wilflex™

Product Information Bulletin

10088PFXHDC Epic™ HD Sharp Clear

Wilflex Epic HD Sharp Clear is a non-phthalate special effect clear developed to create high resolution graphics with sharp detail. Epic HD Sharp Clear can be used in high density applications or blended with other texture inks to create unique effects.

Highlights

- Non-phthalate.
- Compliant with CPSIA (Consumer Product Safety Improvement Act) 2008, 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).
- Eco-Passport Certified.
- Satin finish, dry hand feel.
- Super straight-edge definition, excellent sharp-corner properties.
- Good elongation and stretch.
- Excellent wash properties.
- Excellent adhesion to fabrics.
- Use Epic HD Sharp Clear, either on its own or with color addition. May be overprinted with colors.
- Used in conjunction with other special effect bases, Epic HD Sharp Clear can create unique textures and design effects.
- Epic HD Sharp Clear is excellent for neoprene and other stretch fabrics.
- Greatly increases production efficiency of high density printing due to excellent stacking properties.

Printing Tips

- For best results, follow the recommended Printing Parameters.
- Add Epic PCs, Epic MX, or Epic Equalizer to create custom color. Addition of pigments or finished ink to the base should not exceed 10% by weight.
- Use as an overprint clear on printed colors and metallic inks to improve crock resistance and hand feel. Pretest before beginning production. Clarity may vary slightly depending on thickness of ink deposit.
- Use a print-flash-print method to build ink with capillary films. Do not print wet-on-wet.
- A heavy flood stroke that fully fills the open areas of the stencil with ink is recommended.
- Ink will appear slightly milky after flashing with clarity achieved after full cure.
- Cure temperatures in excess of 350°F during curing will result in a tacky hand feel, rounded edges, and an increase in gloss. Please see page 2 for comparison.
- Avoid excessive squeegee pressure.
- When formulating customer formulas use Wilflex Ink Room Management Software to ensure formulas are balanced for optimal print, wash and cure performance.

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Printing Parameters

Opacity	N/A
Bleed Resistance	N/A
Smooth Surface	8
Flash	7
Gloss	5
Printability	7

Fabric Types
100% cotton, blends, acrylic, lycra & uncoated nylon, & neoprene

Mesh
Counts: 83-200 t/in (34-77 t/cm) recommended
Tension: 25-35 n/cm² recommended

Squeegee
Durometer: 75, 60/90/60
Edge: Sharp edge
Stroke: Medium. Avoid excess pressure

Stencil non-phthalate
Direct: 2 over 2
Capillary/ thick film: 200-400 microns
Off contact: 1/16" (.2 cm)

Gel/Cure Temperatures
Gel Temp: 220°F (104°C)
Cure Temp: 325-350°F (170-180°C) entire film

Epic Pigment Loading
MX: 10% max by weight
EQs: 10% max by weight
PCs: 10% max by weight

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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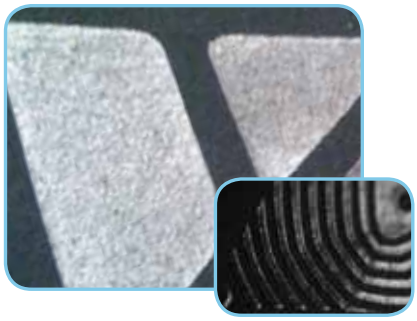
Epic HD Sharp Clear Finish Comparison

10088PFXHDC Epic HD Sharp Clear

- MESH :: 83 t/in (34 t/cm)
  400 micron
- SQUEEGEE :: 70 durometer sharp
- PRINT - FLASH - PRINT
- CURE :: 325°F (163°C)
- Matte finish, sharp edge, no tack
- Foil will not adhere at end of oven



10088PFXHDC Epic HD Sharp Clear

- MESH :: 83 t/in (34 t/cm)
  400 micron
- SQUEEGEE :: 70 durometer sharp
- PRINT - FLASH - PRINT
- CURE :: 350°F (177°C)
- Satin finish, sharp edge, low tack
- Foil will adhere immediately after exit from oven

**Not recommended for foil application.*

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. Epic HD Sharp Clear cures at 325°F (170°C). Ensure the entire ink film reaches 325°F.
- Dyestuffs inherent in the garment fabric can change the clarity and color of this ink during curing.
- 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 and stirring apparatus must be cleaned properly and free of phthalate containing inks. All squeegees, flood bars and screens must be cleaned properly to remove phthalate containing inks before printing Epic.
  - 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

Sharp Clear Base, Overprint Colors

Pigmented Sharp Clear Base

Pigmented Sharp Clear Base

Pigmented Sharp Clear Base

Sharp Clear Base, Overprint Colors

www.wilflex.com/pib

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