

Sericol UTMI II Overprint Clear Coat

Instructional Bulletin #3.23 (Revision 4)

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1.0 Scope

- Avery Dennison recommends the use of Sericol's TMI II Transit Marking Ink, used in conjunction with an approved overprint clear coat, for all long-term applications, including fleet.
- It is very important that the clear coat be applied properly and in the correct amount to assure durability and performance of the printed part.
- Prior to using the UTMI II Overprint Clear Coat and after jet drying the final TMI II ink color, the prints must be racked and batch oven dried for a minimum of 30 minutes at 160° F (70° C) to assure all residual solvents are removed from the inks.

2.0 UTMI II Two - Component Overprint Clear

2.1 System Components

Product #	Description	Mixing Ratio
K-86693	UTMI II Part A	11 Parts (by weight)
K-84223	UTMI II Part B	1 Part (by weight)
K-83965	Thinner	N/A
K-67020	Retarder*	Do not exceed 5% by weight

2.2 Mixing Instructions

- Combine Part A and Part B at a mixing ratio of 11:1 and mix slowly for ten minutes.
- Adjust viscosity to 15 seconds in a #5 Zahn cup using only K-83965 Thinner (the use of any other thinner will affect flow and reduce pot life).
- The overprint clear should then be allowed to set for 15 minutes prior to use.
- Mix only enough UTMI II for eight hours. Properly dispose of any UTMI II mixture that is not used.

*NOTE: Use of the retarder will increase normal clear coat and batch oven drying times. K67020 retarder may be used to improve screen stability (do not exceed 5% by weight).

3.0 Application of UTMI II Overprint Clear Coat over TMI II Ink Systems

3.1 Screen Printing

Mesh Count	Squeegee Durometer
157 - 200	70

NOTE: When tensioning screens, tension the fabric to 16-22 Newtons (N/cm). Any suitable (lacquer proof) stencil system may be used (i.e., direct method or capillary films). Prior to production, it is recommended to test the compatibility of the screen and ink system. When clear coating a metallic color, the coarser mesh is suggested to properly protect the metallic flake. It may be necessary, when using a large flake, to apply two coats of clear for adequate protection.

Section 3 – Printing Information

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3.2 Roller Coating

- UTMI II Overprint Clear Coat may be roller coated. While the same respective screen printing mixing instructions will apply, additional viscosity “adjustments” with the appropriate thinner may be necessary to assure coatability. The minimum dry film thickness of the overprint clear coat should be 0.4 mil (10mm). When roller coating, it is important to obtain a uniform dry film thickness to assure a smooth, even coat.

4.0 Drying of the UTMI II Two Component Overprint Clear Coat System

- UTMI II Overprint Clear Coat must be batch oven dried. The following drying times are based on the fact that clear coated prints will be racked and placed in a batch oven.

4.1 Overprint Clear Drying Times (Batch Oven)

Batch Oven Temperature	Minimum Drying Times
160°F (70°C)	1-1/2 Hours

- After batch oven drying, prints must cool on racks for a minimum of 30 minutes before unstacking. Stacking prints too soon after drying may leave an impression in the clear coat. Premasking prints too soon after drying may cause difficult premask removal.
- Properly vent batch ovens. To prevent hot and/or cool spots, adequate air circulation is required. To test, use maximum number of racks with temperature sensitive tapes at the top, middle, and bottom of each rack.
- For further information about the processing of Avery Dennison films with Sericol’s UTMI II Overprint Clear Coat system, contact Avery Dennison’s Graphics Division Customer Technical Support Team.
- To order Sericol’s UTMI II Clear Coat, MSDS (Material Safety Data Sheet) information, or to obtain general ink information, contact Sericol Customer Service at (800) 255-4562. The preceding information is based upon tests believed to be reliable and is intended only as a source of information.

NOTE: The purchaser should independently determine, prior to use, the suitability of the ink system for his/her specific purposes. Performance of the ink system is not guaranteed by Avery Dennison.

Revisions have been italicized.

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