



THERMO FORM SERIES (TF-000)

PRODUCT DESCRIPTION

Kolorcure's Thermo Form Series ink was developed specifically for printing plastics used for vacuum or thermo forming. Excellent intercoat adhesion and extreme elongation properties enable this UV ink to withstand up to a 6 inch draw. Unmatched adhesion and superior flexibility create an ink film that can be heat bent and routed without any chipping or loss of adhesion even after multiple layers have been applied.

RECOMMENDED SUBSTRATES

Kolorcure's Thermo Form Series performs well on Point of Sale substrates such as Acrylic, ABS, PVC, Polycarbonate, Polystyrene, and PETG.

PHYSICAL PROPERTIES

Solids:	100%
Weight/U.S. Gallon:	9.0 lbs
Viscosity:	4000-8000 cps at 25°C
Flash Point:	Greater than 200°F (93°C)
Shelf Life:	6 months at 77°F

DIRECTIONS FOR USE

Pretest for adhesion to all substrates prior to production printing, as well as, other properties to determine suitability. Mix well prior to each use.

Surface - A clean dry surface is preferred for superior adhesion.

Mesh - Monofilament polyester or nylon, 350-390 mesh per inch recommended.

For maximum color retention on deep draws a coarser screen mesh may be used.

Stencil - Lacquer proof, most direct or direct/indirect work well.

Squeegee - An 80 durometer (Shore A Hardness) polyurethane is recommended. It should be well sharpened.

Screen Wash Up - A special high flash point wash containing no hydrocarbon solvents should be used, such as KOLORCURE'S UVW-80 Screen Wash.

Screening equipment - Hand, semi-automatic, or fully automatic presses.

ADDITIVES

To lower the viscosity which will enhance the transfer of the ink through the screen, use Thermo Form Thinner

Use TF-100 Mixing Base as an extender to enhance cure and adhesion to substrate.

Use TF-400 H/T Mixing Base as an extender to reduce color strength of Process colors and to increase the viscosity of standard colors for fine line copy.

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CURING AND CURING EQUIPMENT

Thermo Form inks cure in air upon brief exposure to a focused high intensity ultraviolet light source. A standard 300 watt per inch medium pressure mercury vapor lamp should be used. For an optimal cure a 300-350 millijoule window is required, however thick plastic substrates act as a heat sink and can result in a slower cure rate. If a loss of gloss or adhesion occurs due to insufficient cure, the use of mixing base will increase light penetration and improve cure.

FILM THICKNESS

Recommended 0.4 to 0.6 mil (10-15 microns).

COVERAGE

Using 390 monofilament polyester mesh, Thermo Form will yield an average of 3200 square feet per gallon.

STORAGE AND HANDLING

All KOLORCURE photopolymer inks and coatings should be stored in a cool dry area: 80°F (27°C) or below. Keep these inks and coatings away from direct sun light and indirect white light. Do not use these inks and coatings in areas having fluorescent lights overhead. Keep these inks and coatings away from internal heat sources.

SPECIAL NOTES

All UV inks and coatings are sensitive to contamination. Use only new screens or those previously used for UV printing. Do not add any conventional ink or solvents to the inks. They are most likely not compatible and will destroy all properties.

WARNING

The use of goggles, gloves, and protective clothing is recommended. Avoid prolonged breathing of vapors. Contact of liquid material with the skin may be irritating; wash exposed area thoroughly with soap and water. Contact of liquid with the eyes may cause injury - effects may be delayed; flush eyes with large amounts of water for 15 minutes and call a physician. Like most polymers, the properly -cured resins are considered largely inert.

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