

## L/291.1



### Description

Gloss Transparent Cast Truck Film, specifically designed to laminate AP/290 or AP/280. Equipped with the exclusive APA-ColTruck/Ultra-P Plus adhesive, L/291.1 has been formulated to weld onto the surface of the printed film and with it resist the strains to which the PVC curtain are subjected. Ideal to give images a bright finish. The film provides excellent resistance to the elements. Elastic, conformable and does not shrivel up.

With an excellent mechanical and UV ray protection, L/291.1 is recommended to improve the durability of printed images onto APAPrint film listed in the section "Application" of this Technical Data Sheet.

**Colours:** transparent gloss.

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### Technical information

#### Technical data

<b>Film:</b>	P.V.C. Cast
<b>Film Thickness (without adhesive):</b>	80 +/- 5 µm (Op. Istr. n° 4).
<b>Liner:</b>	Clay coated paper 1 side siliconised.
<b>Release:</b>	100 +/- 30 cN/20mm.
<b>Adhesive:</b>	Permanent adhesive high adhesiveness on to plasticized P.V.C.
<b>Grammage:</b>	45 +/- 5 g/m <sup>2</sup> .
<b>Adhesion after 24 h. :</b>	min. 400 N/m. Peel 180° at 20°C onto plasticized P.V.C. (Op. Istr. n° 7).
<b>Method of application:</b>	dry.
<b>Application temperature:</b>	suggested between 10° and 28°C.
<b>Shrinkage:</b>	< 0,2 mm after 48 h. at 70°C on steel (Op. Istr. n° 8).
<b>Temperature resistance:</b>	from -50°C to +90°C adhered to steel no variation (Op. Istr. n° 15).
<b>Seawater resistance:</b>	adhered to steel no variation after 100 h. at 20°C (Op. Istr. n° 14).

## Average expected lifetime

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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).
- 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 of the film and improper use of laminating machines.
- attack by solvents and other volatile parts contained in printing inks.
- 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.

**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):

5 years.

## Storage

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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

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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.

All APA over laminate films are produced and packed under very strict quality control procedures in order to guarantee that the films are clean, free of dust and other impurities that might compromise the usage. Before any lamination takes place it's important that the inks of the printed graphic are thoroughly dried. The residual solvents can otherwise change the specific features of the product. Purchasers must independently assess the

suitability of the product with the aim to determine if the APA product is suited for the specific goal.

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## 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.

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.**

This over-lamination film is designed to laminate APA Print Truck vinyl films AP/290 or AP/280 Cast vinyl film and is suitable for applications on flat flexible pvc banners and truck curtain sided.

Before any lamination takes place it's important that the inks of the printed graphic are thoroughly dried. The residual solvents can otherwise change the specific features of the product. Therefore after print we recommend to allow the film to rest for at least 48 hours in a room with a temperature of 20°.

It is recommended to apply the film in a room with a temperature between 10 and 28°C.

**Apply the vinyl only using the dry method. Do not use water.**

For the application, cold laminating machines can be used.

### 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.

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

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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.**