

GOLDMAN

PCU PAINT PROTECTION
FILM

Premium Surface Protection • Self-Healing Technology • High Gloss • Hydrophobic Performance

PROTECTIVE FILM

Temporary protection during handling and installation

FUNCTIONAL COATING

Gloss, hydrophobicity and surface performance

PCU BASE FILM

Primary impact and surface protection layer

PSA ADHESIVE

Pressure-sensitive adhesive system

RELEASE LINER

Protective liner before installation

PCF-180 INSPIRED SPECIFICATION PLATFORM

This Goldman catalog is prepared using the PCF-180 specification data supplied by the customer. Final commercial specifications should be confirmed against the approved production sample and batch QC report.

GOLDMAN — PREMIUM AUTOMOTIVE PROTECTION

2. PRODUCT SPECIFICATION

2.1 Appearance Performance

ITEM	SPECIFICATION	TEST METHOD
Function	Paint Protection	
Type	PCF-180 / Goldman PCU PPF	
Liner Bubbles	Visually Invisible	Visual Test
Dust	Visually Invisible	Visual Test
Crystal Points 0.1–0.6 mm	Allowed	Visual Test
Crystal Points 0.7–2.9 mm	< 10	Visual Test
Crystal Points ≥ 3.0 mm	Max. 1	Visual Test
Coated Bump / Surface Defect	Visually Invisible	Visual Test
Glue Line	Visually Invisible	Visual Test

Appearance inspection note: Protective film is removed before visual inspection. Crystal-point counting area and acceptance criteria are based on the supplied source data.

2.2 Physical Performance

ITEM	SPECIFICATION	TEST METHOD
Gloss (60°)	≥ 92%	GB 8807
Finished Weight	405–425 g/m ²	GB/T 4669
Glue Weight	25–30 g/m ²	GB/T 4669
Product Thickness	210 ± 15 μm	GB/T 7125
Protective Layer Thickness	50 ± 5 μm	GB/T 7125
Coating Thickness	10 ± 5 μm	GB/T 7125
Urethane / Base Film Thickness	180 ± 5 μm	GB/T 7125
Glue Thickness	20 ± 5 μm	GB/T 7125
Liner Thickness	75 ± 5 μm	GB/T 7125
Tensile Strength	≥ 380 kg/cm ²	GB/T 10041
Peel Strength	≥ 75 N/cm	GB/T 10041
Elongation at Break	≥ 350%	GB/T 1040.1
Shrinkage (MD)	≤ 0.5 mm	FTM 14
Shrinkage (TD)	≤ 0.4 mm	FTM 14
Release Force	≤ 0.35 N/25 mm	GB/T 2792
Tack	≥ 9 N/25 mm	FTM 9
24 h, 180° Peel	≥ 18 N/25 mm	GB/T 2792
Maximum Temperature	120°C ± 5 min	GB/T 2423.1

2.3 PRODUCT CHARACTERISTICS

ITEM	SPECIFICATION	TEST METHOD
Self-Healing Function	Heat 75°C	0.1 mm Brush & Heat
Water Contact Angle	≥ 103°	DL/T 864
Anti-Acid	Oxalate 72 h — Pass	Lab Test
Yellowness Index	≤ 2	QUV
Anti-Fouling	Strong Marker — Pass	Lab Test

TEST METHOD DESCRIPTION

Scratch Repairing Function

A 0.1 mm copper wire is used to create a controlled scratch condition. After repeated brushing and heating, the surface is visually inspected for scratch recovery.

Acid and Alkali Resistance

The supplied test description uses 10% hydrochloric acid and sodium hydroxide solution, followed by a 24-hour evaluation for bubbles, cracks and other visible defects.

Anti-Stain

The supplied test description uses UV radiation, heating and spraying exposure, followed by visual inspection under defined laboratory conditions.

KEY PERFORMANCE HIGHLIGHTS

HIGH GLOSS	≥ 92% at 60° gloss
SELF-HEALING	Heat-assisted recovery at 75°C
HYDROPHOBIC	Water contact angle ≥ 103°
ANTI-YELLOWING	Yellowness index ≤ 2 (QUV)

3. STORAGE & HANDLING

Shelf Life (before application): 1 year when stored upright in its original packaging, in a dust-free environment at approximately +15°C to +25°C with relative humidity around 50%.

Recommended Handling

- Store rolls upright and protected from direct sunlight.
- Avoid excessive heat, moisture and prolonged compression.
- Allow the film to acclimatize to the installation environment before use.
- Inspect each roll before installation and retain batch identification for traceability.

4. WARRANTY

Warranty Coverage: Valid from the date of purchase and intended to cover verified manufacturing defects such as abnormal yellowing, cracking, blistering or delamination, subject to the final Goldman warranty terms and approved product warranty period.

Typical Exclusions: Misuse, accidents, improper installation, normal wear, road-debris impact, collision damage, chemical damage, neglect and damage caused by unsuitable maintenance practices.

IMPORTANT TECHNICAL NOTE

This catalog is a branded technical presentation prepared from the supplied PCF-180 source specification screenshots. Before printing for mass distribution, Goldman should obtain a signed TDS, batch test report and raw-material confirmation from the actual manufacturer. For a product marketed specifically as **PCU**, the base-film chemistry should be independently verified by the manufacturer or laboratory testing.

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Premium protection. Technical performance. Global ambition.