Technical Data Sheet



MacPoly 900 series

Polymeric self-adhesive vinyl for solvent, eco-solvent, latex and UV printing

→ Construction

FACE MATERIAL	65 μm polymeric stabilized, soft calendered PVC film		
	■ White Matt MacPoly 928 P GREY		
	 White Gloss MacPoly 929 P, MacPoly 929 P GREY 		
	● Clear Gloss MacPoly 999 R		
ADHESIVE	Clear solvent acrylic - Permanent: MacPoly 929 P		
	Grey solvent acrylic - Permanent: MacPoly 928 – 929 P GREY		
	Clear solvent acrylic - Removable: MacPoly 999 R		
LINER	Coated Kraft liner 140 g/sgm		

→ Advantages

- Good printing quality with Solvent, Eco-solvent, Latex and UV curable inks.
- Very good opacity for the MacPoly 900 GREY series.
- Highly flexible film for perfect conformability to convex surfaces (2D).

→ Surface type compatibility

The product is developed for flat or slightly curved surface applications.

→ Applications

The **MacPoly 900 series** media are specially designed for long-term indoor and outdoor applications (up to 5 years) on flat and curved surfaces (2D).

Printing

This product is designed for solvent, eco-solvent, Latex and UV inkjet printing on wide-format printing equipment.

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%.

<u>Note:</u> for the best results during lamination and 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.

→ Application Method

MacPoly 900 series must be applied following the general self adhesive application guidelines that can be found on our website, www.mactac.eu, section Customer Support.

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 5 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".

→ Physical Properties	TYPICAL VALUES MacPoly 929 P	TYPICAL VALUES MacPoly 928 P GREY MacPoly 929 P GREY	TYPICAL VALUES MacPoly 999 R	TEST METHOD
Adhesive data, 23 ℃				
Quick Tack on Glass (N/25 mm)	15	12	6	FTM 9
Peel 24h on Glass (N/25 mm)	17	15	4	FTM 1
Dimensional stability shrinkage: 48 hours at 70 ℃ (applied on aluminum)	Max 0.5mm	Max 0.5mm	Max 0.5mm	FTM 14
Temperature ranges Minimum application				
temperature:	+ 10℃	+ 10℃	+ 10℃	
Service temperature range	- 20℃ to + 70℃	- 20℃ to + 70℃	- 20℃ to + 70℃	
Flammability	Self-extinguishing	Self-extinguishing	Self-extinguishing	Mactac Test Method

→ Shelf Life

2 years when stored at 15 to $25 \,^{\circ}$ C and $\pm 50 \,^{\circ}$ 6 relative humidity (in the original packaging).

→ Lamination

If the printed graphics 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 films PolyCover 999 (gloss) or 998 (matt). 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.

→ Transport

To allow easy transportation, **MacPoly 900 series** 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 **MacPoly 900** series 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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