

# **MACal® 8900 PRO**

## *Technical Data Sheet*

### **PRODUCT DESCRIPTION**

MACal 8900 PRO are calendered soft vinyl films coated with a semi-permanent acrylic adhesive giving excellent dimensional stability.

MACal 8900 PRO have been specially developed for trouble-free computer cutting and fast weeding, even for small letters and fine lines.

Furthermore, if required, these films can be removed from the substrate, without leaving adhesive residue, for periods of up to 2 years after application.

### **CONSTRUCTION**

#### **Face material :**

Calendered vinyl film, 70 µm thick, cadmium-free.

#### **Adhesive :**

Semi-permanent solvent based acrylic adhesive.

#### **Liner :**

Highly stable 135 gsm white kraft paper with green backprinting.

For white vinyls the liner is coated with a grey 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 8900 PRO is a medium term marking film designed for outdoor applications (vehicle marking, window graphics, signs...) and for indoor applications (exhibition stands).

Application is possible at temperatures down to 0°C.

### **EXPECTED DURABILITY**

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

4 years : black and white.

3 years : all colours.

This information is based on successful real life experience and artificial aging according to ISO4892-3.

**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  
0.090

**Face Material Data, 23°C** DIN 53455-5

Tensile strength : > 25 N/15mm

Elongation at break : > 150 %

**Adhesive Data, 23°C** FTM 1

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

- 20 min. residence: 4.0

- 24 hours residence: 5.5

- 1 week residence: 7.5

**Dimensional stability** FTM 14

Shrinkage (48 hours at 70°C) : < 0.1 %

(25 cm x 25 cm, sample mounted on aluminium)

#### **Temperature ranges :**

Application : + 0°C to + 40°C

End-use : - 40°C to + 70°C

**Flammability** ISO 3795

Sample mounted on aluminium : self-extinguishing.

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

Water, water and detergent, alcohol : unaffected.

Oil, gasoline, gasoline-oil : affected (lifting around edges).

### **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**

The transfer of the cut vinyl onto the Application Tape should always be performed by removing the liner from the pressure-sensitive material and not by lifting off the Application Tape.

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

Note also that the wet application method is not recommended.

#### **Cleaning**

It is strongly recommended not to wash the decorated surfaces within 48 hours after the application.

#### **Important remark**

Some adverse reactions can occur when applying MACal 8900 PRO to certain substrates, for example: acrylics, polycarbonate, polystyrene, plasticized PVC, certain paints and lacquers. These reactions could take the form of cracks, swelling, ghosting and variance in adhesion performance. Therefore, as with any critical application, it is recommended to carry out suitability tests.

**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.*