



Soft-Hand Discharge (DSPP)

Water-based discharge under base for water base or plastisol prints.

Applications

- Under base for plastisol or water based prints on dischargeable fabrics.
- Discharges color from dischargeable 100% cotton fabric.
- White can be used as under base or stand-alone white.

Features

- Extremely Soft / “No Hand” Feel.
- Enables overprinting of medium opacity, soft-hand plastisols.
- Plastisols can be overprinted without flash curing the pre-print clear.

General Information: Discharge printing is a process where water-based inks are applied to certain “dischargeable” dark colored garments to produce very bright, soft prints. As the discharge inks are printed and heat cured, the original dyes in the garment are being reduced, or “discharged” from the image area. Soft-Hand Discharge inks are an under base for plastisol inks when printing on dischargeable fabrics. Medium opacity and soft hand plastisols such as Union’s Ultrasoft (PLUE), Tru-Tone (PRPE), and Unimatch (PTHF) inks can be printed over Soft-Hand Discharge inks, producing bright, soft-hand prints, even on dark fabrics. Printers who prefer not to use an under base can create custom dischargeable colors by using the DSPP-9070 Discharge Base combined with Union’s PIGT-Series Pigments. After the custom color has been created, mix the DSPP-9ZFS agent using the same percentages as described under Mixing Instructions. The increased brightness of Union’s DSPP-1003 Bright Discharge White now works well as either an under base or stand-alone white.

Mesh: Use 156-186 thread per inch (62-73 threads per cm) mesh.

Opacity: Discharge inks are virtually transparent until activated with proper cure times and temperatures.

Stencils: Use any direct emulsion which is listed as water base / discharge resistant on all screens within job. Check with emulsion manufacturer for specifications and proper usage.

Additives: DSPP-9ZFS must be added at specified amounts for the effect to take place. ATEX-9600 Aqueous Stay Open may be added at .5-1% by weight to slow down ink drying into mesh. Small amounts of water may be added to increase inks penetration into fabric.

Available Standard Colors

DSPP-1003 Bright Discharge White

DSPP-9070 Discharge Base

DSPP-9050 Soft-Hand Clear

Additives

DSPP-9ZFS Discharge Agent

ATEX-9600 Aqueous Stay Open

Mixing Instructions for DSPP-9ZFS Discharge

Agent: The discharge system consists of two parts: the ink and the Discharge Agent. The DSPP-9ZFS Discharge Agent is supplied as a powder and sold separately. Add 6-8% DSPP-9ZFS Discharge Agent of the total weight to the Soft Hand Clear, Soft-Hand White or the custom color created utilizing the DSPP-9070 Discharge Base and Union’s PIGT-Series Pigments). Mix until totally dissolved. Minimize waste by only mixing enough of the ink / discharge agent that will be used in a 6-8 hour period.

Printing Instructions: Print the Soft-Hand Discharge inks first, forcing the ink well into the fabric with moderate squeegee pressure, Open mesh / graphic should be flooded immediately after printing to avoid ink drying into screen. If utilizing DSPP-9050 Soft-Hand Clear other plastisol or water based colors may be printed without flash curing. The color values of the over-printed inks will appear after curing. You may mist the screen occasionally with water to maintain the ink viscosity during long printing runs. Print custom dischargeable in the same manner.

Curing Instructions: Cure for a minimum of 90 seconds at 320° F (160° C) to activate the discharge reaction and produce a washable print. Evaporating the water too quickly will stop the discharge reaction and result in dull colors.

Wash-Up: Clean the screens and squeegees with warm water and if necessary, mild detergent to remove dried ink from mesh.

Storage: Always store water based inks in cool / dry area in an air-tight container. Ink Mixed with DSPP-9ZFS should not be stored longer than 6-8 hours.

Caution: Not all garments are dyed with dischargeable dyes. The printer must test Soft-Hand Discharge inks on the garment before using in production to determine if the dyes in that garment will discharge.

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