PRODUCT DESCRIPTION



SATIN MATTTM is a premium polyurethane paint protection film offering a refined matte finish with strong surface protection. It shields paint from scratches, chips, and contaminants while maintaining a smooth, low-gloss look. Built with a self-healing coating and durable TPU base, it ensures flexibility, UV resistance, and easy residue-free removal perfect for luxury automotive finishes.

PRODUCT CONSTRUCTION

LAYER COMPONENT	DESCRIPTION / THICKNESS
Top Coating	10 μm – Matte self-healing surface layer
TPU Base Layer	150 µm – Optical-grade aliphatic polyurethane
Adhesive Layer	25 µm – High-performance acrylic adhesive
Protective Film	0 μm – Matte structure without gloss coating
Release Liner	85 μm – PET release film
Total Thickness	190 µm (nominal)



GENERAL CHARACTERISTICS

PROPERTIES	TEST VALUE	TEST METHOD
TPU Thickness	150 µm	Thickness Tester
Coating Thickness	10 µm	Thickness Tester
Adhesive Thickness	25 µm	Thickness Tester
Release Film Thickness	85 µm	Thickness Tester
Protective Film Thickness	0 μm	Thickness Tester
Total Product Thickness	190 µm	Thickness Tester
Anti-Yellowing	B value≤5	GB/T 16422.3-2014 QUV5000 hours
Xenon Accelerated Aging	No change	GB/T 32088-2015 2000 hours
Elongation at Break (Coating)	>98%	ASTM D882
Elongation at Break (Finished Product)	>328.6%	ASTM D882
Tensile Strength	28.1 MPa	ASTM D638-2014
Tear Strength	62.3 KN/m	ASTM D624-2000
Puncture Resistance	13.4 N	GB/T 10004
Stone Impact Resistance	Pass	SAE J400
Initial Viscosity	>1295 gf/inch	GB/T 4852
Viscosity Retention	>1578 gf/inch	GB/T 4851
Surface Gloss	18.1 GU	3NH Gloss Tester (30°)
Scratch Repair	Normal temperature repair	Brush 10 times, 50°C hot water for 30°
Coating Adhesion	Level 5	ASTM D3359
Water Drop Angle	80°	Water Drop Goniometer
Water Resistance	No change	GB/T 22886-2008 (50°C, 200 hours)
High Temperature Resistance	No change	GB/T 7141-2008 (80°C, 1000 hours)
Hydrolysis Resistance	No change	GB/T 4671-2014 (40°C, 400 hours)
Acid & Alkali Resistance	No change	GB/T 11547-2008 (Soak 24 hours)
Chemical & Oil Resistance	No change	Internal Test (Spray 60 seconds)