

Milmar Silver Perm

PRODUCT DESCRIPTION

Face Material: Polyester films, top coated for ink receptivity: **MILMAR T.C. 25 µm** : Bright Silver or Dull Silver

Adhesive: Permanent high-performance, acrylic based.

Liner: Mercury. Bleached Kraft paper, ca. 160 gr/sqm, two-side polyethylene coated, without breaklines and backprinting.

Backing with excellent dimensional stability.

TYPICAL USE

Milmar Silver films : luxury labels for household or industrial appliances, audio and video equipment, calculators, nameplates, toys, panels for decorative purposes, luxury packaging for perfumery or jewellery.

GENERAL REMARK : factors affecting adhesion

Adhesion failure problems can be avoided by :

- Where possible, always test the proposed construction under actual application and end-use conditions because a 100 % multi-purpose adhesive for all substrates does not exist.
- Being familiar with factors which adversely affect adhesion :
 - Labels or stickers should not be applied onto dusty, dirty, oily or oxidized surfaces.
 - Mould release agents on blow-moulded plastic surfaces inhibit adhesion.
 - Adhesion failure may occur on substrates with low surface tension, such as polyethylene or polypropylene. Rubber based adhesives stick better to low energy surfaces than acrylics.
 - Avoid the use of relatively rigid facestocks on highly curved or small diameter surfaces.
 - Do not use pressure-sensitive materials outside the recommended service temperature range, or do not apply below the minimum application temperature.

PROCESSING

The special topcoating allows printing solvent based by screen printing. For letterpress and offset printing, please contact your ink supplier. We recommend to maintain an unprinted area of 3-4 mm on the edges of the printed decal to avoid edge lifting.

SHELF LIFE

2 years stored at 50 ± 10 % RH at 15 - 25°C in its original packaging.

PHYSICAL PROPERTIES (TYPICAL VALUES)

Average Values Test Method

Thickness (micron)		
Film + Adhesive	50	ISO 534
Adhesive data, 23°C		
Peel adhesion 180° on glass		
- 20 min. residence (N/25 mm)	11	FTM1
- 24 hour residence (N/25 mm)	14	FTM1
Quick Tack (N)	16	FTM9
Dimensional stability		
Shrinkage (1 week at 70°C applied on Aluminium)	no shrinkage	FTM14
Temperature ranges		
Application (°C)	+10	Minimum
End-use (°C)	-20 to +130	
Solvent and chemical resistance		
Solvent Resistance	Resistant to most oils, greases, aliphatic solvents, alcohols.	
Petrol Resistance	Resistant to short limited contacts. If extended contact, edge-lifting will occur.	
Chemical Resistance	Resistant to most mild acids, mild alkalis.	

EXPECTED DURABILITY

The expected vertical outdoor durability of the unprocessed product in central Europe (Zone 1) is up to: 2 years.

This information is based on successful real life experience and artificial aging according to ISO 4892-2. Middle European exposure conditions, vertical exposure. Exposure to severe humidity, ultra-violet light or conditions found in tropical, subtropical or desert regions will cause more rapid deterioration than under conditions existing in "normal" temperate climates.

DISCLAIMER

For more information on the durability and exposure please visit the "Mactac Technical Bulletin TB 7.5 Outdoor Durability of Mactac Graphics - Self-adhesive films" on the [www.https://www.mactacgraphics.eu](https://www.mactacgraphics.eu) website.

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