

Union Ink Company Technical Data Sheet

Barrier Clear (PLHT-9040)

A premium, low-bleed, clear plastisol to help fight extreme dye migration on 100% polyester, or polyester-blended fabrics.



Applications

- Direct print, low-bleed underbase for polyester-blended or 100% polyester garments or as a last-down clear on transfers.
- Print as last-down clear over transfers.

Features

- Helps control dye migration on troublesome polyester fabrics.
- Easy printing.
- Provides excellent adhesion to fabrics.

Printing Tips— Barrier Clear (PLHT-9040) is a specially formulated low-bleed clear to be used as a direct-print underbase on polyester fabrics prone to extreme dye migration. This product may also be printed last as a low-bleed mask on heat transfers. Depending upon the transfer paper used, it may be peeled from the platen immediately after transferring prior to cooling. In laboratory and field testing Barrier Clear has shown to greatly increase the chances of success when printing troublesome polyester fabrics.

For best results Barrier Clear must be printed through mesh counts of 74-86 (29-34 metric), flash-cured at 240°F/115°C and overprinted with another low-bleed ink. Screens should be tensioned to mesh manufacturer's tensioning recommendations and emulsion applied to screen building up the print side to increase ink deposit and edge sharpness of print. Off-contact should be set so that screen immediately peels from substrate as squeegee passes through the print stroke.

Additives and Modifiers—None recommended, Barrier Clear should be used straight from the container to achieve ultimate bleed resistance.

Flash-Curing and Curing—Barrier Clear will gel when surface of ink film reaches 240° F/115°C. Entire ink film must reach 300°F/150°C to achieve full cure. Thicker ink deposits will require higher temperatures and longer time in oven.

Caution—Stir well before use and always test for curing, adhesion, washability, and desired performance before commencing a production run.

Key Facts

Opacity—None

Bleed-Resistance—Excellent when used to underbase another low-bleed color.

Mesh— 74-86 (29-34 metric).

Stencil—Any direct emulsion or capillary film compatible with plastisol inks will be acceptable.

Thinning—Do not reduce. Reducing viscosity of this product will affect bleed-resistance.

Gel and Curing—Gel temperature is 240°F/ 115°. Barrier Clear will achieve full cure when entire ink film reaches 300° F (150° C).

Washfastness—Good to 140°F/60°C (ISO 3) Do not dry clean or iron print.

Clean Up—Any screen wash designed for use with plastisol inks.

Storage—Do not expose to temperatures in excess of 87°F/30°C/.

Warning—Low-bleed plastisols contain blocking agents to minimize the migration of fugitive textile dyes into plastisols. Occasionally textile dyes are sensitive to blocking agents, causing a ghost" image on the garment. For this and other reasons Union Ink does not recommend the use of low bleed inks on cotton garments. Since Union Ink has no control over dyes, curing, or print methods used it cannot accept liability for spoilage caused by this condition and must insist the ink be tested to see if it is suitable for the particular job. If the ink is not satisfactory, Union will accept for credit the ink returned in good condition.