AUTO PPF Hyper



INTRO

The AUTO brand, exclusively from Spandex, is designed to cater for the ever-changing needs of professional wrappers, detailers and fleet applicators. The products are co-branded and have been developed in conjunction with leading manufacturers. Auto offers a range of special edition automotive colours, paint protection films, automotive tint films and accessories. The Auto PPF range has been manufactured by Orafol exclusively for Spandex.

PRODUCT DESCRIPTION

Customized Top-coated polyurethane film, highly transparent, glossy with excellent UV resistance and a self-healing surface. The surface is highly resistant to chemicals. The migration of dirt into the film is effectively prevented by the surface coating, which prevents yellowing.

TOPCOAT

Best self-healing properties with excellent stain retention, highest chemical resistance, Hydrophobic with ceramic coating; No cap-sheet for best plotter usage.

FILM

Thermoplastic Polyurethane with high impact resistance, stone chip protection, highly transparent and high UV resistance with excellent cutting qualities.

ADHESIVE

Solvent polyacrylate, permanent with high initial tack, highly transparent, high UV resistance and non yellowing properties.

RELEASE LINER

Matt PET, 75 $\mu\text{m},$ siliconized on one side.

AREA OF USE

The market for Paint Protection Films (PPF) is one of fastest growing within vehicle wrapping and customization. PPF are technologically advanced, specialist films that offer paint protection against scratches and marks. The desire to protect and customize vehicles with PPF presents a new opportunity for detailers and vehicle wrappers to expand their existing offering.

AUTO PPF Hyper is designed for the protection of sensitive surfaces against particularly strong mechanical forces in interior and exterior applications. Specially developed for the protection of car-paints e.g. front and rear bumpers and side skirts against stone chipping, scratches. Recommended for bonding to even and slightly curved surfaces.

Technical Data

Thickness ⁽¹⁾	205 micron (incl. adhesive).
Dimensional stability ⁽¹⁾ (FINAT TM 14)	Adhered to steel, shrinkage 0,2 mm max.
Temperature resistance	Adhered to aluminium, -40°C to +100°C, no variation
Resistance to solvents and chemicals Immerse for 1 hour (water, acid), 30 Min (Pancreatine, tree gum), 10 Min (IPA,Gasoline, Motor oil), Check after 24h at RT	No Detrimental Effect on: Water, Sulfuric Acid (10%), Hydrochloric Acid (10%), Bird droppings (Pancreatine), Tree gum, Gasoline, Motor oil, Isopropanol
Aging Test Xenon weathering acc. To DIN EN ISO 4892	> 1000 hr No Detrimental Effect
Gravel Resistance SAE J400 2.4L of Gravel	Pass
Gloss level Determined at 20° angle	>96 (GU)
Adhesive power ⁽¹⁾ (FINAT TM 1, 180°, after 24h stainless steel)	17 N/25 mm
Tensile strength (DIN EN ISO 527)	Along: min. 29 MPa; Across: min. 29 MPa
Elongation at break (DIN EN ISO 527)	Along: min. 300%; Across: min. 300%
Shelf life ⁽³⁾	2 years
Application temperature	> +10° C
Proposed application technique	Wet application process using f. eg. ORAFOL® Application Gel
Available width	152,0 cm
Maximum service life by specialist application Applies for vertical outdoor exposure (4)	10 years

(1) average (2) short-time exposure (3) in original packaging, at 20° C and 50% relative humidity (4) normal climate of Central Europe



PREPARATION GUIDELINE:

- The better the preparation the better the result
- Conventional cleaning agents and cleaning clay
- No substances that form a coating or sealing layer by nanotechnology
- Remove all residues of preservative wax or polishing agents
- Finally, all surfaces must always be cleaned with Pre-Wrap Surface Cleaner
- Thoroughly dry the vehicle especially under rubber seals

APPLICATION GUIDELINE:

- Clean and dust free room, preferably with car lift or mounting ramp
- Minimum temperature +18 °C 🛛 rapid evaporation of residual moisture
- We recommend only wet application
- Use f. eg. ORAFOL Application Gel
- Mixing is possible: Water → reduces viscosity Isopropanopanol/water mixtures → initiates more tack to adhesive (CAUTION: mixing is exothermic!)
- Spray to open adhesive side and surface to be covered
- Best applied with spray bottle
- Dries off residual-free
- Push the squeegee gently from the middle to the side with big overlaps
- Remove excessive gel with water and lint free cloth
- Prolonged slip-behaviour 🛛 repositionability of the film
- Adhesion builds up smoothly ? reduces risk of lift lines and air entrapments.
- Do not heat up TPU films too much need much less temperature.
- Any cloudiness of the adhesive disappears within 3-5 days

MAINTENANCE GUIDELINE:

- 3 days after application: cleaning in car wash is possible
- No high pressure cleaning recommended
- Contaminants such as bird droppings and tar that can cause fatal damage to the paint can also cause considerable damage to the PPF, so please remove them as soon as possible
- For Long-Lasting film properties we recommend to use regulary f. e.g. ORAFOL PPF Cleaning and Care

REMOVABILITY GUIDELINE:

- Removal of the film at least 20°C temperature
- Angle 180 °
- Hot air blower helps

APPLICATION TRAINING:

Training & education is the key to success a perfect PPF installation. Spandex offers regular training for customers interested in PPF applications. Please contact your local Spandex for more information.

NOTE: Surfaces to which the material will be applied must be thoroughly cleaned and free from dust, grease or any other contamination that could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. We recommend wet application of the film. Furthermore, the application information published by AUTO must be considered.

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