

## MACal® 9800 CAST

### PRODUCT DESCRIPTION

MACal 9800 CAST Series are high performance cast vinyl films coated with a durable permanent adhesive giving excellent dimensional stability.

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

**Face Material:** Cast vinyl, 66 µm thick, cadmium-free. MACal 9800 CAST SL have a white tie-coated face at the back.

### Adhesive:

- MACal 9800 CAST: High quality clear solvent based permanent acrylic adhesive.
- MACal 9800 CAST HT: Clear solvent based high tack
- MACal 9800 CAST BF: Clear solvent based micro-structured permanent acrylic adhesive.

### Liner:

- MACal 9800 CAST and MACal 9800 CAST HT: highly stable 135 g/m<sup>2</sup> white kraft paper with Mactac backprinting.
- MACal 9800 CAST BF: highly stable 145 g/m<sup>2</sup> white kraft paper with Mactac grey backprinting.

For white vinyls the liner of Macal 9800 Cast and HT is coated with a blue silicone coating to improve the contrast with the film colour.

NB : CONTRAST ensures a clear view during the stripping process therefore improving productivity.

### TYPICAL USE

MACal 9800 CAST Series is designed for long term interior and exterior marking applications (vehicle marking, windowgraphics, signs...).MACal 9800 CAST Series provides ideal conformability over flat to curved surfaces with rivets and simple corrugations. MACal 9800 CAST SL are intense, vibrant colours for eye-catching markings.

### COLOR MATCHING

Customer colour matching service is provided by Mactac. This colour matches can be requested from a minimum quantity of 10 rolls (500 lm).

### PROCESSING

#### Computer cutting

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.

MACal 9868-100 Cast Silver requires special attention when converting, small letters (<2cm) are not recommended.

#### Application

For matt products: we recommend the use of a high tack application tape in order to ensure a good transfer of all letters (for example MACTransfer 100 High grade). 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. On flat surfaces the dry or the wet application method is suitable.

#### Edge sealing

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

#### Important remark

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.

#### SHELF LIFE

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

## PHYSICAL PROPERTIES (TYPICAL VALUES)

### Average Values Test Method

Thickness		
Film + adhesive (µm)	Cast - 66 Cast SL - 100 Cast HT - 106	ISO 534
Face Material data, 23°C		
Tensile Strength (N/15mm)	> 24	DIN ISO 527-3
Elongation at Break (%)	> 150	DIN ISO 527-3
Excluding Metallic colours and colour matching		

Adhesive data, 23°C (N/25 mm)				
Peel adhesion 180° on mirror stainless steel				
	Cast	HT	BF	
- 20 min. residence	11	19	11	FTM1
- 24 hours residence	13	25	16	FTM1
- 1 week residence	13	27	18	FTM1
Dimensional stability				
Shrinkage (1 week at 70°C applied on Aluminium)				
MACal 9800 Cast	Max. 0.2mm			FTM14
MACal 9800 Cast SL	Max. 0.2mm			FTM14
MACal 9800 Cast HT	Max. 0.5mm			FTM14
MACal 9800 Cast BF	Max. 0.2mm			FTM14
Temperature ranges				
Minimum application temperature (°C)				+8 °C
Application temperature range (°C)				-40 °C to +90 °C
Flammability				
Sample mounted on aluminium		B-s1,d0		EN 13501-1
Solvent and chemical resistance				
Resistance to most:				oils and grease, fuel, aliphatic solvents, weak acids, salts and alkalis

## EXPECTED DURABILITY

Central Europe (Zone 1)

Black & white	10 years	ISO 4892-2
Colours	8 years	ISO 4892-2

Metallics	5 years	ISO 4892-2
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*Note : Exposure to severe temperatures and ultraviolet light, as well as conditions in southern European countries, and also in tropical, sub-tropical or desert regions, will cause a more rapid deterioration. This also applies to polluted areas, high altitude, horizontal and south-facing exposure.*

### DISCLAIMER

For more information on the durability and exposure please visit the "Mactac Technical Bulletin TB 7.5 Outdoor Durability of Mactac Graphics - Self-adhesive films" on the [www.https://www.mactacgraphics.eu](https://www.mactacgraphics.eu) website.

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