

Product Factory Inspection Report

Product Model		MAG-S85		Date		2026/4/11	
Material Description		Surface Protective Film	Coating Layer	TPU Base Film		Adhesive	Bottom Protective Film
		PET protective film	Lotus-Effect Superhydrophobic Self-Healing Coating	Aliphatic polyurethane		Pressure Sensitive Adhesive (PSA)	Matte White Release Film
Test Item		Testing Equipment	Testing Method	Unit	Standard Value	Test Data	Result
Structure	Working Layer Thickness	Micrometer	GB/T 6672-2001	um	190±10	192	Pass
	Release Film Thickness	Micrometer	GB/T 6672-2001	um	75±3	70	Pass
Mechanical Properties	20min Initial Peel Strength	Tensile Tester	ISO 527-1:2019	gf/inch	>1200	1699.1	Pass
	24H Peel Strength	Tensile Tester	ISO 527-1:2019	gf/inch	>1500	2145.3	Pass
	Coating Elongation at Break	Tensile Tester	ISO 527-1:2019	%	≥90	98	Pass
	Elongation at Break	Tensile Tester	ISO 527-1:2019	%	≥150	319	Pass
	Transverse Tensile Strength	Tensile Tester	ISO 527-1:2019	MPa	≥15	21.88	Pass
Puncture Resistance	Displacement	Puncture Tester	ISO 527-3:2018	mm	≥10	13	Pass
	Maximum Force	Puncture Tester	ISO 527-3:2018	gf	≥1000	1454	Pass
	Puncture Strength	Puncture Tester	ISO 527-3:2018	MPa	≥50	74	Pass
Water Contact Angle	Contact Angle	Water Contact Angle Tester	ISO 527-1:2019	°	>90	106	Pass
Glossiness	Glossiness	60° Gloss Meter	ISO 527-1:2019	°	≥90	110.1	Pass
Special Properties	Self-Healing Property	Brass Brush Rub + Hot Water Healing Test	QC/T 1171-2022	S	OK	Pass	Pass
	Stain Resistance	Chenguang GM-2110 Oil-Based Marker	QC/T 1171-2022	/	Minor marks or traces	A	Pass
Appearance	Color	Standard Sample	/	/	transparent	transparent	Pass
	Surface Appearance	Visual Inspection	QC/T 1171-2022	/	Refer to Appearance Inspection Standard for Automotive Paint Protection Film	Pass	Pass
QUV Aging Test	Accelerated Film Aging Test	UVA-340 Lamp	ASTM G154-23 Cycle 1	AYI	ΔE≤2	Pass	Pass