PAINT PROTECTION FILM

PCU



Next-generation polycarbonate urethane

Stronger anti-yellowing and anti-staining than traditional TPU, with a capsheet top layer.

>95 GU	10 yr	100%	328%	196 µm
GLOSS typical	WARRANTY replacement	THERMAL self-healing	ELONGATION at break	TOTAL thickness

KEY FEATURES

Next-generation PCU

Polycarbonate urethane, the next generation of PPF materials beyond traditional TPU.

Stronger anti-yellowing

Greater resistance to yellowing than traditional TPU.

Stronger anti-staining

Resists staining better than traditional TPU; marker wipes away trace-free.

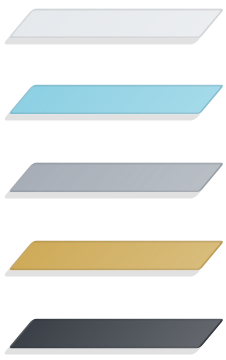
High gloss

>95 GU for a deep, brilliant, show-quality surface.

100% thermal self-healing

Heat-activated recovery helps light marring disappear.

CONSTRUCTION



1. **Capsheet** — Top layer
2. **Self-healing top coat** — Thermal self-healing layer
3. **PCU film** — Polycarbonate urethane base layer
4. **Adhesive** — Pressure-sensitive layer
5. **Release liner** — Removed before install

Exploded view, not to scale.

MATERIAL & DURABILITY

Warranty **10 years**	Material category **Polycarbonate urethane**	Top layer **Capsheet**
Surface stain resistance **Trace-free**	Thermal self-healing **100% self-healing**	Adhesive layer **Pressure-sensitive**

Typical values for reference; not specifications.

PCU | POLYCARBONATE URETHANE PPF

Test Results & Performance Data

SURFACE PERFORMANCE

PROPERTY	RESULT	TEST CONDITION
Anti-staining	Trace-free	Marker, alcohol wipe wiped after 10 s
Self-healing	100% recovery	1 kg brass brush 10 scrubs, 50–70°C water, 1 min
Gloss	>95 GU	Typical value

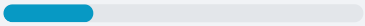
ELONGATION AT BREAK

typical tensile test

PPF film **328%**



Coating **100%**



Track end = 400% elongation.

ADHESION BUILD

20 minutes **15.9 N/inch**



24 hours **18.1 N/inch**



≈ 626 N/m at 20 minutes, ≈ 713 N/m at 24 hours: +14% build.

MECHANICAL PROPERTIES

Total thickness	196 ± 5% µm
Tensile strength	15.9 MPa
100% modulus	5.9 MPa
Film elongation at break	328%
Coating elongation at break	100%

PCU ADVANTAGE

Polycarbonate urethane is the next generation of PPF materials, with stronger anti-yellowing and anti-staining than traditional TPU.

- **Anti-yellowing** — Stronger than TPU
- **Anti-staining** — Stronger than TPU
- **Self-healing** — 100% thermal recovery
- **Top layer** — Capsheet

GLOSS

>95 GU TYPICAL

WARRANTY

10 years Replacement, subject to the published warranty terms.

CONTACT

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NOTES

All values are typical, obtained under laboratory test conditions, and are not specifications. Actual performance varies with surface preparation, installation, environmental exposure and maintenance. Installation by trained professionals is recommended. Wize Brothers may revise this data sheet without notice.