

# TuningFilm Carbon BF

## Technical Data Sheet

### PRODUCT DESCRIPTION

TuningFilm Carbon BF are 130µm embossed polymeric vinyl films coated with a permanent micro-structured acrylic adhesive.

### CONSTRUCTION

**Face material :**

130µm polymeric stabilized calendered vinyl, cadmium-free (thickness excluding embossing structure).

**Adhesive :**

Low tack micro-structured solvent based acrylic adhesive.

**Liner :**

Highly stable 145 gsm micro-embossed PE coated paper.

### TYPICAL USES

TuningFilm Carbon BF are designed for partial or full Vehicle and Boat Hulls wrapping (above water line).

They can also be used for various furniture's & interior decorations.

### EXPECTED DURABILITY

Expected durability of the unprocessed product is up to:

Interior decoration: 8 years

Exterior application:

Vertical exposure	Zone 1	Zone 2	Zone 3
Black	5 years	4 years	2.5 years
White	5 years	4 years	2.5 years
Silver	4 years	3 years	2 years
Gold	4 years	3 years	2 years
Graphite	4 years	3 years	2 years

Horizontal exposure	Zone 1	Zone 2	Zone 3
Black	3 years	2 years	Not Recom
White	3 years	2 years	Not Recom
Silver	2 years	1.5 year	Not Recom
Gold	2 years	1.5 year	Not Recom
Graphite	2 years	1.5 year	Not Recom

This information is based on successful real life experience and artificial aging according to ISO4892-3.

Exterior boat application : above data reduced by 30%

**Zone 1:** North, West, Central & Eastern Europe, North America (excl. : USA desert's - zone 3)

**Zone 2:** South Europe, Central & South America, Asia Pacific, Australian South coastal area (from Perth to Brisbane), New Zealand

**Zone 3:** Greater Middle East, Africa, Australian Desert areas & North of Perth-Brisbane coastal area, USA (Arizona, California, Florida, Nevada, New Mexico, Texas, Utah), Mexico

### SHELF LIFE

1 year stored at 15 to 25°C and ± 50 % relative humidity.

### PHYSICAL PROPERTIES (Typical values)

**Thickness (mm) (Film + adhesive)** ISO 543  
0.160

**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: 13

- 24 hour residence: 15

- 1 week residence: 16

**Dimensional stability**

FTM 14

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

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

**Temperature ranges :**

Application : +15°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 with isopropyl alcohol.

**Application**

**on flat or slightly curved surfaces**

Apply directly with the dry application method.

**on convex areas**

Heat the film with a heat gun before conforming 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.

**on rivets**

Apply the film over the rivet with high pressure and heat it with a heat gun (air temperature over 500°C).

The film may lift slightly after few weeks.

**Application on boat**

We recommend edge sealing.

**Removability**

Once heated, TF Carbone BF are easy to remove. Eventual adhesive residues can be removed thanks to isopropyl alcohol. Removability is warranted only on original manufacturer coating.

**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 TF Carbon BF, otherwise the structure appearance could be damaged.

TF Carbon BF are sensitive to scratches and should be handled with care.



**IMPORTANT NOTICE**

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