

TECHNICAL DATA SHEET

SHORT DESCRIPTION:

ELT Niche Series is specifically designed to meet the needs of applications that require the lowest cure possible, such as polypropylene bags and jackets.

QUICK SPECIFICATIONS:



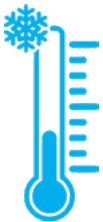
MESH COUNT
86 to 230

This is simply a recommendation based on printing difficult fabrics such as 100% polyester. Preventing dye migration requires a generous ink deposit.



FLASH CURE
5/5: **Exceptional**

The rating of **EXCEPTIONAL** implies a flash cure speed of approximately half that of any standard plastisol ink. Due to the great number of variables involved, we cannot specify a specific flash time or temperature.



INK CURING
230°F to 320°F

Washing and drying your prints to check durability is the ultimate test of ink curing. However, the use of Thermolabels is the most sensible method of testing for your day-to-day operations. This will help you prevent cracking, peeling, and washout.



SQUEEGEES
70 Durometer

Squeegees are one of many variables controlling your ink deposit. Softer squeegees are capable of printing thicker while hard squeegees allow for better print resolution. 60 durometer is soft. 70 durometer is medium. 80 durometer is hard.



CLEAN UP
PW-4 or IR-26

Many cleaning products will remove plastisol ink. We recommend Saatchichem PW-4 for cleaning on-press. The IR-26 is ideal when cleaning in a washout booth. Cleaning the ink out of the screen immediately after printing is always recommended.



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LOW TEMPERATURE BENEFITS:

Low temperature inks help prevent numerous fabric/printing problems which have become such a nuisance. These problems include:

Dye Migration

Polyester dyes turn into gas when they are heated. Since you are using a significant amount of heat to fully cure plastisol ink, this will always be a problem. With low temperature ink, you are using much less heat, preventing polyester dyes from migrating.

Ghosting

100% polyester, fluorescent tees, pigment-dyed tees, and “vintage” apparel may experience what we call ghosting. This appears to be a haze around the print. You may also see a ghost image of the print on through the back (or front) of the garment. This can be caused by both heat and chemistry. Low temperature inks will prevent ghosting.

Shrinking

Fabric shrinking can happen while flash curing or fully curing in the conveyor dryer. This can be a huge problem either way. If your fabric shrinks under a flash unit, the colors will no longer register properly. Shrinking in the conveyor dryer may not be a big deal unless it is significant. We have seen polyester hooded sweatshirts shrink more than four inches in the dryer. Low temperature ink is an excellent solution for all shrinking fabrics.

Scorching/Melting

Fabrics will burn, leaving dark or even charred burn marks on your apparel. This can happen while flash curing or fully curing in the conveyor dryer. Excessive heat is the culprit. However, items such as polypropylene and nylon may scorch at significantly lower temperatures when compared to cotton and poly/cotton. Our low temperature inks will fully cure cool enough to prevent these problems.

Color-Changing

Fluorescent cotton and poly/cotton fabrics have a tendency of darkening when over-heated. This is not always easy to see as the color change is often slight. It most commonly occurs on safety yellow, fluorescent green, and fluorescent orange tees. Any part of the shirt which is not flat on the belt is likely to be a different color once it is heated. Low temperature ink will allow you to keep the temperature at a safe level.



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ELT NICHE SERIES BENEFITS:

- Low Temperature, universal ink for printing virtually any fabric.
- Best ink for screen printing polypropylene bags & rain jackets
- Bleed resistance is incredible for printing 100% polyester tees and uniforms.
- When printing sublimated polyester, print ELT Digital Black or Gray Underbase to block the extreme amount of dye migration and cure at minimum 250°F.

IDEAL CURING GUIDELINES:

Curing ELT Niche Series at the temperatures listed below (measure with a Thermolabel) will give you the best possible print without damaging the fabric. Curing is a time and temperature process. A lower temperature with a slower belt speed is always the best method.

100% Cotton	Poly/Cotton	Polyester	Nylon/Stretch	100% Nylon	Polypropylene	Rayon
240°F	240°F	240°F*	240°F	240°F*	230°F	230°F

TIPS AND TRICKS:

- ELT Niche Series inks flash extremely fast. If you are printing manually with multiple stations, adjust the flash unit to be cooler or further from the print to protect your fabric.
- ELT Niche Series can be cured successfully at regular temperatures (320°F). However, this will decrease your bleed resistance and risk temperature related fabric problems.
- Thin ink deposits will help prevent abrasion on flat surfaces.

Always perform a pretest print and test cure conditions on the fabric to be printed to establish the best results. Stir inks vigorously before each use. Viscosity may need adjusting for best results. If there is ever a question about a print job, call us at 800-942-4447. We are always happy to help!