



Paint protection film, or PPF for short, has evolved from an invisible protective film to a design element. Coloured PPF combines durability, protection against minor stone chips and a longer service life with a customised look. The new TPU-based films could become a real game changer for car wrappers in the future, moving from a niche product to a mainstream solution. Experts agree that they will greatly enrich the vehicle wrapping industry in any case.

film manufacturers and distributors share this assessment.

"We expect coloured paint protection films to become a permanent fixture in the portfolios of film applicators in the future," Marco Kimme is certain. "The advantages of combined colour change and very strong paint protection are simply outstanding," emphasises the CEO of CYS Europe, who caused a stir on the German market in spring 2025 with the introduction of coloured TPU film. Film specialist Orafol also sees the development

PPF on the rise

"The rapid development of coloured paint protection films over the past year has been enormous," explains Oliver Zicke, Market Development Manager Automotive, Trainer and Application Specialist at Spandex. Jens Claaßen, Senior Business Development Manager at Avery Dennison, cites an important reason for this: "Coloured paint protection films offer a third option in addition to classic coloured wrapping and transparent paint protection films. The combination of two applications opens up new possibilities for selected applications." Other



development in the field of coloured paint protection films as "very positive," as Technical Sales Manager Uwe Zimmermann confirms. He has observed that, in addition to the classic transparent version, demand for coloured and customised solutions is steadily increasing. Customers in the automotive sector in particular want products that not only offer protection but also contribute to customisation and visual enhancement. "Paint protection films are therefore increasingly no longer perceived exclusively as invisible protection, but also take on design functions."

Technical challenges

The development of coloured PPF is technically challenging. The balancing act between protective function, colour fidelity and easy processing requires manufacturers to take a new approach. Customers have a direct comparison between car wrapping films and coloured PU films in mind, "but the requirements for the material are fundamentally different," explains Thomas Brux, Managing Director of Bruxsafol Folien. The big challenge is to optimise workability to such an extent that it approaches the possibilities of car wrapping films. Uwe Zimmermann points out another special requirement: "The highest standards must be met in terms of colour accuracy and stability - especially with intense or metallic colours, it is crucial that the films do not fade or change colour over the years." Marco Kimme sees "a certain learning curve for Colored TPU, as with any new product in its early stages." But the CYS managing director is confident that this will settle down over the next few months. He believes that Colored TPU will then be just as reliable as PVC and PU.

Sustainability factor 60:1

This raises the question of how sustainable the production of coloured paint protection film is. According to Marco Kimme, the significantly longer durability of TPU compared to PVC alone makes it a more sustainable product overall. He likes the fact that "today, you can achieve a reduction in CO2 emissions with a film-coated vehicle compared to a painted one," explains Span-dex trainer Oliver Zicke. We now know that the environmental impact of coating with paint protection films is 60 times lower than that of vehicle painting. "This means that if you include all energy costs...



"With this film, you can wrap 60 vehicles for the same cost as painting a single car," explains Rainer Lorz. He even goes so far as to predict that TPU film will eventually replace paintwork. "That's the future," prophesies the head of the Wrap Institute. "Even if you go from 60 down to 30, 15 or even just 2:1 – film wrapping always wins."

The question of price

The price level is not insignificant for the acceptance or future market share of coloured paint protection film. "We currently have a wide price range. This confuses customers and requires important and valid arguments," says Oliver Zi-

This development could be boosted by the increasing number of suppliers expected to enter the market in the coming years.

"Competition will drive prices down," believes Marcus Knoch, owner of Car Film Components (CFC). The price-performance ratio of the films must be in line with the market in order to make coloured paint protection films attractive to a broad audience. After all, "if coloured TPU is to replace some of the PVC car wrap films, then the film price should be such that it is not only suitable for super sports cars," says CYS Europe CEO Marco Kimme. Of course, there are also experts who are sceptical about the price development, such as Uwe Zimmermann. The Orafol sales manager believes that the significant difference in price levels is due to the production processes and will continue to be the case in the future.

Remain significant. Although rising production volumes could bring certain economies of scale and thus cost savings, PU will never be able to match the price level of PVC. "This would require fundamentally new technologies along the entire value chain," emphasises Uwe Zimmermann.

Role of PVC films

It is not only because of the difference in price that coloured PPF will certainly not completely replace classic PVC film on the market. Especially as the quality of this product is continuing to improve. "There is certainly still room for improvement here

ve have already achieved a very high x. The further development of optical mison's agenda this year in particular, ng shelf life that is sufficient for many able today." Uwe Zimmermann also sees al for PVC films. "Particularly with regard ch as gloss or matting, there are e visual appearance more closely to proved formulations and innovative



involved." Thomas Brux believes that coloured paint protection films "will have to command a significantly higher price on the end customer market due to the additional costs involved." Marco Kimme, on the other hand, believes that coloured paint protection films will converge somewhat with PVC films in terms of price in the long term.



to meet customer needs and expand the product portfolio in a targeted manner. However, opinions differ as to the extent and pace at which coloured paint protection film will gain market share.

"We estimate that coloured paint protection films, such as our CYS Coloured TPU, will serve 20 to 25 percent of the film market in the coming years," believes Marco Kimme. Without committing to a specific share, Orafol also expects the market for paint protection films to grow significantly in the future. "We see a clear development from a niche product to a broad market segment , which

Matt or glossy, as shown in the picture: with CYS TPU film, the customer has the choice.

coatings can be used to achieve different degrees of gloss more durable and uniform," says Orafol's Technical Sales Manager.

Coloured PPF is the future

The industry agrees that coloured paint protection film, with a durability of up to ten years (assuming proper care), will have a major impact on the market in the coming years. Most dealers, manufacturers and car wrappers agree with Thomas Brux's opinion that coloured paint protection films open up new market opportunities and offer the possibility of tapping into additional target groups

"This opens up new target groups," confirms Uwe Zimmermann.

"The drivers are the desire for long-term value retention of vehicles and the trend towards individualisation. While transparent PPF films will retain the largest market share, we expect dynamic growth for coloured variants, as customers increasingly want to combine protection and design." Oliver Zicke has identified a clear indication that coloured paint protection films are "already firmly established on the market": "I can see this from the large number of training courses I give and from the sales figures for the corresponding films."

Rudi Stallein

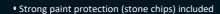
TPU instead of PVC

CAR WRAPPING NEXT LEVEL



Colour change & paint protection perfectly combined





- Self-healing surface
- Resistant surfaces even with matt finishes
- Enormously high brilliance of glossy surfaces
- Increased UV and weather resistance
- Reduced maintenance, easy cleaning
- TPU is classified as more environmentally friendly
- Long-lasting, intense colours



