

## Mactac Protect Pro

### PRODUCT DESCRIPTION

Mactac Protect Pro is a 203 µm high gloss, optically clear, top-coated self-adhesive aliphatic thermoplastic Polyurethane (TPU) film. The film is delivered with a PET protective sheet in order to maintain its high gloss finish. The self-healing top-coat helps to maintain the look of the vehicle by enabling healing of mild or medium scratches when heated from sunlight or another heat source (eg. Heat-gun, hot water). The design of the film ensures stain resistance and good outdoor performance.

**Face Material:** 165 µm top-coated thermoplastic polyurethane (TPU) film.

**Adhesive:** Permanent acrylic adhesive.

**Liner:** 75 µm PET siliconized liner.

### TYPICAL USE

Mactac Protect Pro is an engineered top-coated paint protection film created to protect a vehicle's finish. The film is designed to reduce the impact of stone chipping, road debris and insects. Mactac Protect Pro is also ideal to protect exposed vehicle surfaces such as side mirrors, spoilers, rocker panels, etc. The film offers optimal protection on vehicles and needs to be applied to fully cured painted surfaces.

### PROCESSING

Mactac Protect Pro must be applied following the instructions in TB 8.0. "Application guide: Mactac Protect Pro", available from the resource section at [www.mactacgraphic.eu](http://www.mactacgraphic.eu). Mactac Protect Pro can be easily sized by manual cutting or digital cutting plotters. The film can also be used on top of applied Mactac Colour Wrap Series products that were applied previously.

Note: Always remove the protective PET sheet before converting, using a plotter or flatbed cutter. Always store unused material on the roll, tightly wounded and secured. Do not leave cut pieces untight with the PET protective sheet. The compatibility with paints and lacquers should be tested by the end-user, prior to application. The compatibility with other application liquids, gels or cleaning products than those recommended in TB 8.0. "Application guide: Mactac protect Pro" should be tested by the end-user, prior to application.

### SHELF LIFE

One year when stored at 22 °C and 50-55% rH (in the original packaging).

### PHYSICAL PROPERTIES (TYPICAL VALUES)

#### Average Values Test Method

Thickness (µm)		
Top Coated TPU film	165	ISO 534
Total (TPU + Adhesive)	203	ISO 534
Liner	75	ISO 534
Face Material data, 23°C		
Tensile Strength (MPa)	18	ISO 527
Elongation at Break (%)	250	ISO 527
Adhesive data, 23°C (N/25mm)		
Peel adhesion 180° on stainless steel		
- 20 min. residence	14	FTM1
- 72 hour residence	19	FTM1
Dimensional stability		
Shrinkage (1 week at 70°C applied on Aluminium)	<0.15	FTM14
Temperature ranges		
Application (°C)	>10	
End-use (°C)	-40 to 100	
Solvent and chemical resistance		
Resistance to most: mild cleaners, mild acids, diesel, motor oil, SWC cleaners and water and soap solutions	24 hrs exposure	No significant change

## EXPECTED DURABILITY

Expected Durability			
	Zone 1	Zone 2	Zone 3
Vertical exposure	10 years	8 years	6 years
Horizontal exposure	7 years	4 years	3 year

This information is based on artificial aging.

For more details about durability and zone classification, please refer to TB 7.5 "Outdoor Durability of Mactac Graphics - Self-adhesive films".

Exposure to severe temperatures, ultraviolet light, and/or conditions in Southern European countries, tropical, subtropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south-facing exposure.

### 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](http://www.mactacgraphics.eu) website.

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