



From the moment a vehicle rolls off the production line to the time it is handed over to the customer, it is absolutely crucial to ensure its delicate surface finishes are well protected from damage, both outside and inside.

Temporary, self-adhesive protective films from POLIFILM AUTOMOTIVE offer you precisely that: superior protection, perfectly tailored to your surfaces and processes. Complete Automotive protection without compromise.



We supply our customers with optimal protective film solutions to meet all their requirements on any surface. So why choose us?

- We have many years of experience working with leading automotive manufacturers.
- As part of the POLIFILM GROUP we have access to some of the most advanced film, coating and production technologies in the industry.
- We have in-depth experience of the production processes and materials used in vehicle construction.

POLIFILM AUTOMOTIVE

## **TAILOR-MADE SOLUTIONS.**FOR THE AUTOMOTIVE INDUSTRY.

A wide range of surface finishes can be found on the outside and inside of a vehicle. Whether it's paintwork, chrome, plastic, leather or textiles: each one poses a specific challenge for the protective film. There is no single type of film that will perfectly protect everything. Therefore the optimal solution needs to be adapted to the specific challenges of each case and surface.

To guarantee optimum performance in terms of protection, duration of use, UV and weather resistance, our experienced application and development engineers will tailor every component of the protective film perfectly to your requirements. They will identify the right carrier films, adhesive and release layer technologies for each vehicle, and combine them into a single custom solution. A solution that provides long-lasting protection, speeds up processing operations and increases efficiency.

#### Requirement

#### **STABILITY**

Tailored durability throughout the whole product life to ensure optimal removal in all weather conditions.

#### Requirement

#### **MECHANICAL STRENGTH**

Maximum strength and resistance to tearing and abrasion thanks to matched film thicknesses and mechanical properties.



#### Requirement

#### **APPLICATION**

Optimum punching and application characteristics – perfectly applies to body contours whilst assuring trouble-free repositioning.

#### Requirement

#### SURFACES

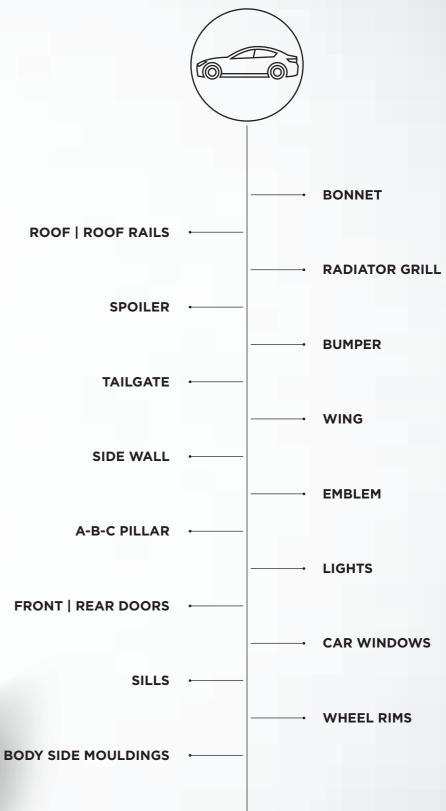
Perfect adhesion and compatibility with all commonly used paint systems thanks to the careful selection of adhesive system, formulation and strength.

## SURFACE PROTECTION EXTERIOR

Paint and clear coatings on automotive bodywork require special protection: stone chips, adverse environmental factors such as strong sunlight and corrosive bird droppings can all cause damage. Temporary high-performance protective films from POLIFILM AUTOMOTIVE protect these sensitive surfaces, especially the bonnet, sills and doors.

Of course, it is not enough to protect just the bodywork from damage: POLIFILM AUTOMOTIVE also has solutions tailored specifically for plastic, metal and glass surfaces such as wheel rims, spoilers and windscreens.





POLIFILM **AUTOMOTIVE** 6

### CO-EXTRUDED PROTECTIVE FILMS. PERFECTLY MATCHED.

A flawless paint finish on a new car is an essential element of the customer's expectations. However, when it comes to protecting the paintwork, there's more to it than just visual appearance: after all, repairing any damage incurs additional expense and reduces the sale value.

That's why we have developed co-extruded protective films which are adapted to the particular challenges of automotive production. Application optimised properties and film thicknesses ensure films are highly efficient and offer an excellent priceperformance ratio.









CO-EX CAST PROTECTIVE FILMS.

Co-extruded cast films consist of several film layers which are extruded in a single processing step together with the adhesive. The combination of the individual properties contributed by each of these layers produces a high-performance film with the adhesive already integrated, which offers significant advantages when it comes to their application.

## HIGHLY EFFICIENT & APPLICATION OPTIMISED.





#### Extensive paint compatibility.

Co-extruded protective films from POLIFILM AUTOMOTIVE are compatible with the most popular automotive paints. These films can be applied immediately after the painting process to protect the delicate paint finish.



#### Effective surface protection.

Our protective films for car bodies are more robust than many other films providing excellent protective properties and resistance to tearing and abrasion. With their low restoring forces and their adhesive strength being perfectly matched to each application, reliable adhesion is guaranteed. Peeling, wrinkling and bubble formation are a thing of the past.



#### Quick and easy removal.

If the vehicle has been left outside for a long time or has been exposed to intense UV light, co-extruded protective films from POLIFILM AUTOMOTIVE can be removed quickly without tearing and as the adhesive is an integral part of the film; it leaves behind no residue. As a result the vehicle is ready for the showroom or to be handed over to its new owner.



#### Process optimised application.

The ideal protective film should fit perfectly into the production process, which is why our co-extruded protective films not only make very little noise when they are unwound, but can also be folded and unfolded with ease. Simple application is assured as these protective films have excellent elasticity even when applying them around corners and edges, giving a smooth and uniform application every time. They are easy to reposition if they weren't perfectly positioned the first time around, saving time and material.

POLIFILM **AUTOMOTIVE** 8

## ADHESIVE COATED PROTECTIVE FILMS. PERFECTLY TAILORED TO THE SURFACE MIX.

There is more to the exterior of a car than its bodywork. From plastic bumpers and headlights to chrome plated parts, stainless steel and glass to the wheel rims: a wide variety of materials are used.

The POLIFILM AUTOMOTIVE range of films is just as broad. Our selection of adhesive coated protective films provides solutions for the widest variety of surface structures and finishes for vehicle exteriors.



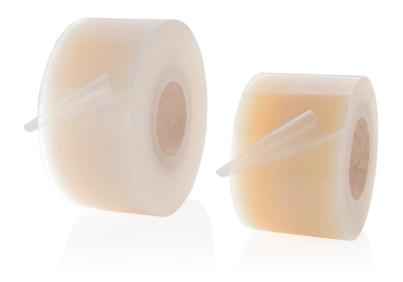






#### Wide range of applications.

Exterior protective films for vehicles are available with water and solvent based acrylic or rubber adhesive systems, and cover a particularly broad spectrum of surfaces and customer requirements.







#### Custom adhesion.

Exterior protective films from POLIFILM AUTOMOTIVE precisely ensure the desired degree of protection and adhesion, thanks to their adhesive formulations that provide perfectly calibrated adhesive strengths, along with film characteristics tailored to the specific application..



#### Perfect removal characteristics.

Our exterior protective films are particularly resistant to tearing and leave behind no adhesive residues. They can therefore be removed quickly in a single step without needing any extra cleaning. Even after exposure to extremes of temperature or strong UV radiation: depending on the type of film, they are UV resistant for up to 12 months.



#### Customer optimised application.

Our exterior protective films also enable efficient work processes. They are perfectly suited to machine pre-punching and are easy to prepare for a wide range of component geometries. This makes integrating them into tightly meshed automotive assembly lines even easier, which speeds up the manufacturing process.



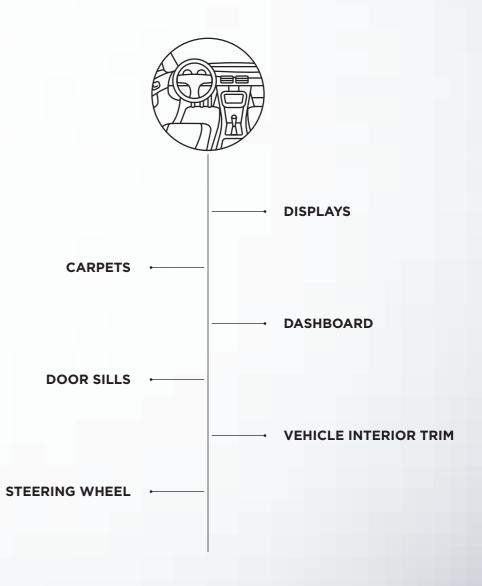






# SURFACE PROTECTION INTERIOR

The interior also calls for high-performance and customised solutions for a variety of materials, shapes and surface finishes. The corresponding product portfolio from POLIFILM AUTOMOTIVE offers a wide range of protection films that provide a suitable solution to every challenge. These films provide reliable protection for the delicate surfaces in the vehicle interior against dirt and other factors that are detrimental to its high-quality design.



POLIFILM **AUTOMOTIVE** 12

### INTERIOR PROTECTIVE FILMS. BESPOKE INTERIOR.

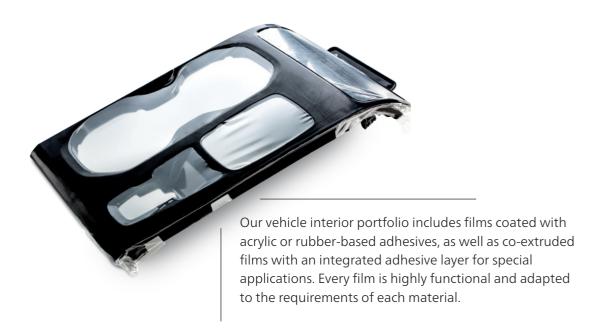
A vehicle's character is defined by its interior. From compact cars to saloons, luxury materials and elaborate designs and décor are becoming increasingly popular.

Whether metal, leather, textile or plastic, smooth or rough, matt or gloss: the POLIFILM AUTOMOTIVE range offers automotive manufacturers the perfect solution for any surface finish.









### HIGH-PERFORMANCE & PROCESS OPTIMISED.





#### Luxury designs, preserved.

We adapt the adhesive strength and formulations of our protective films precisely to the relevant material and structure of the surface to be protected. This means we can guarantee reliable adhesion of the film and optimal protective properties. So, the luxury appearance of the interior is always perfectly protected from dirt and damage.



#### Easy application.

Depending on the requirements of the process, our protective films can be applied by machine or by hand. They are quick and straightforward to apply, and effortlessly adapt to the various shapes and contours of the vehicle interior. Even affixing them around the edges and corners is easy. Furthermore, they guarantee optimal results when pre-punching, so the films can be delivered to the production line cut perfectly to size.



#### Residue-free removal.

Perfect removal characteristics also play an important role when it comes to the interior ensuring minimal effort is required to prepare the vehicle to be handed over. Which is why our protective films guarantee high tear resistance and residue-free removal.



#### Quality assured.

As well as white films, our range includes transparent and slightly tinted protective films with high transparency enabling optimal quality control and barcode readability. One advantage of tinted films is that they are very visible meaning the dealer will notice straight away if any protective film remains which needs to be removed from the vehicle before hand over to the customer.

### AT A GLANCE. PROTECTIVE FILMS AUTOMOTIVE APPLICATIONS.

Here you will find an overview of our protective films for the most common applications for the exterior and interior of vehicles. Of course, the table showcases only a small selection of our diverse protective film range. Our specialists would be happy to help you design the perfect protective films for your requirements.





ics	ADHE	SIVE TYPE	Co- extruded	Co- extruded	PIB	Co- extruded	Co- extruded	Acrylic, solvent based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, water based	Natural Rubber	Natural Rubber	Acrylic, water based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, water based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, solvent based	Acrylic, water based	Acrylic, water based	Acrylic, solvent based	Acrylic, water based
RIST	ADHESIVE STRENGTH		Medium	Medium	Medium	High	Medium	Medium	High	High	Low	Medium	High	Low	Medium	Very High	Very High	High	High	High	High	High	High	High	High	Medium
ACTE	THICKNESS		72 μm	60 μm	50 μm	80 μm	72 μm	65 μm	70 μm	85 μm	40 μm	80 μm	80 μm	45 μm	60 µm	70 μm	85 μm	50 μm	100 μm	100 μm	80 μm	60 μm	90 μm	100 μm	95 μm	60 μm
HAR	UV PROTECTION (Month)		12	12	12	12	12	3	6	6	3	3	3	12	3	12	12	3	-	-	-	-	-	-	-	-
FILM CHARACTERISTICS	COLOUR*		W	W	W	W	W	BL	BL	TR	TR	G/TR	G/TR	BL	TR	BL	W	BL	G	G	TR	TR	TR	TR	TR	TR
ш.	DIE CUT ABILITY		Moderate	Excellent	Excellent	Moderate	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
	FILM TYPE		PF A6173/34	PF A6143/32	PF A6451/34	PF A6104/32	PF A6172/34	PF A2302/52	PF A7384/52	PF A5384/02	PF A7301/02	PF A7524/50	PF A7544/50	PF A2500/10	PF A5382/02	PF A5313/02	PF A1384/13	PF A2341/00	PF A5286/00	PF A9396/60	PF A3394/01	PF A3392/00	PF A3244/00	PF A3266/00	PF A3395/01	PF A3241/00
APPLICATIONS		A-B-C PILLAR	•	•	•	•	•																			
		CAR BODY	•	•	•	•	•																			
		EMBLEM						•	•	•	•	•	•													
	RIOR	DOORS   DOORSTEPS					•	•	•	•																
	EXTERIOR	LIGHTS						•			•				•											
		SPOILERS		•	•	•		•	•	•					•											
		SUN ROOF   ROOF RAILS						•																		
		WHEELMASK					•									•	•									
	EXTERIOR   INTERIOR	ALUMINIUM						•			•	•	•					•								
		GLASS						•						•												
		PLASTICS, PAINTED		•	•			•	•	•					•	•	•	•								
		PLASTICS, SMOOTH		•	•	•		•	•	•	•				•											
		PLASTICS, STRUCTURED							•	•					•	•	•	•	•	•	•	•				
		STAINLESS STEEL						•				•	•					•								
	~	CARPET							•	•						•	•	•	•	•	•	•	•	•	٠	•
	ERIOF	DOORSTEPS					•	•	•	•																
	Ā	LEATHER						•	•	•						•	•									
		TEXTILE							•	•						•	•	•	•	•	•	•	•	•	•	
SPECIA	AL APPI	LICATION   MASKING																	•	•						

### **POLIFILM GROUP ABOUT US**

POLIFILM AUTOMOTIVE specialises in surface protective films for the automotive sector and is part of the global POLIFILM Group.

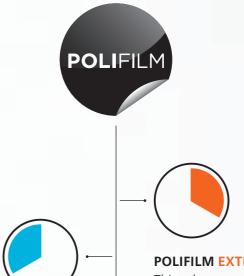
As an independent subsidiary of POLIFILM PROTECTION, we are part of the POLIFILM Group, one of the world's leading manufacturers of extrusion and protective films. The POLIFILM Group is a second generation family owned global business. It supplies customers worldwide with solutions for a wide variety of markets and applications.



POLIFILM AUTOMOTIVE

### THREE BUSINESS DIVISIONS. ONE GLOBAL GROUP.

**POLIFILM**, the independent and 100% family-run group with its headquarters in Cologne, comprises of **POLIFILM EXTRUSION, POLIFILM PROTECTION** and **POLIFILM TRADING** subgroups, which in turn consist of several legally independent subsidiaries.



#### POLIFILM PROTECTION

This subgroup are the surface protection professionals and specialists in the areas of coextrusion, adhesive development, and film coating across its many production locations. As experts in surface adhesion they use a variety of adhesive systems as coatings for their protective films: from water or solvent based acrylic adhesives to natural or synthetic rubber adhesives. The adhesive systems are all produced in-house and specially developed for the specific customer's requirements. Furthermore, POLIFILM PROTECTION develops and manufactures co-extruded film solutions for surface protection at its specialised facilities. These films are self-adhesive and are extruded together with the adhesive in a single operation.

#### **POLIFILM EXTRUSION**

This subgroup are the experts in the extrusion of polyethylene (PE) and polypropylene (PP) based films via blown and cast extrusion. Having the largest extrusion facility in Europe, the company maintains its own technical centre and laboratories, and operates an on-site recycling scheme. This is where the film solutions for the needs of today and tomorrow are created, including technical films which are used by POLIFILM PROTECTION as carrier materials for the production of protective films.



#### **POLIFILM TRADING**

The subgroup is responsible for developing markets related to the core business and associated expansions of our portfolio, including targeted acquisitions on the market.

18

# OPTIMUM PROTECTION FOCUSED ON YOU

**PRODUCTION LOCATIONS**Germany, France, Italy, Israel, China,

**DISTRIBUTION LOCATIONS** 

Turkey, USA and Australia

Germany, France, United Kingdom, Italy, Spain, Israel, China, Mexico, South Africa,

Vietnam and USA

Providing tailor-made protection solutions, wherever and whenever you need them. Offering an always available product and service portfolio at a consistently high level of quality: That is the mission that we accomplish every day.

We offer you the flexibility of a global player, combined with the commitment of a traditional family business. As a global group of companies, we have access to an international network of production facilities, distribution centres and trusted trading partners. So we can always be by your side. Fast, reliable, innovative and skilful.



YOUR POLIFILM PARTNER ON SITE:

#### **POLIFILM AUTOMOTIVE GMBH**

Handelsstrasse12 42929 Wermelskirchen Germany

**Member of the POLIFILM Group** 

Tel.: +49 2196 88208 3130 Fax: +49 2196 88208 3195 Email: info-pfa@polifilm.de

www.polifilm.com