



Automotive

Technical Data Sheet

AUTOMARK MPL

Solvent Screen Ink For: Washed Aluminum • Polyester and Vinyl Coated Metals • Most Coated Metals

Features

- **Specifically Designed for Automotive Interior Metal Constructions**
- **Excellent Forming Capabilities**
- **Excellent Printability and Screen Stability**
- **Bright, Clean Colors**
- **Resistant to Yellowing with Multiple Bakes**
- **Superior Color Stability**

Description

Thermosetting Ink for Formed Metal Panel Automotive Constructions

Thinning

Stir well before every use. Viscosity reduction can be accomplished using the MPL-TH Thinner. Suggested maximum level is 30% reduction by weight.

Flow Control

Automark MPL is a flow control free ink system. MPL is compatible with a variety of non-silicone flow controls, most of which will produce a defect free film. A non-silicone flow thinner, MPL-FLT, is provided for improving printability in all MPL inks. Its use is highly recommended when screen printing these products. For best results, MPL-FLT is designed to be added at 1-6% by weight of ink.

Mesh and Squeegee

Automark MPL prints well through 196 to 305 (77 to 120/cm) monofilament polyester or stainless steel fabrics. The ideal squeegee durometers are from 60 to 80 and solvent resistant.

Stencils

Stencil materials must be solvent resistant. Xtreme AST-210, Xtreme AST-220, Dirasol 911, SuperCoat 915, SuperCoat 916 and SuperCoat 917 dual cure, or Dirasol 132 one pot direct emulsions are recommended to give the highest print quality and stencil durability. Solvent-adhered stencil films should not be used with Automark MPL.

Special Matches

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

Color Availability

The Automark MPL color range includes standard printing colors as well as matching system colors. This color range includes some transparents as well as opaque pigments (where appropriate). All pigments have suitable lightfastness and heat stability to pass most automotive metal appliqué specifications.

Automark MPL toners are single pigment inks that can be mixed in any proportion. All toners are glossy when blended.

Blending Colors

MPL-010	GS Yellow
MPL-014	Yellow RS
MPL-020	Orange
MPL-030	Red YS
MPL-031	BS Red
MPL-039	Violet
MPL-040	BS Green
MPL-050	Blue GS
MPL-052	RS Blue
MPL-233	Intense RS Blue
MPL-301	Black
MPL-311	Opaque White
MPL-260	Transparent Red YS
MPL-265	Transparent BS Red
MPL-SB	Shading Black

Halftone Colors

MPL-IHY	High Intense H/T Yellow
MPL-IHR	High Intense H/T Red
MPL-IHB	High Intense H/T Blue
MPL-IHK	High Intense H/T Black

Thinners and Clears

MPL-MX	Mixing Clear
MPL-MOP	Matte Overprint Clear
MPL-HTX	Halftone Extender Base
MPL-TH	Thinner
MPL-FLT	Flow Thinner
MPL-FLX	SP Flexibilizer
MPL-HDR	Hardener



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Co-Use with Other Inks

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

Drying

Automark MPL inks are thermo-setting and require a minimum substrate temperature of 340°F (170°C) for proper cure. Automark MPL will not air dry.

When using a batch oven, Automark MPL will cure at 340°F to 365°F (170°C - 185°C) in 15 to 20 minutes. In high temperature conveyor ovens, Automark MPL will cure at 360°F to 450°F (182°C - 232°C) in two to four minutes.

All cure temperatures are dependent on gauge and type of metal, ink film thickness, as well as type and condition of the oven being used. Caution should be used when curing Automark MPL at temperatures above 400°F (204°C). Excessive immediate high temperatures without adequate air flow may result in a surface cure, demonstrated by a matte or slight texture to the ink film surface.

Coverage

Standard line colors should yield coverage of 1,800 to 2,400 square feet/gallon (45 to 57 m²/liter) depending on film thickness.

Wash Up

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

Outdoor Use

Automark MPL Overprint Clears will enhance color retention. Therefore, in order to achieve adequate durability an Overprint Clear must be used.

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.

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

Metallics

The Mixing Clear (MPL-MX) is recommended for use with all metallic powders. Blending colors can be used to shade the metallic as needed. The viscosity of the MPL-MX offers good powder suspension and very good mixed shelf life. Please check with the manufacture of the powder for appropriate percentages to use.

Due to the possibility of chemical changes after mixing, it is recommended that all metallic shades be mixed fresh daily.

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.