

MACal® 9800 P

Technical Data Sheet

PRODUCT DESCRIPTION

MACal 9800 P are polymeric stabilized calendered soft vinyl films that are coated with a durable, high performance acrylic based pressure-sensitive adhesive. The adhesive is protected with a 135 gsm bleached kraft liner.

CONSTRUCTION

Face material :

Stabilized calendered vinyl film; 0.080 mm thick.

Adhesive :

Durable transparent acrylic pressure-sensitive.

Liner :

Highly stable 135 gsm bleached kraft paper.

TYPICAL USES

MACal 9800 P series is designed for permanent interior and exterior marking applications which have a long term life requirement.

These films offer good conformability to simple contours and flat-surfaces, and are ideally suited for containers, vehicles, caravans markings, etc.

MACal 9800 P is generally converted into printed decals but also in cut and spaced texts and logo's.

DURABILITY

Unprinted film

White and black : 7 years

Transparent : 5 years

Printed film

Satisfactory performance for up to 7 years can be obtained with some screen inks and varnishes. However, assurance of ink performance in all cases should be first obtained from the ink supplier.

These end-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 humidity 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 \pm 50 % relative humidity.

PHYSICAL PROPERTIES (Typical values)

Thickness mm (Film + adhesive) ISO 534
0.110

Face Material Data, 23°C DIN 53455-5

Tensile strength : > 27 N/15mm

Elongation at break : > 150 %

Adhesive Data, 23°C FTM 1

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

- 30 min. residence: 16

- 24 hours residence: 19

- 1 week residence: 20

Dimensional stability FTM 14

% Shrinkage (48 hours at 70°C) : < 0.2

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

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.

Chemical resistance : A sample is prepared by adhering the film to a metal substrate 24 hours before the test. It is then submitted, either to a projection test or a total immersion in chemical or solvents solutions. After a fixed period of time has elapsed, the sample is removed, dried and examined for adhesion.

Petrol resistance : A sample is prepared in the same manner as for the chemical resistance test and is sprayed several times with petrol, followed by drying at each stage.

Fuel under test

- Petrol - low octane : good

- Petrol - high octane : good

PROCESSING

Printing

During printing, it is important to carefully dry the inks : retained solvents could lead to plasticization with subsequent application troubles and poor weathering properties.

We recommend to maintain an unprinted area of 3-4 mm on the edges of the printed decal.

Application

Application of MACal 9800 P Series is made easier if a MACtransfer Application Tape is used.

Edge sealing and varnishing

Where exposure to chemical 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 hence longer end-use life, against any prolonged effect of weathering, abrasion and other erosive effects such as frequent cleanings.

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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