

# TuningFilm Carbon BF

## Technical Data Sheet

### PRODUCT DESCRIPTION

TuningFilm Carbon BF is a 175µm embossed polymeric vinyl film coated with a permanent acrylic adhesive. Product application is easier thanks to the Bubble Free adhesive system.

### CONSTRUCTION

#### Face material :

175µm polymeric stabilized calendered vinyl, cadmium-free.

#### Adhesive :

High tack micro-structured solvent based acrylic adhesive.

#### Liner :

Highly stable 130 gsm white PE coated paper.

### TYPICAL USES

TuningFilm Carbon BF creates a special design to various surfaces, such as external or internal vehicle parts and electronic equipments (computers, cellular phones, ...).

### DURABILITY

Vertical exposure in zone 1 (North, West & Central Europe):

|          |           |
|----------|-----------|
| Black    | 5 years   |
| White    | 5 years   |
| Silver   | 5 years   |
| Gold     | 2.5 years |
| Graphite | 5 years   |

Horizontal exposure : reduced by 40%

These use-life estimates are based upon accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in West Europe.

**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

1 year when stored at 15 to 25°C and  $\pm 50$  % relative humidity.

### PHYSICAL PROPERTIES (Typical values)

**Thickness (mm)** (Film + adhesive) ISO 543  
0.200

**Face Material Data, 23°C** DIN 53455-5

Tensile strength : > 40 N/15mm

Elongation at break : > 150 %

### Adhesive Data, 23°C

FTM 1

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

- 20 min. residence: 10

- 24 hour residence: 14

- 1 week residence: 15

### Dimensional stability

FTM 14

Shrinkage (48 hours at 70°C) : < 0.3 %

(25 cm x 25 cm, sample mounted on aluminium).

### Temperature ranges :

Application : +10°C to + 40°C

End-use : - 40°C to + 90°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

#### Clean and degrease the substrate

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

Use soapy water to remove the dust and degrease the substrate with isopropyl alcohol.

#### Application

##### on flat or slightly curved surfaces

Apply directly on the substrate by the dry application method.

##### on convex areas

Heat the film with a heat gun before stretching it over the convex area.

##### on corrugated or concave areas

If the film is stretched into a corrugation it may pop-out after a few weeks. It is, therefore, recommended to cut the film and to apply it in the corrugation without tension.

### Removability

Once heated, TuningFilm Carbon BF is easy to remove.

Eventual adhesive residues can be removed thanks to isopropyl alcohol.

### Important remarks

The compatibility of paints and lacquers should be tested by the end-user, prior to use.

Don't over heat or over stretch Tuning Film Carbon BF, otherwise the Carbon structure appearance could be damaged.

Tuning Film Carbon BF is sensitive to scratches and should be handled with care.

## **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.*