

Epic Top Score Base

Wilflex™ Epic Top Score Base is a non-phthalate plastisol ink designed to meet the changing demands in the athletic market by delivering a solution for printing on polyester substrates that require low cure temperature.

Compliance

- ▶ Non-phthalate.
- ▶ Compliant with CPSIA 2008 (Consumer Product Safety Improvement Act) Section 101, Lead Content in Substrates (<100 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).

Highlights

- ▶ Low cure properties.
- ▶ Delivers high stretch and bleed resistance in one package.
- ▶ Matte finish.
- ▶ Low tack surface.
- ▶ Excellent printability.

Printing Tips

- ▶ For optimal bleed resistance, print Epic PolyWhite, the most bleed resistant white in the Wilflex line, as underbase. Set the dryer belt at the highest possible speed while still ensuring that the ink film reaches 300°F (149°C). For optimal stretch, print Epic Performance White as underbase. Set the dryer belt at the highest possible speed while still ensuring that the ink film reaches 290°F (143°C).
- ▶ Building a thick ink deposit on the polyester substrate provides additional bleed blocking power. To accomplish this, use the following coating screen method with a wet-on-wet application: 1) Coat print side; 2) Coat squeegee side; 3) Coat print side; 4) Coat squeegee side. Always end coating on the squeegee side to push the emulsion to the print side. Dry screens with print side facing the floor.
- ▶ If printing on a hard metal surface, use a palette covering to allow for a softer printing surface.
- ▶ Wilflex recommends Epic Pigment Concentrates (PCs) as Top Score 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.
- ▶ Polyester fabrics are likely to have dye migration issues and may require use of additional bleed blocker, such as Epic Performance Underbase Gray. 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.
- ▶ Avoid over flashing as it can result in poor intercoat adhesion of colors.
- ▶ Pre-test Epic Top Score inks on garments that could be susceptible to ghosting. Avoid stacking printed garments hot as some fabric dyes are prone to color distortion. Fabric and dye characteristics can vary between manufacturers and from dye lot to dye lot.
- ▶ Stir plastisols 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 phthalates and pvc 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 Wilflex Technical Services Department prior to printing.
- ▶ Email: techserviceswilflex@polyone.com

Printing Parameters

Opacity	9	
Bleed Resistance	8	
Smooth Surface	9	
Flash	7	
Gloss	2	
Printability	8	



Fabric Types

100% polyester, polyester blends, 100% nylon jersey



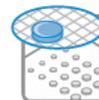
Mesh

Counts: 86-160 t/in (34-90 t/cm)
Tension: 25 n/cm²



Squeegee

Durometer: 60-70
Edge: Square, Sharp
Stroke: Hard Flood, Slow-Medium
**Avoid excess squeegee pressure.*



Non-Phthalate Stencil

Direct: 2 over 2
Capillary/Thick Film: 30+ micron
Off-Contact: 1/16" (.2cm)



Flash & Cure Temperatures

Flash: 220°F (104°C)
Cure: 290°F (143°C)



Pigment Loading

EQs: N/A
MX: N/A
PCs: 15% max by weight



Epic Additives

Extender: N/A
Reducer: Epic Viscosity Buster-1% max



Storage

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



Clean Up

Ink degradient or press wash.



Health & Safety

MSDS: www.polyone.com