

Processing instructions - CYS Colored TPU

Please note

CYS TPU films are paint-protecting color films for partial and full vehicle wrapping. The application of CYS TPU films and their removal should only be carried out by qualified specialists (e.g. trained and experienced signmakers or car wrap specialists). If CYS TPU films are not applied or removed correctly or improperly, the paint of the affected vehicle can be damaged and/or the durability of the CYS TPU films can be significantly reduced.

To avoid variations in color or surface finish, always work with **consistent batches** (film rolls for a project sharing the same lot number). For matte and metallic films, pay attention to the grain direction.

Note: The matte CYS TPU film is ideal as an easy-entry film for paint protection due to the dry application with air channels. The glossy films are designed with plain adhesive for the best possible results and know-how in handling assembly fluids is required. If necessary, CYS Europe recommends appropriate training.

Durability expectation

The expected service life stated in the technical data sheets describes maximum results that can be achieved under normal Central European environmental conditions. In general, no guarantee, warranty or other claims can be derived from the information on the expected maximum durability. The basis are empirical data from artificial and natural weathering results under standard conditions.

The durability that can actually be achieved depends on a variety of individual factors, such as care measures, environmental conditions and preparation of the substrate to be applied. During the expected durability period, slight changes due to aging are possible. TPU films are naturally very weather and UV stable; there are no significant restrictions on the expected durability when applied horizontally.

The service life of CYS TPU films can be reduced, among other things:

- when used on unsuitable surfaces
- if the surface is not cleaned sufficiently
- if films are permanently exposed to high temperatures and/or high humidity
- if films are not cleaned regularly; e.g. if insect remains or bird droppings are not removed promptly
- if you spend a long time in areas with high environmental pollution (e.g. air pollution/particles from industry)

Preparation

Condition of the paint/surface

To achieve the best possible result, ensure that the paint on the vehicle is OEM-specified. If in doubt, please contact the vehicle manufacturer or a qualified painter before application. Finally, the paint on the vehicle must not be damaged; that means, there must be no damage from rust, fire, scratches, stone chips, age-related brittleness, etc. CYS TPU films are generally only suitable for painted or paint-like surfaces.

Cleaning of surfaces

The vehicle must be cleaned by hand or in a car wash before application. Please note that no program that uses wax should be selected when cleaning. The vehicle must be completely clean and dry at the time of application. Check the vehicle surfaces and edges for any surface contamination and residue. Clean all surfaces to be glued with isopropanol-water-mix 50/50. Make sure that any remaining cleaning agent residues are thoroughly and completely removed.

We recommend deep cleaning paint preparation using polishing clay, especially for glossy films. This is the only way to achieve the best possible finish.



Note: No other cleaner (surface cleaner, etc.) may be used for the final surface pre-cleaning, as this can attack the adhesive on the CYS TPU and have a negative effect.

Application of CYS TPU films

Matte CYS TPU film - *Processing similar to PVC car wrap*

Use the dry application method when installing the matte film with air channel.

High-gloss CYS TPU film - *Processing similar to PPF*

The glossy CYS TPU films with plain adhesive should be applied "wet", using suitable assembly fluid.

Tip: To reduce the **initial tack** of the films (matte and glossy), apply a thin layer of SONAX Film Detailer. **Caution:** Keep a distance of at least 3 cm from the edges.

Note on handling the glossy films: There is a protective film on top that must be removed. After the film has been cut, the film must be stored temporarily without the protective film or it must be wrapped tightly around a core again, otherwise tunnels can form due to the inherent tension of the protective film.

Remaining amounts of the film, that are not required, should also be wrapped tightly around a core again.

Processing conditions

CYS TPU films should only be applied in clean, dust-free and bright rooms. The vehicle surface to be application must have a sufficient minimum bonding temperature of +18° C. The best possible result is achieved at temperatures of +21° C to +23° C on the vehicle surface.

Tips for installing CYS TPU films

Application matte film: The matt CYS TPU films are bonded dry. The film is stretched by mechanical pulling and requires less heat than with a PVC film.

Squeegee for matte film: For matte CYS TPU films, a firm squeegee with a rather hard felt should be used to achieve sufficient contact pressure so that as little air as possible remains in the adhesive channels.

Application gloss film: The glossy CYS TPU films are bonded wet with assembly fluid. Application techniques "from the roll" or using "plotted stencil" are possible. After wet application, the adhesive needs time to dry in order to achieve sufficient adhesion.

Assembly fluid: The mixing ratio depends on whether you are working from a roll or with plotted templates. When working from a roll, the recommended mixing ratio (can be adjusted depending on temperature and working conditions) of the assembly fluid is "1 liter of water + 0.5 ml of Film-On*". When working with templates, "1 liter of water + 1 ml of Film-On*". A syringe is recommended for precise dosing.

*alternatively, baby shampoo

If you prefer not to use the mounting fluid (water with FilmOn) in certain areas, you can use the **SF26 Flex-Binde Gel** mounting gel.

Squeegee gloss film: The surface to be filmed and the adhesive surface of the film are sprayed with the assembly fluid. To apply the film, the surface of the film is also moistened with assembly fluid. A silicone squeegee is recommended.



Cutting: When cutting, make sure you use a very sharp blade and a cutting angle of less than 45 degrees. If the cutting angle is steeper, the film will be pushed. Alternatively, Knifeless Precision can be used for cutting.



Tempering: All film edges are heated to 90° C (temperature on the film) after completion of the work.

Air bubbles: Air and fluid bubbles should not be punctured. They disappear within a few days. Bubbles that are too large can be punctured with a very fine syringe needle.



Film on film: Overlaps, inserts and labels are possible because the CYS TPU is only slightly hydrophobic.

Tip: Remove the application tape only after the labeling film has built up adhesive strength.



Video on “How to install CYS TPU films”

You can find further practical information in the installation video at <https://cys-europe.de>



Cleaning and care

Notes on cleaning and care

CYS Europe generally recommends regular cleaning and care by hand using the SONAX cleaning and care products specially developed for vehicle wrapping. The mild but very effective cleaning and care products they contain are precisely tailored to the different sensitive film surfaces. See also “After completion of the work”.



After completion of the work

After application, the vehicle must be at bonding temperature for at least another 24 hours. Experience has shown that the CYS TPU has reached its optimal final adhesion three days after bonding. Before this period has elapsed, the vehicle must not be driven through a car wash or cleaned with a high-pressure cleaner. When using high-pressure cleaners, a distance of at least 70 cm must be maintained and the edges of the film must not be blasted. In order not to damage the film surface, the vehicle covered with CYS TPU may only be driven through car washes with textile washing without a hot wax program (no brush washing).

Warranty information

If the processing instructions and the care and usage conditions are not followed, a warranty and liability are excluded. The qualified specialist personnel carrying out the work are responsible for the quality of the application. The owner of the film-coated vehicle is responsible for compliance with the care and usage conditions. We do not cover the costs of removing an applied film.

Warranty and liability are particularly excluded in the following cases:

- new paintwork that is not completely dry or cured at the time of application
- application on unsuitable substrates and on improperly applied paintwork
- improperly prepared substrates
- improper or unprofessional application by unqualified processor
- paint peeling and paint changes when removing the film
- film detachments from corrugations
- Temperatures exceeding 120 degrees Celsius, due engine heat, exhaust systems etc.