

**TECHNICAL DATA SHEET****SHORT DESCRIPTION:**

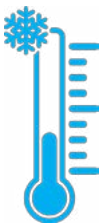
ELT stands for “extreme low temperature”. These plastisol inks avoid many of the fabric pitfalls traditional inks encounter when flash-curing and curing high temperature inks. ELT Series inks are great for printing virtually any fabric.

**QUICK SPECIFICATIONS:****MESH COUNT**  
86 to 110

This is simply a recommendation based on printing difficult fabrics such as 100% polyester. Preventing dye migration requires a generous ink deposit. However, ELT Series white and colors will print through finer mesh with ease.

**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**  
250°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. ELT Metallic and Glitter formulas must cure at a minimum of 270°F.

**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 Saatchem 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.

**TECHNICAL DATA SHEET****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.



**TECHNICAL DATA SHEET**

**ELT SERIES BENEFITS:**

- Universal ink for printing all fabrics.
- Soft-hand feel.
- Stretchy ink film for spandex or lycra blends.
- Opaque ink for printing dark fabrics without a white underbase.
- Bleed resistance is very high for printing 100% polyester tees and uniforms.
- ELT Digital Black Underbase is available for printing sublimated polyester (digital camo).
- Compatible with nylon catalyst for printing on waterproof nylon and polyester.

**IDEAL CURING GUIDELINES:**

Curing ELT 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
270°F	270°F	270°F*	270°F	270°F*	250°F	250°F

\*210 denier nylon and 210 denier polyester will melt/distort above 275°F. For these cinch sacks, we recommend curing ELT Series at 250°F to protect the fabric. Be very cautious when flash curing.

**TIPS AND TRICKS:**

- Although ELT Series is very stretchy, add 10% S-Additive if you would like to have even more stretch for lycra and spandex apparel.
- For 100% polyester fuzzy tees, try using the ELT Digital Black Underbase as it holds down polyester fibers better than any other ink.
- ELT Series flashes 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.
- If ELT Series inks appear glossy after the ink has cured, your dryer settings may be too hot. ELT Series should have a matte finish when cured at low temperatures.

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!