

## MACal® 9800 CAST, 9800 BF CAST and 9800 HT CAST

### PRODUCT DESCRIPTION

MACal 9800 CAST is a cast vinyl film coated with a durable permanent adhesive giving excellent dimensional stability.

MACal 9800 CAST is designed for computer cutting and fast weeding, even for small letters and fine lines.

#### Face material:

Cast vinyl, 66 µm thick, cadmium-free.

#### Adhesive:

Clear solvent-based permanent acrylic adhesive.

Bubble-Free (BF)- Clear solvent-based micro-structured high tack permanent acrylic adhesive.

High Tack Bubble Free (HT) - Clear solvent-based high tack permanent acrylic adhesive.

#### Liner:

Highly stable 135 gsm white kraft paper with grey 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 CAST is designed for long term interior and exterior marking applications (vehicle marking, window graphics, general signage).

MACal 9800 CAST provides ideal conformability over flat to curved surfaces with rivets and simple corrugations.

MACal 9800 Bubble Free CAST adhesive allows faster and trouble-free application onto substrates.

MACal 9800 High Tack CAST provides great 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.

For matt products: we recommend the use of a high tack application tape in order to ensure a good transfer of all letters. 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.

MACal 9800 CAST can be applied with the dry application method on curved surfaces. Excluding bubble free adhesives, on flat surfaces the wet application method can be used.

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 CAST 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](http://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	ISO 534
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#### Face Material Data, 23°C

Tensile Strength	> 27 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 CAST	Average values	Test method
Peel 20 min	16	FTM 1
Peel 24 hours	18	FTM 1
Peel 1 week	20	FTM 1

MACal 9800 HT CAST	Average values	Test method
Peel 20 min	19	FTM 1
Peel 24 hours	25	FTM 1
Peel 1 week	27	FTM 1

MACal 9800 BF HT CAST	Average values	Test method
Peel 20 min on Brushed Stainless Steel	14	FTM 1
Peel 24 hours on Brushed Stainless Steel	16	FTM 1
Peel 1 week on Brushed Stainless Steel	20	FTM 1

#### Dimensional stability

Shrinkage (1 week at 70°C)	< 0.2 to 0.7mm	FTM 14
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#### Temperature ranges

Minimum/maximum 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	10 years	ISO 4892-2.
Colours	8 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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