

MACal® 9700 PRO

PRODUCT DESCRIPTION

MACal 9700 Pro is translucent when backlit, and opaque when not illuminated, and is manufactured in such a way to show uniform colour reproduction.

MACal 9700 Pro is coated with a long-life durable, highly cohesive acrylic pressure-sensitive adhesive, and protected with a high quality siliconized kraft paper liner.

Face Material: 80 µm matt translucent polymeric stabilized vinyl film, cadmium-free.

Adhesive: High quality acrylic adhesive, very cohesive and extremely durable.

Liner: Highly stable 135 gsm white kraft paper with a grey backprinting.

TYPICAL USE

Decoration and identification of internally illuminated signs made from glass, acrylic, stretched plasticized fabric, etc. Be aware that due to the characteristics of the black film, the light transmission is less than on other colours.

Suitable for outdoor and indoor applications.

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 method

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.

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.

Care should be taken when selecting a substrate for use in illuminated devices with self-adhesive materials. Some substrates, e.g. polycarbonate, can cause problems because of "bubbling".

It is therefore recommended that trials be conducted to establish the compatibility of the MACal 9700 PRO with the application surface.

SHELF LIFE

2 years when stored at 15 to 25°C and ± 50 % relative humidity (in the original packaging).

PHYSICAL PROPERTIES (TYPICAL VALUES)

Average Values Test Method

Thickness		
Film + Adhesive (µm)	115	ISO 534
Face Material data, 23°C		
Tensile Strength (N/15mm)	>28	DIN ISO 527-3
Elongation at Break (%)	>150	DIN ISO 527-3
Adhesive data, 23°C (N/25 mm)		
Peel adhesion 180° on stainless steel		
- 20 min. residence	14	FTM1
- 24 hour residence	17	FTM1
- 1 week residence	20	FTM1
Dimensional stability		
Shrinkage (1 week at 70°C applied on Aluminium)	Max. 0.3 mm	FTM14
Temperature ranges		
Minimum application temperature (°C)	10°C	
Service temperature range (°C)	- 40°C to + 90°C	
Flammability		
Sample mounted on aluminium	B-s1,d0	EN 13501-1

EXPECTED DURABILITY

Central Europe Zone 1

Black & white	7 years	ISO 4892-2
Colours	5 years	ISO 4892-2

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

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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