

# **MACal® 8300 PRO**

## *Technical Data Sheet*

### **PRODUCT DESCRIPTION**

MACal 8300 PRO are calendered soft vinyl films coated with a permanent acrylic adhesive.

MACal 8300 PRO is designed for trouble-free computer cutting and fast weeding, even for small letters and fine lines.

### **CONSTRUCTION**

#### **Face material :**

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

#### **Adhesive :**

Permanent acrylic adhesive.

#### **Liner :**

Highly stable 135 gsm white kraft paper with orange 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 8300 PRO is a medium term marking film designed for indoor (exhibition stands) or outdoor applications (vehicle marking, window graphics, signs...).

### **DURABILITY**

5 years : black and white.

4 years : all colours.

These use-life estimates are based upon accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in "normal" temperate climates.

**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

**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: 14

- 24 hours residence: 18

- 1 week residence: 19

#### **Dimensional stability**

FTM 14

Shrinkage (48 hours at 70°C): < 0.3 %

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

#### **Temperature ranges :**

Application : + 10°C to + 40°C

End-use : - 40°C to + 70°C

N.B. : for lower temperatures, please consult us.

#### **Flammability**

ISO 3795

Sample mounted on aluminium : self-extinguishing.

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

Water, water and detergent, alcohols : 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.

#### **Weeding**

Easy and fast weeding even for small letters and fine lines.

#### **Application**

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 8300 PRO can be applied with the dry application method on slightly 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 and varnishing**

Where exposure to chemicals and solvent spillage is likely to occur, edge sealing of decals with a varnish will prevent edge lift. Correct varnishing of decals gives greater protection, and extends the use-life against prolonged effects of weathering, abrasion and other effects such as frequent cleanings.

## **IMPORTANT NOTICE**

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