

MACal® 9800 PRO

PRODUCT DESCRIPTION

MACal 9800 PRO is a premium polymeric stabilised calendered soft vinyl film coated with either a durable permanent adhesive, bubble-free adhesive or high tack adhesive.

MACal 9800 PRO is designed for trouble-free computer cutting and fast weeding, even for small letters and fine lines.

Face material:

Polymeric stabilized calendered vinyl, 66 µm thick, cadmium-free.

Adhesive:

Standard - Clear solvent-based permanent acrylic adhesive.

Bubble-Free - Clear solvent-based micro-structured permanent acrylic adhesive.

High Tack - Clear solvent-based high tack permanent acrylic adhesive.

Liner:

Highly stable 135 gsm (Bubble-Free is 145gsm) white kraft paper with blue backprinting.

For white vinyls the liner is coated with a blue silicone coating to improve the contrast with the film colour. This added contrast ensures a clear view during the weeding process therefore improving productivity.

TYPICAL USE

MACal 9800 PRO is designed for long term interior and exterior marking applications (vehicle marking, window graphics, general signage), and provides ideal conformability over simple contours. MACal 9800 Bubble Free PRO adhesive allows faster and trouble-free application onto substrates. MACal 9800 High Tack PRO provides greater adhesion to non-smooth or slightly porous surfaces like matt painted walls, MDF etc.

PROCESSING

Clean, quick, trouble-free cutting with most plotters. Adjustment of the cutting depth is important: if the cut is too deep this could result in the paper splitting and coming away with the adhesive when the vinyl is transferred to Application Tape.

The transfer of the cut vinyl onto the Application Tape should always be performed by removing the liner from the pressure-sensitive material (i.e. with the PVC face downwards onto the working surface) and not by lifting off the Application Tape. For gloss finish films we recommend medium to standard and for matte finish films we recommend Hi Tack Application Tape. MACal 9800 PRO can be applied with the dry application method on slightly curved surfaces. Excluding bubble free adhesives, on flat surfaces the wet application method can be used.

All surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination.

The compatibility of paints and lacquers should be tested by the end-user, prior to use.

Where exposure to chemicals and solvent spillage is likely to occur, edge sealing of decals with edge sealer will prevent edge lift.

SHELF LIFE

2 years when stored at 15 to 25°C and 50 % relative humidity.

APPLICATION METHOD

MACal 9800 PRO, Bubble Free and High Tack must be applied following the instructions in the Signage Films section of the Technical Bulletins page called "Marking films: application guide", available from the resource section at: www.mactacgraphics.eu

To ensure application suitability, always test the proposed construction under actual application and end-use conditions before going into full production.

PHYSICAL PROPERTIES (TYPICAL VALUES)

Thickness (mm)

Film + Adhesive	0.095 (0.100 for SL)	ISO 534
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Face Material Data, 23°C

Tensile Strength	> 23 N/15mm	DIN ISO 527-3
Elongation at break	≥ 150 %	DIN ISO 527-3

Adhesive data, 23°C (N/25 mm), brushed stainless steel

MACal 9800 PRO	Average values	Test method
Peel 20 min	16	FTM 1
Peel 24 hours	18	FTM 1
Peel 1 week	20	FTM 1

MACal 9800 BF PRO	Average values	Test method
Peel 20 min	14	FTM 1
Peel 24 hours	16	FTM 1
Peel 1 week	18	FTM 1

MACal 9800 HT PRO	Average values	Test method
Peel 20 min	19	FTM 1
Peel 24 hours	23	FTM 1
Peel 1 week	26	FTM 1

Dimensional stability

Shrinkage (1 week at 70°C)	< 0.2 mm (High Tack< 0.5 mm)
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Temperature ranges

Minimum application temperature	+ 8°C to + 40°C
Service temperature range	- 40°C to + 90°C

Flammability

Applied to aluminium	Self-extinguishing	ISO 3795
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Solvent and chemical resistance

Resistant to most oils and grease, fuel, aliphatic solvents, weak acids, salts and alkalis.

EXPECTED DURABILITY*

Central Europe Zone 1

Black and White	8 years	ISO 4892-2.
Colours	7 years	ISO 4892-2.
Metallics	5 Years	ISO 4892-2.

*For more information, refer to "Mactac Warranty Bulletin - Expected Durability of Mactac Graphics Films".

Note: Exposure to severe temperatures, ultraviolet light, and/or conditions in Southern European countries, tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitudes and south-facing exposure. No durability warranty is given for horizontal exposure.

DISCLAIMER

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