

Polymeric 3D Sublimation inks are flexible high performance water-based dye-sublimation inks specifically designed for Epson and other Piezo head printers. With our elevated concentration levels of dye, 3D Sublimation inks allow reduced ink limits without the loss of color vitality. These inks are compatible with the most common sublimation papers and perform well when transferred with a heat press or calendar roll. Polymeric's 3D Sublimation inks are designed for transferring on a wide range for polyester based fabrics for sportswear, banners, along with polyester and polyamide coated rigid materials used in outdoor signage. 3D Sublimation inks have exceptional elongated characteristics for bending and vacuum forming applications.

Performance Properties

- Brilliant color array providing a wide color gamut with vibrant colors
- Excellent light-fastness properties
- Exceptional wash-fastness properties
- Superb heat transfer properties
- Sharp outline definition and smooth gradations
- Reliable jet-ability
- Superior flexibility
- Excellent scratch resistance
- Good chemical resistance properties

Recommended Substrates

Polyester fabrics, including Spandex, and Lycra materials, and mixed synthetic fabric with minimum polyester content of 60%.

In addition to polyester, there are some substrates that require a coating to enhance sublimation. 3D Sublimation inks will decorate polyamide, polyethylene, polyvinyl polymers, including products with dye receptive polymer coated surfaces, such as plastics, films, metals, woods, ceramics and glass materials, including polyester and urethane painted surfaces.

Color Availability

CMYK
Light Cyan
Light Magenta
Orange
Violet

Curing Guidelines

The dwell time platen/ calendar roll temperature required to accomplish the optimum level of transfer is reliant upon the substrate, and heat transfer equipment used. Good results are achieved using parameters of 360 degrees Fahrenheit – 412 degrees Fahrenheit for 30-60 seconds.

The 3D Sublimation inks when properly transferred on coated plastics, coated metals, and coated ceramic materials develops an extremely flexible and durable ink. Even though cured ink film has been engineered to optimize processing and handling, the printer must assume responsibility for pre-testing and qualifying production parameters prior to printing.

Light Fastness

The variables related to the dye sublimation printing and transferring processes, and the outdoor environment that a print may be subject to, may unfavorably affect the outdoor fade characteristics of the printed product. While Polymeric 3D Sublimation inks are formulated with high quality premium dyes, which have excellent light fast characteristics in their raw material state; the light fastness and durability of a printed product will be determined by the density of the print. For this reason no guarantee is provided in regards to the inks performance or suitability for outdoor applications, though 2 to 3 years are typical. Polymeric over-print Solar Shield clear-coats, to extend and ensure the light fast properties, are available upon request.

Storage

Care should be taken to store ink in tightly closed containers located in a cool (60-80°F/15-27°C) dark place. With suitable conditions, unopened ink is expected to have a shelf life of approximately twelve (12) months from date of manufacture, six (6) months for white inks.

IMPORTANT:

Only the correct use of the product will allow satisfactory results. For this reason, closely related to the product supplied, Polymeric must decline all direct and indirect responsibility for the proper or improper use of the product. Make certain that product is right for the desired use, work according to the instructions given in our technical data sheets. Before use contact Technical Service in case of doubt.

Precautions

Read the safety data sheet prior to processing. It contains instructions for precautions to be taken when handling inks. If ink comes in contact with skin wipe off with a clean, dry cloth (do not use solvent). Wash and rinse the affected areas with soap and water.

We strongly recommend a preliminary test of printing and curing on the supports intended to use, in order to ascertain exactly the procedure, the working times and the obtained effect. **MIX WELL BEFORE USE.** Follow the directions on the package, ask for the safety data sheets and always follow the directions contained therein.

A. Warranty Liability Limited to Purchase and Installation Costs

Notwithstanding anything provided herein or any other written material to the contrary, Polymeric only warrants the purchase price and costs of installation. Polymeric US shall have no liability or obligation to any user, buyer, purchaser, distributor or other person or entity for any special, direct, indirect, incidental or consequential damages, however caused, including without limitation, personal liability, loss of business, loss of profit, or other damage, whether or not buyer shall have informed Polymeric US of the possibility or likelihood of any such damages.

B. Limitation of Implied Warranty and Fitness for a Particular Purpose

Polymeric's warranty is given in lieu of all other warranties, express or implied, including but not limited to an implied warranty of fitness for a particular purpose, an implied warranty of merchantability, and any other implied warranty arising out of a course of dealing, performance, customer usage or trade.