



Automotive Technical Data Sheet

AUTOMARK UIP

UV Curable Ink for Flat Automotive Instrument Panels

Features

- **UV Curable System Formulated for Interior Automotive appliqué testing specifications**
- **V-Pyrol (NVP) Free**
- **Optimized for Doped-Lamp UV Curing Systems**
- **Excellent Opacity / Bright Clean Colors**
- **Superior Intercoat / Multi-Pass Adhesion Properties**
- **Resistant to Common Pressure Sensitive Adhesives**
- **Excellent Die Cutting Properties**

Thinning

It is absolutely essential to thoroughly stir the ink completely before use. We recommend stirring the ink for three to five minutes using a high-speed agitation device. Automark UIP is designed to be press ready. If thinning is required, the ink should be thinned 5% to 10% by weight using UIP-TH thinner. It is recommended that thinner be added in 1% increments until desired viscosity is achieved.

Mesh and Squeegee

Automark UIP is recommended to be used with 305 – 390 count mesh made with low elongation monofilament polyester (90 to 150/cm²). The ideal squeegee durometers are from 70 to 85 and resistant to UV inks.

Stencils

Stencil materials must be solvent and UV resistant and produce a thin film stencil (4-6 microns over mesh). Dirasol 914, SuperCoat 915, 916, or 917 and Xtreme AST 210 & 220 dual cure emulsions are recommended to give the highest print quality and stencil durability.

Cure Parameters

Curing parameters are designed around doped lamps. Inks in the UIP line can be cured using either the "D" (Iron doped) and/or "V" (Gallium doped) lamps. Toner colors, including Opaque Blacks, respond best to the "D" lamp. Whites and Clears respond best to the "V" lamp. The "H" lamp is generally not suitable to achieve proper cure. An output power of 400-600 Watts/inch is recommended for proper cure. Dosage requirements will depend on bulb selection, power output and mesh count.

Coverage

Standard line colors should yield a coverage of 2,800 to 3,500 square feet/gallon (64 to 80 m²/liter) depending on film thickness.

Wash Up

Wash up on press with Xtend™ press washes and after the production run with Xtend™ ink degradents.

Laminating

Automark UIP ink series is resistant to most adhesives utilized in the automotive and membrane switch / overlay industry.

For optimal results, lamination should be delayed until 24 hours after the last color is applied.

Pre-Production Tests

It is strongly recommended that all substrates be tested before use as supposedly similar substrates can vary between manufacturers and even between different batches from the same manufacturer. Certain plastics may be impregnated with lubricants that, like plasticizer migration, may impair adhesion and block resistance, even a considerable period after printing. Other plastics can become brittle or caused to curl after printing.

END-USER MUST DETERMINE SUITABILITY OF THIS PRODUCT FOR THE INTENDED USE PRIOR TO PRODUCTION.

Co-Use with Other Inks

It is not recommended that Automark UIP be intermixed with any other UV or solvent-based ink system.

Automark UIP can be interprinted with Techmark GSO.

Color Availability

The Automark UIP color range includes high density matching colors, pigmented transparent colors, as well as opaque blacks and whites. This color range includes transparent as well as opaque pigments (where appropriate), allowing a variety of first and second-surface backlit colors to be matched.



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High Density Matching Colors

The Automark UIP ink series uses a High Density Matching System specifically designed to provide the automotive industry with strong, brilliant matches. The system consists of highly concentrated base colors, each of which has been selected for its cleanliness of tone and suitability for intermixing. Using the base colors plus Shading Black (UIP-SB) and Tinting White (UIP-TW), almost any color can be produced. It is not recommended to use either the 301 Opaque Black or 311 Opaque White for color matching purposes.

Halftone / Detail Colors

The Automark UIP series is incorporated with specific higher viscosity or halftone rheology white, black and clear for fine detail and compensation pass printing. These products can be used in combination with all other UIP products and may require additional energy exposure for proper cure.

Matching Toners

UIP-SB	Shading Black
UIP-TW	Tinting White
UIP-009	Dense Black
UIP-010	GS Yellow (Green Shade)
UIP-014	RS Yellow (Red Shade)
UIP-020	Orange
UIP-030	YS Red (Yellow Shade)
UIP-031	BS Red (Blue Shade)
UIP-035	Magenta
UIP-039	Violet
UIP-040	BS Green (Blue Shade)
UIP-050	GS Blue (Green Shade)
UIP-052	RS Blue (Red Shade)
UIP-233	Intense RS Blue (Red Shade)
UIP-260	Trans. YS Red (Yellow Shade)
UIP-265	Trans BS Red (Blue Shade)

Opaque Colors

UIP-301	Opaque Black
UIP-302	Matte / Halftone Black
UIP-311	Opaque White
UIP-HTW	Halftone / Detail White

Thinners and Clears

UIP-TH	Thinner
UIP-MX	Mixing Clear
UIP-HTX	Halftone Clear
UIP-DX	Diffuser Clear

Hardcoats

The following hardcoats are V-Pyrol (NVP) free and can be used in UIP constructions.

MTS-GHC	Gloss Hardcoat
MTS-MVHC	Matte Velvet Hardcoat
MTS-MTHC	Texture Hardcoat
GSO-FVHC	Flexible Velvet Hardcoat
GSO-FTHC	Flexible Textured Hardcoat

Metallics

Automark UIP Mixing Clear is recommended for use with metallic powders. Suggested ratios of powder and Mixing Clear are 8% by weight of silver powder and 20% by weight of gold powder. It is recommended that fresh metallics be mixed daily to prevent color shift of the finished mix.

Special Matches

Special colors can be supplied against dry prints, wet ink, or other Fujifilm Sericol standard colors.

Storage

Containers should be tightly closed immediately after use. At the end of long printing runs, surplus ink from the screen should be disposed of. Refer to Material Safety Data Sheet (MSDS) for materials and conditions to be avoided.

In the interest of maximum shelf life, storage temperatures should be between 50°F (10°C) and 77°F (25°C). When stored under these conditions the maximum shelf life is shown by the use by dates, which are clearly marked on all ink containers.

Safety and Handling

Refer to MSDS for safety, handling, and waste disposal information.

The information and recommendations contained in this Technical Data Sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason, our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Technical Data Sheet out of date and users are requested to ensure that they follow current recommendations.