

www.Mactac.com

Version #8 (0217)
Approved by J. S.

Product

IMAGin® M Series EMP328

Product Description

EMP328 is a 3.2-mil **matte** white, soft-calendared PVC film designed for wide format ink jet printing. The product is coated on one side with a permanent, opaque, acrylic pressure sensitive adhesive and supplied with a 72# Polycoated layflat liner.

EMP328 is designed for indoor or medium term outdoor advertising and promotion on flat surfaces.

Physical Properties

Property	Typical Values	Test Method
Peel Adhesion 180° on Stainless Steel - 30 min. - 24 hr.	5.0 (19.75) 6.0 (26.25)	PSTC - 1
Quick Tack on SS lb. /in ² (N/25mm)	4.0 (17.5)	FTM - 9
Dimensional Stability (shrinkage) in Percent 48 hours @ 158°F (70°C)	max 1.0	FTM - 14 10" x10" Sample Bonded to aluminum
Temperature Ranges Minimum Application: End Use:	50°F (+10°C) -40°F to 180°F (-40°C to 82°C)	

Durability

The indoor durability of this film is 5 - 6 years and the outdoor durability of the unprinted film is 4 years. Over lamination of the inkjet-printed material with PERMACOLOR® overlaminates delays color fading that may occur over time. This color fading is mainly dependent upon the inks quality (see technical data sheets given by the ink manufacturers) and the pressure sensitive media being used.

Shelf Life

2 years from D.O.M. when stored at 60/77°F (15/25°C) and 50% relative humidity in the original package.

Approved Printing Processes:

Screen Printing:		HP Indigo	<input type="checkbox"/>
UV Cured	<input type="checkbox"/>	Off-set	<input type="checkbox"/>
Solvent	<input type="checkbox"/>	Off-set UV	<input type="checkbox"/>
Digital: UV Inkjet	<input checked="" type="checkbox"/>	Thermal Transfer	<input type="checkbox"/>
Eco-solvent	<input checked="" type="checkbox"/>	Flexographic *	<input type="checkbox"/>
True solvent	<input checked="" type="checkbox"/>	Laser	<input type="checkbox"/>
Latex	<input checked="" type="checkbox"/>	Jetrion	<input type="checkbox"/>

To achieve the best possible print quality, please make sure that the correct ICC profiles or printer settings are used. Profiles can be obtained from our Distributors or can be downloaded from www.mactac.com. Printer and heater settings and ICC profiles can also be downloaded from some O.E.M. or software manufacturer's websites.

The ICC profiles are provided solely as a customer resource. Print environments, the individual nature of printing systems, inks and software can significantly affect output. It is the customer's responsibility to determine the suitability of any profile for use in their specific print environment.

Chemical Resistance

The film was adhered to an aluminum substrate 24 hours prior to testing. Samples were immersed in each chemical and later observed for adhesion.

Chemical	Time Immersed	Observation
Water	24 hours	No Effect
5% Detergent	24 hours	No Effect
SAE 20 Motor Oil	24 hours	No Effect
10% Hydrochloric Acid	10 min.	No Effect
10% Ammonium Hydroxide	10 min.	No Effect
Unleaded Gas	1 hour	No Effect
Ethylene Glycol	24 hours	No Effect

Limitations

Due to the wide variability of interior walls, sealants and paints, no claims for successful applications to or removal from painted wall surfaces are made by Mactac. It is the users' responsibility to determine the products suitability for the intended wall.

- 1) The user is responsible for determining the product's suitability, including adhesion and if needed, removal characteristics when used in applications other than listed specifically in this Performance Guide.**
- 2) If there are any questions about applications, please contact your Mactac sales representative to discuss your requirements for recommendations.**
- 3) If this is a printed Performance Guide it is an uncontrolled document. Please check the Mactac website for the latest, most up-to-date version.**

Recommendations

Always test your combination of IMAGin M Series products, inks and laminating films prior to commercial use.

- 1) **Printing Conditions:** Print in conditioned pressroom at $\pm 73^{\circ}\text{F}$ (23°C) and 50% RH. The maximum allowable ink saturation is 270%.
- 2) **Drying Requirements:** Solvent, Eco-solvent and Mild-solvent inkjet prints require 24 - 48 hr. drying time - open to the air. Inks do not dry when printed media is rolled up. The prints must be dry prior to lamination.

Laminating Conditions: If the printed graphic is likely to be exposed to corrosive liquids, smoke or fumes and highly polluted areas and there is a likelihood of scratching, it is highly recommended you laminate with **Permacolor LUV®** or **PromoGard®** series overlaminating films. Please be aware that adding an overlamine will significantly reduce conformability to complex surfaces.

- 3) **Transportation Conditions:**

To allow for easy transportation, IMAGin M Series can be rolled up, with the image out, with a minimum diameter of 6 inches (15cm). When the image is not protected by an overlamine, make sure the print is completely dry and protected in a plastic bag. During transportation or storage, avoid exposing them to extreme temperature and humidity changes.

- *Values given are typical and are not necessarily for use in specification.*

CALL 1-800-321-8834 for additional product information

IMPORTANT NOTICE: The information given and the recommendations made herein are based on our research and are believed to be accurate, but no guarantee of their accuracy or completeness is made. In every case, user shall determine before using any product in full scale production, or in any way, whether such product is suitable for user's intended use for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or fitness for a particular purpose, or any other warranty, express or implied. No representative of ours has any authority to waive or change the foregoing provisions, and no statement or recommendation not contained herein shall have any force of effect unless in an agreement signed by the officers of seller and manufacturer. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent without authority from the owner of the patent. The following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

TM Trademark of Morgan Adhesives Company LLC
© Registered Trademark of Morgan Adhesives Company LLC
www.Mactac.com

