DINP, DIDP, DNOP)
- Epic Series - Eco-Passport Certified (Oeko-Tex)
- Excellent bleed resistance for polyester fabrics
- Odorless
- Wet-on-wet printing
- Low cure, Fast flashing
- Matte finish
- Excellent elasticity, stretch

Printing Tips

- Use high tension screen mesh to optimize performance properties.
- To optimize bleed resistance, print Epic Performance Underbase Gray as underbase to block dye migration. Set the dryer belt at the highest possible speed while still ensuring that the ink film reaches 290°F (143°C); ensuring that the ink's heat exposure is minimal.
- To increase production speeds, use finer mesh counts for the flash plate to decrease gel time. Set flash dwell times on heated pallets to simulate production. Adjust your settings so that the ink is just dry to the touch.
- Best printed with Epic Performance White as underbase to achieve optimal color opacity.
- Wilflex recommends Epic Pigment Concentrates (PCs) as Performance Ink colorants. Ink formulations using the PCs or other color variants should be thoroughly print and wash tested in alignment with fabric considerations before production application.
- Low quality polyester fabrics are likely to have dye migration issues. To determine a material's bleed potential, please reference the testing procedures outlined in the Wilflex User's Manual.

Precautions

- Perform fusion tests before production. Failure to cure ink properly may result in poor wash fastness, inferior adhesion and unacceptable durability. Ink gel and cure temperatures should be measured using a Thermoprobe placed directly in the wet ink film and verified on the production run substrate(s) and production equipment. It is the responsibility of the printer to determine that the correct ink has been selected for a specific substrate and the application processes meet your customer's standards or specifications.
- Pre-test Performance Base on light colored or stone washed garments. Avoid stacking printed garments hot because such colors are more prone to color distortion. Fabric and dye characteristics can vary between manufacturers and from dye lot to dye lot.
- Avoid overflashing, as it can result in poor inter-coat adhesion of overprint colors.
- Use of EQualizers are not recommended and may affect the bleed properties of the base.
- Stir inks before printing.
- Do not dry clean, bleach or iron printed area.
- **NON-CONTAMINATION OF EPIC INKS**
  - Do not add or mix non-Epic inks, additives or extenders with the Epic ink products.
  - All buckets, palette knives, stirring apparatus, squeegees, flood bars and screens must be cleaned properly and free of phthalate containing inks.
  - Non-phthalate emulsions and pallet adhesives must be used.
- Any application not referred in this product bulletin should be pre-tested or consultation sought with Technical Services Department prior to printing.
- Email: techserviceswilflex@polyone.com

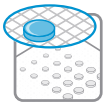
Printing Parameters

Opacity	8
Bleed Resistance	8
Smooth Surface	9
Flash	7
Gloss	5
Printability	8

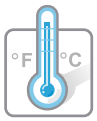
Fabric Types
100% polyester, polyester blends, 100% nylon jersey, 100% cotton, cotton/poly blends, cotton/lycra blends, spandex
**Not suitable for all nylon substrates. Pre-test prior to production.*

Mesh
Counts: 86-230 t/in (34-90 t/cm) recommended
Tension: 25-35 n/cm² recommended

Squeegee
Durometer: 60-70, 60/90/60
Edge: Square, Sharp
Stroke: Hard flood, medium speed
*Avoid excess pressure.



Stencil *(non-phthalate)*
Direct: 2 over 2
Capillary/thick film: N/A
Off contact: 1/16" (.2 cm)



Gel/Cure Temperatures
Gel: 220°F (104°C)
Cure: 290°F (143°C) Entire film

Epic Pigment Loading
15% Max Loading

Additives
Extender: None
Reducer: 3% max - 10025VB QEC Viscosity Buster

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

Clean Up
Wilflex screen wash

Health & Safety
MSDS: www.polyone.com

www.wilflex.com/pib

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