CORE-MATTE

MATTE TPU PAINT PROTECTION FILM

PRODUCT CODE CM-85 / NOMINAL 8.5 MIL / MATTE FINISH

Core-Matte is a premium transparent matte TPU paint protection film engineered to transform compatible glossy automotive paintwork into a refined de-glossed finish while providing durable adhesion, surface protection, hydrophobic performance and heat-assisted surface recovery. It is intended for professional automotive installation.

8.5 MIL	28.7 GU	88.9%	10 YEARS
NOMINAL THICKNESS	GLOSS @ 60 DEG	LIGHT TRANSMITTANCE	LIMITED WARRANTY*

PRODUCT CONSTRUCTION

01	02	03	04
INTEGRATED MATTE COATING	**LUBRIZOL TPU CORE**	**ADHESIVE**	**RELEASE PET**
Hydrophobic top coat / 16 µm	Flexible transparent base film	Ashland AROSET™ 951059 / 28 µm	76 µm removable liner

PRODUCT SPECIFICATIONS

PARAMETER	SPECIFICATION
Product type	Transparent matte TPU paint protection film
Nominal thickness	8.5 mil (finished film tested at 219 µm)
Base material	Lubrizol TPU
Finish	Matte / de-glossing
Top coat	Integrated hydrophobic matte coating
Top-coat thickness	16 µm
Adhesive	Ashland AROSET™ 951059 pressure-sensitive adhesive
Adhesive layer	28 µm
Colour / appearance	Colourless, transparent, flat and uniform
Roll dimensions	1.52 m x 15 m
Sentrix limited warranty	10 years*

OPTICAL AND SURFACE PERFORMANCE

PROPERTY	TEST METHOD	REQUIREMENT	RESULT
Surface gloss	Gloss meter @ 60°	20 ±3 GU	28.7 GU
Light transmittance	Float-glass method	>=90%	88.9%
TPU haze	Haze meter	40%	27.27%
UV blocking	LS182 tester	>90%	95.12%
Hydrophobicity	Marker-pen line test	Hydrophobic	Confirmed
Stain resistance	Marker residue after alcohol wipe	Score 0-10	8 / 10

PERFORMANCE TEST RESULTS

MECHANICAL, DURABILITY AND QUALITY CONTROL

Production COA reference: Smatte II 8.5mil / test date 6 May 2026

MECHANICAL PERFORMANCE

PROPERTY	TEST METHOD	REQUIREMENT	RESULT
Elongation at break	PT-6081G	>=150%	452.7%
Tensile strength	PT-6081G	>15 MPa	20.58 MPa
Tearing strength	GB/T 529	>=40 kN/m	97.64 kN/m
Adhesive peel - 20 min	GB/T 2792-2014	>=1,200 gf	1,242.5 gf

DURABILITY PERFORMANCE

PROPERTY	TEST CONDITION	REQUIREMENT	RESULT
QUV ageing resistance	ASTM G154-16, Cycle 1, 1,000 h	ΔE*ab <2	Not reported
Heat self-healing	Scratch recovery using ~70°C hot water or hot air	100% self-healing	100%
Scratch resistance	1,000 copper-brush cycles at 500 g	No damage after thermal repair	No damage
Temperature resistance	80 ±2°C for 24 h; recover 2 h; then -20 ±2°C for 24 h	No cracks, turbidity, bubbles or discoloration	No abnormality

APPEARANCE QUALITY CONTROL

PROPERTY	METHOD	ACCEPTANCE CRITERIA	RESULT
Visual colour	Visual inspection	Colourless and transparent	Qualified
Product appearance	Visual inspection	No impurities, coating lines, bubbles, tension marks or water ripples	Qualified
Crystal / impurity points	Visual inspection	0.6-1.0 mm: <=6 pcs/m2; >1.0 mm: 0	Qualified

Application: Professional automotive installation only. Confirm substrate condition and paint compatibility before application. Matte film changes the visual finish of the underlying paintwork; use approved installation and edge-finishing practices.
Thickness: The tested finished-film thickness of 219 µm is the sum of TPU, matte coating and adhesive layers. The removable PET liner is excluded.
*Warranty: Ten-year Sentrix limited warranty, subject to registration, approved installation, care requirements, exclusions and the prevailing Sentrix warranty policy.