

Technical Datasheet

CYS PPF professional clear 190 / 215, PPF professional matt 190

Description

CYS PPF professional clear and Professional matt are high-quality transparent TPU paint protection films (PPF) of the latest generation, featuring a modern special coating.

Only high-grade, non-yellowing aliphatic TPU is used, ensuring superior durability and performance.

The glossy variant stands out particularly for its exceptional shine and clarity, distinguishing it from older generations of products. The resulting depth effect significantly enhances the appearance of the painted surfaces it protects.

These films offer excellent shock absorption properties, providing reliable protection against stone chips as well as additional mechanical and chemical stress.

Notably, the unique softness of the film improves application, especially when the product needs to be applied around edges. The self-healing properties have been further improved. The self-healing process is faster and requires even less heat.

Both variants are hydrophobic, offering an effective beading effect that significantly simplifies surface cleaning.

Please note!!

Before use, the user should check the suitability of the product for the intended use. The user assumes all associated risks and liabilities.

All data was collected in accordance with SGS certification test standards and methods.

SGS is an international institute for product testing and certification, results may vary if other test standards are used.

The technical information provided relates to representative products and should not be used for specification purposes.



CYS PPF professional clear (190 / 215) & matt (190)

Technical Datasheet

Film thickness	190 μ, 215 μ depending on the version	
Without cover liner + protect. film		
Protective film	PCL , to be removed before bonding	
Cover liner	Matt PET 90μ	
Gloss		
Clear 190/215	> 140 GU (gloss unit)	
Matt 190	33±3 GU (gloss unit)	
Reference = 100 GU (high-gloss polished black glass)		
Adhesive	25 μ solvent polyacrylate, self-crosslinking, pressure-activated	
Adhesive strength	Initial adhesion: 6N/25mm (recommended processing temperature = 18 - 23 °C)	
gloss versions	20 minute: 20 ±5 N/ 25mm	168 hour: 20 ±5 N/ 25mm
matt version	20 minute: 15 ±5 N/ 25mm	168 hour: 20 ±5 N/ 25mm
Polished steel plate		
Tensile strength		
gloss versions	20±5 Mpa	
matt version	25±5 Mpa	
QC/T 1171-2022		
Elongation to break Top coating		
gloss versions	≥ 120%	
matt version	≥ 100%	
ASTM D-882		
Elongation to break PPF		
Gloss clear 190	≥ 350%	
Gloss clear 215	≥ 380%	
Matt 190	≥ 400%	
QC/T 1171-2022		
Tear strenght		
Gloss clear 190	≥ 40 KN/m	
Gloss clear 215	≥ 50 KN/m	
Matt 190	≥ 55 KN/m	
QC/T 1171-2022		
Punctured strenght		
190μ versions	≥ 130 N	
215μ versions	≥ 140 N	
QC/T 1171-2022		
Acid resistance	no abnormality ✓	
(2~5) HCl (Salzsäure) / 24h		
Alkali resistance	no abnormality ✓	
(10~13) NaOH (Caustic soda) / 24h		
UV reduction	≥ 90%	
GB/T 2680		
Haze		
gloss versions	≤ 1%	
matt version	≤ 30%	
ASTM D1003		
Water repellency		
gloss versions	90~100° stark hydrophob	
matt version	70~90° hydrophob	
Water contact angle GB/T 30693-2014		
Inclusion / Visuell inspection		
<0.6mm	Keine Ansammlung	
0.6mm~1mm	≤ 6 / m ²	
>1mm	0 / m ²	

Scratch resistant, self-healing	≤ 5s; Repairable; No scratches A fine copper brush with a load of 110g/cm ² is scraped 10 times, and repaired with hot water at about 70°C.
Residual glue	No residue glue ✓ Coated cover plate, after 168 hours at 70°C, placed at room temperature for 1 hour, film removed
Heat resistance	No cracking ✓ Stretch 1.4 times, attach the painted cover plate, and place it at 70°C for 1 hour
Anti-corrosion performance	Non- fogging ✓ Carburetor cleaner sprayed on the top coating for 2min
Shelf life	2 yeras Recommended: 20±2°C room temperature, relative humidity 40-60%, original packaging, horizontal
Durability expectation*	up to 10 years *Central European normal climate, normal environmental influences, no significant differences between vertical and horizontal bonding. This information is a guideline, but not a guarantee. The shelf lives that can actually be achieved depend on a number of individual factors, such as e.g. care, ambient conditions and preparation of the substrate to be bonded. Slight changes due to ageing are possible during the shelf life expectancy period. You can find detailed information on this topic in our processing instructions.