

MACal® MACcrystal 8400

PRODUCT DESCRIPTION

MACcrystal 8400 is a glossy transparent coloured film used in the manufacture of illuminated signs made from opaline acrylic sheets and for windows decoration.

MACcrystal 8400 is manufactured in such a way to show uniform colour reproduction, and is coated with a long-life durable, highly cohesive acrylic pressure sensitive adhesive, which is protected with a high quality siliconized kraft paper liner.

Face material:

Glossy transparent coloured vinyl film, 80 µm thick, cadmium-free.

Adhesive:

Acrylic based pressure-sensitive, very cohesive and highly durable.

Liner:

Highly stable 140 gsm bleached kraft paper with blue backprinting.

TYPICAL USE

MACcrystal 8400 can be used for windows graphics and for illuminated signs. 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.

SHELF LIFE

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

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.

We recommend the wet application method on flat surfaces.

IMPORTANT REMARK

All surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination.

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 MACcrystal 8400 with the application substrate.

PHYSICAL PROPERTIES (TYPICAL VALUES)

Face Material Data, 23°C	Average values	Test method
Tensile strength (N/15mm)	>30	DIN ISO 527-3
Elongation at break (%)	>150	

Thickness

Face film + adhesive (µm)	105	ISO 534
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Adhesive data, 23°C (N/25 mm)

Peel on mirror Stainless Steel	20 minutes	14	FTM 1
	24 hours	18	
	1 week	20	

Dimensional stability

Shrinkage (1 week 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 + 70°C

EXPECTED DURABILITY

Central Europe Zone 1

Unprocessed	3 years	ISO 4892-2
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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.

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