

# MAGIC® PRODUCTS APPLICATIONS GUIDE

## DMCVLA3

InteliCoat



Digital Imaging  
Substrates

### MATTE PRESSURE-SENSITIVE INK JET CAST VINYL

DMCVLA3 is a cast, white opaque, matte vinyl with a permanent, positionable pressure-sensitive adhesive, designed specifically for vehicle and display graphics. Material can be applied over rivets and corrugation, and can also be applied to most sign surfaces. For display applications, DMCVLA3 is intended for use in Hewlett-Packard DesignJet®, Canon iPF® series, Epson Stylus® series, and Roland® piezo printers and offers a broad color gamut and superior waterfastness with pigment inks.

#### PHYSICAL PROPERTIES

Vinyl Type:	Cast	Gloss (60°):	2.2
Caliper of Vinyl:	3 mil (76 um)	Optimum Print Temp.:	70°F (21 °C)
Caliper of Vinyl/Adhesive:	5.3 mil (134 um)	Outdoor Life Expectancy:	
Total Caliper:	11.8 mil (305 um)	Unlaminated	6 months
Opacity:	98%	Indoor Life Expectancy	1 year
Whiteness:	108%	Adhesive:	Permanent Solvent-Based

#### APPLICATIONS GUIDELINES

##### Printer & Ink Compatibility:

DMCVLA3 can be printed on Hewlett DesignJet®, Canon iPF®, series, Epson Stylus® series, and other piezo water-based pigment printers. It is recommended to use pigment inks for longer-lasting images. Inks NOT recommended for use are Encad GX, Ilford® Archiva™ and ColorSpan® EnduraChrome ink because premature fade is known to occur.

##### Outdoor and Indoor Use:

This product is recommended for outdoor and indoor applications. It must be applied at minimum air and surface temperatures of 50° F. Once posted, the material can withstand temperatures of -10° F to 150° F.

##### Water Resistance & Surface Protection:

Exposed edges of laminated images will absorb water causing water migration under laminates. Otherwise, overlamination is not required. To obtain a high degree of water resistance, use only pigment ink. Dye-based inks will yield good color gamut for display graphics, but with repeated exposure to water, bleed may occur. Overlaminating dye-based ink will not eliminate image bleed, unless the material is completely sealed to a non-porous surface or encapsulated. Water can migrate under the laminate at exposed edges, causing dye based ink to bleed or show a water mark. To avoid this, use 3M edge sealer or Clearstar Clearjet liquid laminate ([www.clearstarcorp.com](http://www.clearstarcorp.com)) on all exposed edges or have the laminate overhang the edge of the image to seal the edge and prevent water migration. Let image dry 24 hours before exposing to moisture. Dirt and stains can not be cleaned from the imaged surface, and it can be damaged from excessive folding or creasing. Laminating is recommended to protect the surface.

##### Printing:

Ink coverage of up to 250% is recommended. Excessive ink saturation can affect the waterfast properties and color uniformity. To optimize print quality, printers should be set for highest print quality and media selection should be "Heavy Coated Paper."

##### Material Handling & Storage:

Once print is completed, roll imaged media onto a core, until ready for posting. Folding of the material is not recommended. Unimaged material should be stored at 72° F (+/-5° ) for no more than 6 months, to obtain maximum adhesion values. After use, the roll should be stored in its original packaging in the poly bag.

SEE PAGE 2 FOR FINISHING RECOMMENDATIONS

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For more information call 1-800-628-8604  
or visit our web site at [www.magicinkjet.com](http://www.magicinkjet.com)  
\*Most updated version of this guide can be obtained on our website.

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## DMCVLA3

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#### FINISHING RECOMMENDATIONS

##### Surface Preparation:

Always ensure that the receiving substrate is thoroughly cleaned, free of dust, dirt or cleaner residues. Metal and glass surfaces can be cleaned with standard glass cleaners. Poor surface conditions will cause adhesion loss or failure. For more detailed surface preparation information see the "Installation Guidelines for DMCVLA3" on our [magicinkjet.com](http://magicinkjet.com) website.

##### Recommended Application Surfaces:

Recommended surfaces include the following: Automotive panels, Imron paint, FR Plastic Panels, Fruehauf trailers, MD overlaminate, glass, enamel painted aluminum, acrylics and polycarbonates, painted aluminum, glass, fiberglass, ABS, polycarbonate and Plexiglas®. The product is not designed for use on wood, drywall, or all textured surfaces. Always pretest your specific substrate prior to actual application.

##### Application Paper (Premask):

The use of application paper will reduce the amount of stretching and will protect the surface of the graphic. Only low tack premask is recommended. Application paper applied directly onto the imaged surface of the vinyl may cause slight yellowing of the coating. American Biltrite Inc. paper TransferRite® cause the least amount of yellowing. 3M tapes have been found to increase the yellowing effect.

##### Installation Techniques:

Water should not be used to install the adhesive backed vinyl. Material should not be stretched during installation. For more complete application information see the "Installation Guidelines for DMCVLA3" on our [www.magicinkjet.com](http://www.magicinkjet.com) website.

##### Laminating:

A vinyl pressure-sensitive may be used. However, an overlaminate may cause the product to curl toward the laminated side and the edges to lift from the release liner and or the application surface. Liquid laminates may be used but always pretest the laminate prior to use. Consider using Clearstar Clearjet liquid laminate. (Clearstarcorp.com)

##### Edge Sealing:

Ink jet vinyl is susceptible to water wicking at the edges of the laminated graphic. To prevent water-inducing staining, use 3M Edge Sealer 3950 on all exposed edges to the graphic.

##### Alternatives to Edge Sealing:

- (1) Leave a one-half inch or greater white space border around the graphic
- (2) Overlap the laminate one-half inch or greater beyond the edge of the ink jet vinyl to seal the edges.
- (3) Apply liquid laminate around edges to serve as an alternative edge sealer. Clearstar products have been tested.