

MACal® 9800-00 P series

PRODUCT DESCRIPTION

MACal 9800-00 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.

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 USE

MACal 9800-00 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.

PROCESSING

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.

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.

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.

SHELF LIFE

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

APPLICATION METHOD

Application of MACal 9800-00 P Series is made easier if a MACtransfer Application Tape is used.

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 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.

SOLVENT AND 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

PHYSICAL PROPERTIES (TYPICAL VALUES)

Face Material Data, 23°C	Average values	Test method
Tensile strength (N/15mm)	> 27	DIN ISO 527-3
Elongation at break (%)	> 150	

Thickness

Face film + adhesive (µm)	110	ISO 534
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Adhesive data, 23°C (N/25 mm)

Peel on mirror Stainless Steel		FTM 1
20 minutes	11	
24 hours	12	
1 week	13	

Dimensional stability

Shrinkage (48 hrs at 70°C applied on aluminium)	Max. 0.3 mm	FTM 14
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Flammability

Sample mounted on aluminium	Self extinguishing	ISO 3795
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Temperature ranges

Minimum application temperature	+10°C
Service temperature range of use	- 40°C to + 90°C

EXPECTED DURABILITY*

Central Europe Zone 1 - unprocessed product

Black & white	7	ISO 4892-2.
Transparent	5	

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.

Important notice Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

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