ONE STROKE INKS - TECH SHEET

ELT-S Series

Extreme Low Temperature Plastisol Ink

Product Description

ELT-S is a new option for those printers who want the benefits of our low temperature inks in an even softer, more stretchy formula. Like the ELT Series inks, ELT-S White speeds up production with quicker flash times and lowers energy cost with lower cure temperatures. The lower flash and cure temperature also lead to a number of other benefits not realized by other inks:

- **No fabric shrinking.**
- **Stop ghosting.**
- **Prevent dye migration.**
- **Hot stacking is safe.**
- **Cool down stations are unnecessary.**
- **Significantly lower energy cost.**
- **Longer lasting platen adhesive.**

In addition to preventing the problems listed above, ELT-S White and ELT Series colors have many benefits not commonly found in plastisol inks:

- **Excellent replacement for silicone ink.**
- **Universal ink for printing all fabrics (cotton, polyester, nylon, polypropylene).**
- **Stretches with Lycra® and spandex blends.**
- **Very smooth texture for fantastic resolution and easy multi-color printing.**
- **Ultra-soft feel.**
- **Very light ink viscosity.**

Quick Product Specifications

Mesh Range:
61 - 230 count

Flash Curing:
3 to 4 seconds

Ink Curing:
250ºF to 330ºF

Clean Up:
IR-4 & PW-4

Printing Tips For Success

Depending on the type of fabric you are screen printing, the ELT Series may require different printing instructions to be 100% successful. Each fabric type is listed below with instructions to lead you to better prints. See the following section for important printing instructions regarding the use of the ELT Digital Black Underbase.

Cotton & Poly/Cotton: ELT-S White will have a super-soft feel on cotton and poly/cotton blends. The higher viscosity when compared to ELT White will lay the fibers of the shirt down, making ELT-S White a better option for these fabrics. Dye migration is not an issue when screen printing 100% cotton. However, cotton is likely to scorch at higher temperatures. Ghosting can also exist with lighter colors, pigment-dyed, and fluorescent cotton. Curing the ink film to 270ºF or 280ºF will prevent scorching and ghosting on 100% cotton. These temperatures will also prevent dye migration with poly/cotton.

100% Polyester: ELT-S White can be printed on 100% polyester. However, it is less bleed resistant than the original ELT White. When printing polyester moisture management materials, keeping the temperature lower will help prevent common problems such as shrinking, ghosting, and dye migration. We recommend curing the ink film to 270ºF to 280ºF. Nylon catalyst will be required for screen printing waterproof polyester jackets and bags. Add 1 part nylon catalyst to 9 parts ink. For the most difficult dye migration fabrics, print with ELT Digital Black Underbase.

Digital Camo & Sublimated Polyester: ELT-S White is not recommended for digital camo shirts and other sublimated polyester uniforms. The best option is still our ELT Digital Black Underbase with the original ELT White printed over top. Our premium polyester inks and universal inks will also work well.

100% Nylon: Due to the possibility of damaging the nylon fabric, we recommend curing the ink film for most items to 270ºF to 280ºF. However, if you are screen printing 210 denier nylon drawstring bag or a similar heat sensitive material, it will be best to cure the ink as low as 250ºF or 260ºF. Nylon catalyst may be added to ELT Series inks for screen printing waterproof jackets and bags. Mix 1 part nylon catalyst to 9 parts ink.

Polypropylene: **Inexpensive polypropylene will melt at temperatures above 275ºF. For this reason, it is best to keep the curing temperature between 250ºF and 270ºF.**

Spandex & Lycra® Blends: **Stretch fabrics will require a thicker ink deposit to be successful. Consider 86 or 110 monofilament screen mesh with a print-flash-print technique. ELT-S White is most stretchable when cured between 270ºF and 280ºF. For stretch fabric blends with polyester, consider screen printing one layer of ELT Digital Black Underbase with two layers of ELT-S White on top. This will provide a great, stretchy feel with excellent resistance to dye migration problems.**

Important Notes

This tech sheet includes much more specific information than most of our plastisol inks. This is due to our desire to fully educate our customers leading to better prints and higher sales. With most fabrics, the ELT Series is best when cured between 270ºF and 280ºF. When printing ELT Digital Black Underbase and many layers are necessary, heat the ink 300ºF to ensure everything gets fully cured. When pushing the limits of ELT Series to a 250ºF cure temperature, always test your dryer. Utilize our Thermolabels to test at these very low temperatures.

Most screen printers will have significant ink stock on their shelves when they first make the switch to ELT Series. For fabrics such as cotton, poly/cotton, and most nylon, ELT Series inks can be printed with our other ink series. Simply cure the prints at 320ºF to be sure all of the inks involved are fully cured. 100% polyester will be best using only the ELT Series inks as the low temperature is very important to the success of these prints.

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!