CW/RR7-HX

Description

High Performance cast film with a gloss "3D Carbon Racing Effect", for long duration to completely cover flat and very curved surfaces. Its formulation gives the film an excellent covering power, high mechanical resistance upon application and good anti-scratch properties. It has a structured glue with small channels that allows the air to escape for an easy application. This material has achieved the European classification of reaction to fire (B-S2-D0).

Colours: carbon black.

Technical information

Technical data

Film:	Cast 3D double-layer P.V.C.
Film Thickness (without adesive):	120+/-10 µm (Istr. Op. n° 4).
Liner:	PET-Liner 1 side siliconised “Air Free FTX System” (Micro Channel Technology).
Release:	4+/-3 Nm.
Adhesive:	acrylic repositionable ultra-permanent at high cohesion.
Grammage:	25 +/- 5 g/m2.
Adhesion after 20 min.:	min. 200 N/m. Peel 180° at 20°C on steel (Op. Istr. n° 7).
Adhesion after 72 h. :	min. 550 N/m. Peel 180° at 20°C on steel (Op. Istr. n° 7).
Method of application:	dry.
Application temperature:	suggested between 15° and 28°C.
Shrinkage:	< 0,2 mm after 48 h. at 70°C on steel (Op. Istr. n° 8).
Temperature resistance:	from -50°C to +90°C adhered to steel no variation (Op. Instr. n° 15).
Seawater resistance:	adhered to steel no variation after 100 h. at 20°C (Op. Instr. n° 14).

Average expected lifetime

The data below refer to the film as it is, applied on a standard flat surface and not taking

into consideration the final application. Therefore, they are indicative values intended only as a source of information, and do not constitute a guarantee.

Life estimates are determined on the basis of the results of UV and Xenon accelerated aging lab tests which simulate some conditions when unprocessed, non shaped, non printed film is submitted/**exposed vertically** (+/- 10% from the vertical) and in weather conditions typical of **Central Europe, correctly applied** on a flat surface.

Factors which drastically reduce the film's expected lifetime:

- horizontal/oblique exposure (angle greater than +/-10 ° from the vertical), for example car roofs or non-vertical parts of boats.
- exposure to long periods of sunlight as in southern climatic regions, areas characterised by high temperatures, high altitudes or high pollution.
- exposure facing towards the sun.
- imperfect application.
- excessive film deformation.
- improper cleaning and maintenance (use of aggressive detergents, scratches, abrasions and contaminations that may occur during installation or the lifetime of the product).
- surfaces subject to high temperatures (e.g. engine bonnets).

The actual lifetime of a product depends on several factors, including the quality and the preparation of the surface, exposure (environment, weather, exposure angle), film maintenance, pollution. **Therefore, only the operator can determine the suitability of the product and its expected lifetime**.

In order to extend as much as possible the film's lifespan, we recommend following the instructions for Application, Cleaning and Maintenance set out below in this data sheet.

Data from lab testing (UV – XENON TEST):
6 years.

Storage

1 year, film must be kept warehoused at room temperature (20°C / 50% R.H.) suspended horizontally or placed in a vertically upright position in polythene bag.
During the storage, gloss vinyl could become matt. This phenomenon, due to the pressure of the rolling up of the material, could worsen when close to the cardboard core and, is more frequent when the storage temperature is above 25°C and/or when the vinyl is particularly glossy and soft.
It is possible to return the gloss of the vinyl by heating the surface with an industrial heat gun.

Note

The values and the data given are based on tests we believe to be reliable and are typical values intended only as a source of information, and do not constitute a guarantee. **Purchasers must independently determine, before use, the suitability of the material for their own specific use and under their own operating conditions** with the aim to determine if the APA product is suited for the specific goal and is furthermore suited for the use and the pre-selected application-method.

General information

Warranty / exclusions of liability

APA materials are guaranteed to be free from all manufacturing defects.

In the event of ascertained defectiveness of the product, APA shall replace the materials used upon manufacturing the decorations.
APA shall not be liable for any additional costs, such as the work necessary for reprinting the design, the losses related to production time, the costs for removing or re-applying the graphics. APA, in addition, does not assume responsibility for the replacement of materials not produced by APA.

A.P.A. SpA cannot be held responsibility for any damages other than the substitution of the goods.

APA guarantees to maintain the interval of the variability of the colours of its products in the best possible way, using instrumental and visual checks.

To avoid colour variation, all the parts of the vinyl applied have to belong to the same production batch. It is also the case for decorations that are required for a long duration of time, updating or improvements of the decoration. Therefore, it is recommended to ask beforehand for the required material, belonging to the same production batch.

The feature of a metal colour depends of the angle of vision of the products. For a uniform colour all parts must be applied maintaining the same direction of orientation

No salesman, representative, agent or distributor has authority to supply data different from those reported in this Technical Data Sheet. To make improvements all products may be modified without prior notice.
For a safe use of the self-adhesive materials by A.P.A. it is recommended to read the dedicated safety information.
For a safe use of the cleaners mentioned in this data sheet it is recommended to read the dedicated safety sheets.

Application

The film is conceived for a highly professional use.
The staff that apply the vinyl must possess the requirements and the training necessary.

Before applying the film always test the compatibility between the self-adhesive vinyl and the surface of the decoration and in particular verify:

1. the stability of the paint on the surface to be decorated. Application on coloured surfaces with the original paint from the manufacturer (OEM) is recommended.
   We recommend against the application of film on damaged parts, for example, repaired and re-painted.

2. the presence of oil, wax and other substrates, including those made by the cleaning, that could compromise the adhesion of the film and cause it to detach in the future. Make a general cleaning of the surface with APA EASY CLEANER. Re-clean the corners, edges, slits, rivets and all the areas where the vinyl undergoes an increased shaping with APA CLEANER XT.

Before using APA EASY CLEANER and CLEANER XT always test the compatibility of the products on a corner of the surface which has to be cleaned.

It is recommended to apply the film in a room with a temperature between 15 and 28°C.
Apply the vinyl only using the dry method. Do not use water.

3D films, as a result of their particular composition, are more fragile in the elongation phase, due to the presence of some breaking points introduced by the texture. Therefore always pay attention to curves and profiles during the conformation phase.
3D shaped films, if stretched and conformed in the application stage, may present a texture distortion as wide as the deformation of the film.

This vinyl is not compatible with:

- porous surfaces in general either made of plastic or of other material
- surfaces with small superficial tensions, silicone, rubber, PP, PE and all apolar surfaces
- painted surfaces with poor adhesion of the paint to the surface underneath
- dirty surfaces such as walls and non-smooth surfaces
- flexible surfaces such as banners, truck curtains or textiles
- surfaces that give out gas (out-gassing)
- gasoline vapors or spillages (only short periods of contact and time can be tolerated)

Cleaning the vinyl

Use water with soft cloths and non-aggressive detergents.
Do not use rough sponges and cloths, abrasive creams or very strong solvents. Cleaning with unsuitable products and tools could cause a premature deterioration of the vinyl.
To remove ground in dirt, we advise the use of the quick cleaner APA CLEANER FILM and water. **Do not use wax or polishing products** which, in addition to being difficult to remove, may alter or accelerate the deterioration of the film.

Some films with high pigment content may leave a light coloured mark on the cloth upon cleaning. This event is normal, and becomes more visible if the film is rubbed vigorously or cleaned with detergents containing solvent. So as not to alter the appearance of the film, we recommend cleaning the surface gently and evenly.
Vinyl with a 3D structure, due to the higher porosity, tends to retain more dust and dirt, thus needs more frequent washing. In the 3D structure film it may be necessary to use pressure water. If water under pressure is used for cleaning, never aim the jet at the edges of the film because the force of the water could lift it or detach it. However the nozzle must be perpendicular and never oblique to the surface to be cleaned and at least 1 meter away.
The film with a gloss finish, if treated badly, could go matt and stripe beyond remedy.

Maintenance

The surface of the vinyl is delicate and therefore should be treated with care. Avoid rubbing against objects that could cause scratches or ripping of the vinyl beyond repair.
An extended exposition to solar rays and to atmospheric agents could provoke a premature aging of the film, especially for the parts exposed horizontally or to the south.
In this regard, gloss films can lose shine and give a matt appearance.
In conclusion, we recommend protecting the decorated surface from the sun and the elements to the greatest extent possible.
If a film deterioration should arise, for example, fading, change of colour or become brittle, then an immediate removal is recommended.
For a good maintenance of the vinyl regular cleaning is recommended. To maintain the original finish of the vinyls with a matt surface, and/or clear colours it is essential not to allow dirt to accumulate. To maintain the original finish of the vinyls with a 3D and/or clear colours it is essential not to allow dirt to accumulate.

Removal

During the removal process it is important to apply heat with a heat gun to the self-adhesive vinyl, up to a temperature of 50ºC.
An in-correct temperature in this phase may cause parts of the paint to detach. In regards to this, pay extra attention to painted plastic parts and areas of the bodywork that have been repainted.
In some cases there has been a colour change with some light coloured paints after the removal of the vinyl. This is due to the reaction generated by the paint on which the vinyl is applied, for which A.P.A. SpA can not be held responsible. It is therefore the responsibility of the customer to determine the suitability of the self-adhesive vinyl with the surface that it is to be applied to.
The operations of the vinyl removal are conditioned by many factors, such as the time passed from the application, exposure of the decoration either outdoors or indoors, type of surface, temperature of the room and of the surface, etc... **Therefore it is difficult to quantify and determine the speed and execution time of the removal by A.P.A. SpA.**

Should glue traces remain on the surface, these can easily be removed with the ready-for-use liquid APA REMOVER. Before using APA REMOVER always test the compatibility of the product on a corner of the surface which has to be cleaned.

The company APA cannot be held responsible of any damage caused during the removal phase and/or damages of the surface upon which the film has been applied.