

# MACal® 9800 CAST

## Technical Data Sheet

### PRODUCT DESCRIPTION

MACal 9800 CAST are polymeric stabilized cast vinyl films 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.

### CONSTRUCTION

#### **Face material :**

Polymeric stabilized cast vinyl, 66 µm thick, cadmium-free. MACal 9800 CAST SL have a white tie-coated face at the back.

#### **Adhesive :**

Clear solvent based permanent acrylic adhesive.

#### **Liner :**

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.

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

### TYPICAL USES

MACal 9800 CAST is designed for long term interior and exterior marking applications (vehicle marking, window graphics, signs...).

MACal 9800 CAST 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.

### EXPECTED DURABILITY

The expected vertical outdoor durability of the unprocessed product in central Europe (Zone 1) is up to:

10 years : white and black.

Up to 8 years : colours.

5 years : metallics.

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

**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.

### SHELF LIFE

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

### PHYSICAL PROPERTIES (Typical values)

**Thickness** (mm) (Film + adhesive) ISO 534  
0.095 (0.100 for 9800 SL)

**Face Material Data, 23°C** DIN ISO 527-3

Tensile strength : ≥ 24 N/15mm

Elongation at break : ≥ 150 %

**Adhesive Data, 23°C** FTM 1

Peel adhesion 180° on brushed stainless steel (N/25mm)

- 20 min. residence : 16

- 24 hours residence: 18

- 1 week residence: 20

Peel adhesion 180° on mirror stainless steel (N/25mm)

- 20 min. residence : 11

- 1 week residence : 13

**Dimensional stability** FTM 14

Shrinkage (1 week at 70°C) : < 0.2 mm

(< 0.5mm for 9800 PRO SL)

#### **Temperature ranges :**

Application : + 8°C to + 40°C

End-use : - 40°C to + 90°C

**Flammability** ISO 3795

Sample mounted on aluminium : self-extinguishing.

#### **Solvent and chemical resistance**

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

### 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.

#### **Application**

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. On flat surfaces the dry or the wet application method is suitable.

#### **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.

**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 NOTICE**  
**DISCLAIMER**

MACal 9800 CAST range is available only in the following countries: Germany, Austria, Switzerland, Belgium, Holland, Luxemburg.

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