## **MACmark**<sup>®</sup>



FTM 1

# MACal® 1069 & 1079-01

#### Technical Data Sheet

#### PRODUCT DESCRIPTION

MACal 1069 & 1079-01 are mirror like metallized PET films laminated on a 90 $\mu$ m transparent PVC film and coated with a permanent acrylic adhesive giving excellent dimensional stability.

MACal 1069 & 1079-01 are designed for trouble-free computer cutting and fast weeding, even for small letters and fine lines.

## CONSTRUCTION

#### Face material:

Double layer film made of metallized PET on a monomeric stabilized calendered vinyl, 90  $\mu$ m thick, cadmium-free. MACal 1069 is a silver/silver mirror film.

MACal 1079-01 is a gold/gold mirror film.

#### Adhesive :

High quality clear solvent based permanent acrylic adhesive.

#### Liner :

Highly stable 135 gsm white kraft paper with grey back-printing.

#### TYPICAL USES

MACal 1069 & 1079-01 are designed for medium term interior and short term exterior marking applications (window graphics, signs, flat vehicle surfaces...).

MACal 1069 & 1079-01 provide nice mirror like finish on both sides of the product for eye-catching markings on flat surfaces only.

#### EXPECTED DURABILITY

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

- 3 years indoor
- 3 months outdoor

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

**Note:** Exposure to severe temperatures 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

0.125

Face Material Data, 23°C DIN 53455-5

Tensile strength :  $\geq 50 \text{ N/15mm}$ Elongation at break :  $\geq 80 \%$ 

Adhesive Data, 23°C

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

- 20 min. residence: 16- 24 hours residence: 19- 1 week residence: 20

**Dimensional stability** FTM 14

Shrinkage (48 hours at  $70^{\circ}$ C): < 0.5mm

**Temperature ranges:** 

Application :  $+ 8^{\circ}\text{C} \text{ to } + 40^{\circ}\text{C}$ End-use :  $- 40^{\circ}\text{C} \text{ to } + 90^{\circ}\text{C}$ 

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

## Solvent and chemical resistance

Resistant to most oils and grease, fuel, aliphatic solvents, weak acids, salts and alkalis.

#### **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 mirror film onto the Application Tape should always be performed by removing the liner from the pressure-sensitive material (i.e. with the mirror face downwards onto the working surface) and not by lifting off the Application Tape.

MACal 1069 & 1079-01 can be applied with the dry or 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. The compatibility of paints and lacquers should be tested by the end-user, prior to use.

A felt protected squeegee should be used to minimize scratches when applying the product.

## Edge sealing and varnishing

Where exposure to chemicals 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 extends the use-life against prolonged effects of weathering, abrasion and other 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.

All specifications are subject to change without prior notice.