



GRUV Slideable

www.Mactac.com

Version #3 (0725)

Approved by NDG

Product

Imagin® GRUV™ Slideable Vehicle Wrap Film
GV1029S

Product Description

Gruv Slideable is a 2.0 mil gloss white cast PVC film designed for wide format printing and ease of use. The film is coated on one side with a Slideable and repositionable quick building, block out permanent, acrylic pressure sensitive adhesive with a micro channel air egress 90# polycoated liner.

GV1029S is a slideable and repositionable long-term outdoor cast adhesive vinyl that works with curved, complex and riveted surfaces. Applications include vehicle wraps, fleet graphics, bus wraps, long term outdoor signage and recreational vehicles. The micro channels imparted into the adhesive allow a bubble free installation without showing through the film. Use of Rayzor overlaminates, LF3648G for a gloss finish, or LF3638G with a matte finish, to extend the life of the graphic.

Physical Properties

Property	Typical Values	Test Method
Peel Adhesion, lb./in (N/25mm) 180° on glass - 15 min. - 24 hr.	3.0 (12.12) 3.5 (14.14)	FTM-1
Quick Tack, lb. /in² (N/25mm) Stainless Steel	2.0 (8.75)	FTM - 9
Dimensional Stability (inches) 48 hours @ 158°F	max 0.02	FTM - 14 10" x 10" Sample Bonded to aluminum
Temperature Ranges Minimum/Upper Application: End Use:	50°F (+10°C)/ 80°F (27°C) -5° to 250°F (-20° to 121°C)	
Tensile Strength (lbs./inch)	>2.2	ASTM D882
Elongation @ Break (%)	>180	ASTM D882
Flammability	Self-Extinguishing	Internal Testing
Water Immersion 100 hours immersed @ RT	no change	

Removability

Laminated Gruv Slideable, at a minimum of 50F air and substrate temperature, is cleanly removable for up to five years after application with high heat and/or chemicals. "Clean Removability" is defined as, when removed it will leave less than 20% of the adhesive on the substrate.

Some substrates are affected by the application of the GV1029S, such as acrylic, glass, stainless steel, polycarbonate, polystyrene, nitro-cellulose paints and plasticized PVC's. Besides damaging the substrate, subsequent removal could be difficult. Removal is not guaranteed from paint that is damaged or older than 5 years or from horizontal applications.

Approved Print Materials

Screen Printing:

UV Cured	<input checked="" type="checkbox"/>	Off-set	<input type="checkbox"/>
Solvent	<input type="checkbox"/>	UV Off-set	<input checked="" type="checkbox"/>
WF Digital: UV Inkjet	<input checked="" type="checkbox"/>	Thermal Transfer	<input checked="" type="checkbox"/>
Eco/Solvent	<input checked="" type="checkbox"/>	Flexographic *	<input type="checkbox"/>
Canon UVgel	<input checked="" type="checkbox"/>	UV Flexographic	<input type="checkbox"/>
Latex	<input checked="" type="checkbox"/>		

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

Durability

The outdoor durability of the unprinted film positioned vertically is up to 10 years. The location of the graphic and how the graphic is positioned could greatly reduce the durability because of extreme UV and outdoor exposure, which will affect the warranty.

Marine Graphics

Marine applications have different requirements and therefore different expectations. Graphics manufactured using Mactac's wrap vinyl products are warranted to maintain acceptable appearance for one year from date of application. Marine graphics applied under the water line are not warranted.

Mactac Open Image® Warranty

Mactac requires the registration of a completed and signed Inspection Report TA2108 for each vehicle wrap in the unlikely event of a future claim. This report identifies any potential problem areas and clearly defines the obligations between the applicator and the vehicle owner. A completed copy of the inspection report and the appropriate vehicle template must be on file at Mactac prior to application. The inspection report is available upon request by emailing mactagraphics@mactac.com. Registration acknowledges that your company has received the Application Guide TA2501 as well as reviewed the Open Image Warranty statement and agree to all the requirements and limitations outlined in the documents.

Shelf Life

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

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.

The media 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 Gruv Slideable, the inks, overlaminates and substrate prior to commercial use.

1. **Printing Conditions:** Print in environmentally controlled rooms at $\pm 73^{\circ}\text{F}$ (23°C) and 50% RH. The material needs to acclimate to the room 24 hours prior to use. The maximum allowable ink saturation is 270%.
2. **Printing with UV ink, both inkjet and Screen, will significantly reduce the elongation of this film and may result in cracking or lifting out of the deeper recesses and is not a warranty failure.**
3. **Drying Step:** It is **critical** the GVS1029S print is properly dried prior to laminating or application. We strongly recommend leaving the print *open to the air* (not rolled up in a tube) for a minimum of 24 hours prior to lamination or application. Residual solvents in the vinyl and adhesive will negatively affect the bubble free properties of the adhesive and can result in a significant build or loss in adhesion resulting in potential substrate or graphic failure and/or more residual adhesive being left behind upon removal. Additional hot air drying or IR drying will speed up the drying process and shorten the overall drying time.
4. **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® Rayzor™** overlaminating films.
5. **Not recommended surfaces include, but not limited to:** rubber and plastic, aged paint (chalking) and metals (corrosion or oxidation), improperly cured paint, surfaces with poor paint-to-surface adhesion, over existing graphics that must remain upon removal, oily surfaces, unpainted wood, etc.
6. **Transportation Conditions:** To allow for easy transportation, the GRUV 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 overlaminates, 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.

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