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Approved by J. S.



Product

REBEL RB599R

Product Description

RB599R is a 4-mil soft; **clear gloss**, polymeric stabilized PVC film designed for solvent-based ink jet printing and screen printing. The product is coated on one side with a clear removable, acrylic pressure sensitive adhesive and supplied with a 90# SuperFlat™, C2S polycoated liner that provides excellent lay flat. RB599R is designed medium to long-term outdoor advertising and promotion on flat or slightly curved surfaces.

Suggested uses include digitally produced or screen-printed labels, decals, markings, point-of-purchase displays and signs for indoor and outdoor use.

Physical Properties

Property	Typical Values	Test Method
Thickness, inches (µm)		
Face plus adhesive	0.0042 (106)	
Face, adhesive & liner	0.0120 (304)	
Quick Tack lb. /in² (N/25mm)		MACTac CTM-25
Stainless Steel	1.5 (6.5)	
Peel Adhesion lb./in. (N/25 mm)		PSTC-1
Stainless Steel		
- 30 min.	1.7 (7.5)	
- 24 hr.	2.2 (9.6)	
Dimensional Stability, inches (mm)		MACTac CTM-21 (Method D)
48 hours @ 158°F		Bonded to aluminum
MD	0.06 (1.5)	
CD	0.04 (1.02)	
Temperature Range		
Application:	32° to 150°F (0° to 65°C)	
End Use:	-40° to 200°F (-40° to 93°C)	

- Values given are typical for unprocessed product and are not for use as specifications. Processing may change the values.

Durability

The outdoor durability of the unprinted film is 5 years. RB599R has up to 2 year removability from most surfaces after application. Adhesion to high energy surfaces such as glass, acrylic glass and aluminum may result in some adhesive being left behind. This can be easily cleaned off with Isopropyl alcohol.

This use-life estimate is based upon accelerated age studies. Please note that exposure to severe temperatures, ultra-violet light and also in tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure.

Shelf Life

Two years when stored at 75°F (24°C) and 50% relative humidity or less.

Removability

This product has 2 year removability after application on many surfaces. The removability of RB599R may be affected by the following substrates: polystyrene, nitrocellulose painted surfaces and soft PVC. With such substrates an increase of adhesion over time may occur and adhesive residue on removal may be noticed.

Approved Print Materials

Screen Printing:

UV Cured	☒
Solvent	☒
WF Digital: UV Inkjet	☒
Eco-solvent	☒
True solvent	☒
Canon UVgel 356	☒
Latex	☒

HP Indigo	☐
Off-set	☐
UV Off-set	☒
Thermal Transfer	☒
Flexographic *	☐
UV Flexographic	☒
Narrow Web UV Inkjet	☒

* **Flexographic Printing** requires a topcoat. WVG000113 and WVF010516 have been approved by ACTEGA Coatings and Sealants (www.altana.com) as in-line coat-able ink primers.

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.

Recommendations

Always test your combination of REBEL 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.

- 3) **Laminating Conditions:** If the printed graphic is likely to be exposed to corrosive liquids, smoke, fumes, and highly polluted areas or there is a likelihood of scratching, it is highly recommended to laminate with **Permacolor PermaGard®** Series (high performance) or **ColorGard LUV** Series (intermediate) overlaminating films.
- 4) **Transportation Conditions:** To allow for easy transportation, REBEL 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 overlaminate, make sure the print is completely dry and protected in a plastic bag. During transportation or storage, avoid exposing them to extreme temperature.

Limitations

- 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**

FOR USE in flat to moderately curved surfaces on:

- a. Vending or dispensing machines and cooler graphics
- b. Indoor and outdoor graphics and signs
- c. Small format OEM decorative and identification graphics
- d. Windows – dry application only!

NOT RECOMMENDED:

- e. For use on corrugated or complex surfaces
- f. For use over rivets
- g. For use on flexible substrates (banners, canvas, etc.)
- h. For use on painted surfaces that are not thoroughly cured or properly bonded to the substrate.
- i. Wet application

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.

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