MACal® 9700 PRO

Technical Data Sheet

PRODUCT DESCRIPTION

MACal 9700 Pro is translucent when backlit, and opaque when not illuminated, and is manufactured in such a way to guarantee 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.

CONSTRUCTION

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

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

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

TYPICAL USES

Decoration and identification of internally illuminated signs made from glass, acrylic, stretched plasticized fabric, etc.
Suitable for outdoor and indoor applications.

EXPECTED DURABILITY

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

5-7 years

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

Note : Exposure to severe temperatures, ultraviolet light or conditions in southern European countries, as well as 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
0.115

Face Material Data, 23°C DIN ISO 527-3
Tensile strength : > 28 N/15mm
Elongation at break : > 150 %

Adhesive Data, 23°C FTM 1
Peel adhesion 180° on stainless steel (N/25 mm)
- 20 min. residence : 20
- 24 hours residence: 22
- 1 week residence: 24

Dimensional stability FTM 14
Shrinkage (48 hours at 70°C) : < 0.3mm

Temperature ranges :
Application : + 10°C to + 40°C
End-use : - 40°C to + 90°C
N.B. : for lower temperatures, please consult us.

Flammability ISO 3795
Sample mounted on aluminium : self-extinguishing.

Solvent and chemical resistance
Resistant to most oils and greases, fuel, aliphatic solvents, weak acids, salts and alkalis.

Important notice
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.

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 (i.e. with the PVC face downwards onto the working surface) and not by lifting off the Application Tape.

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.
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