Technical Data Sheet



CastRAP 629 B-free

Long term fleet marking & car wrapping vinyl - full 3D wraps

→ Construction

FACE MATERIAL	50 μm white gloss, cast PVC
ADHESIVE	Permanent Grey Solvent-based
LINER	Highly stable 145 g/sqm white micro-embossed PE coated paper

Certified for HP Latex Inks

→ Advantages

- Optimum printing quality with a gloss white surface and opaque adhesive.
- Specially adapted for 3D surfaces (convex, concave, uneven or riveted and embossed).
- Easy and quick to apply thanks to the bubble-free adhesive technology.

→ Surface type compatibility

The product is developed for vehicle markings on flat, curved, embossed or riveted surfaces.

→ Applications

- CastRAP 629 B-free is ideal for long durability, promotional applications.
- CastRAP 629 B-free is recommended for partial and total car wrapping.

Printing

This product is especially designed for eco-solvent and Latex inkjet printing on wide-format printing equipment. UV printing is also possible as long the selected inks are flexible enough for the expected deformation.

If printed on UV, please adapt your print speed and curing settings. Please refer to the printer manufacturer settings for thin, soft media.

To achieve the best possible print quality, please make sure that the correct ICC profiles and printer settings are used. Profiles can be obtained from our Subsidiaries, Distributors or can be downloaded from www.mactac.eu.

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.

<u>Print room conditions</u>: Print in conditioned pressroom at \pm 23 °C (73 °F) and 50% RH. The maximum allowable ink saturation is 270%.

Note: for the best results during application, it is very important that the print is totally dry. The solvent presence softens the film and makes it more stretchable. An improperly dried print will reduce the adhesive performance and increase the risk of edge lifting, excessive shrinkage, delamination and excessive

adhesive transfer. We recommend placing the printed graphic into an additional drying unit for at least 24h (preferably at 30°C). If no additional drying unit is available, we recommend a longer drying time of 36 – 48h with the print laid out on a flat surface or hung to dry with enough space to allow good air flow over the surface of the film. Keeping the graphic tightly rolled up will not allow the solvents to evaporate.

If the film is not dried sufficiently the vinyl and adhesive will still be full of solvents which change the properties and consequently the behavior of the film. The customer will therefore not benefit from the bubble free effect enough to reduce application time. It can also cause adhesive residue to be left behind and lack of repositionability.

→ Lamination

If the printed graphic is likely to be exposed to corrosive liquids, smoke, fumes, highly polluted areas or if there is a likelihood of scratching or friction or to ensure longer durability, it is strongly recommended to laminate the prints with pressure-sensitive protective film CastLAM Gloss, CastLAM Matt or Permacolor HORIZon™.

The protective lamination process needs to be carried out after the print is totally dry – please see the note above in the printing paragraph.

Mactac denies responsibility for product failure if non-Mactac laminating films are used for the application.

Application Method

CastRAP 629 B-free must be applied following the general self adhesive application guidelines and the Technical Bulletin 4.17, both available on our website, www.mactac.eu, section Customer Support.

The wet method for application is not recommended.

Limitations: Due to the wide variability of substrates, sealants and paints, no claims for unsuccessful applications onto or removal are accepted by Mactac. It is the users' responsibility to determine, by prior testing, the products suitability for the intended surface.

→ Expected Durability

The expected vertical outdoor durability of the unprocessed product in Central Europe (Zone 1) is: **up** to 10 years.

This information is based on successful real life experience and artificial aging according to ISO 4892-2.

Note: Overlamination of the inkjet printed material delays eventual color fading that may occur upon time. This color fading is dependent from the quality of the inkjet inks, the orientation of the printed material, the angle of display and the exact location of exposure on the Globe.

Exposure to severe temperatures, ultra-violet light as well as conditions in Southern European countries, tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure.

No durability warranty is given for horizontal exposure. For more information, please refer to Technical Bulletin 7.5: "Outdoor Durability of combined MACtac print media and laminates".

→ Shelf Life

2 years when stored at 15 to 25 °C and \pm 50 % relative humidity (in the original packaging).

→ Physical Properties	TYPICAL VALUES	TEST METHOD
Adhesive data, 23 ℃		
Quick Tack on Glass (N/25 mm)	18	FTM 9
Peel 24h on Glass (N/25 mm)	17.5	FTM 1
Dimensional stability		
shrinkage: 48 hours at 70 °C	Max 0.3 mm	FTM 14
(applied on aluminum)		
Temperature ranges		
Minimum application temperature:	+ 10℃	
Service temperature range	-20℃ to + 70℃	
Flammability	Self-extinguishing	Mactac Test Method
Applied on aluminum plates		

→ Transport

To allow easy transportation, **CastRAP 629 B-free** can be rolled up, with the image on the outside, with a minimum diameter of 15 cm (for example on a 6 inches' core). Make sure the print is completely dry and protected in a plastic bag. During transportation or storage, avoid exposing the print to extreme temperature and humidity changes.

→ General Remark: factors affecting adhesion

To ensure application suitability - always test the proposed construction under actual application and end-use conditions before going into full production. The removability of **CastRAP 629 B-free** may be

The removability of **CastRAP 629 B-free** 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.

The following factors can change the adhesion of the self-adhesive product

- Dust, dirt, grease, oxidation
- Low tension surfaces like polyethylene, polypropylene, etc.
- Application below the minimum application temperature or use outside of the recommended service temperature ranges must be avoided.

IMPORTANT NOTICE

All Mactac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning Mactac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.

Because of the variety of uses of Mactac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.

TECHNICAL SUPPORT



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