



Product Factory Inspection Report

Product Model		MAG-Matte20		Date		2026/3/22	
Material Description		Surface Protective Film	Coating Layer	TPU Base Film		Adhesive	Bottom Protective Film
		/	Matte Nano Composite 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	183	Pass
	Release Film Thickness		GB/T 6672-2001	um	75±3	75	Pass
Mechanical Properties	20min Initial Peel Strength	Tensile Tester	ISO 527-1:2019	gf/inch	>1200	1210	Pass
	24H Peel Strength		ISO 527-1:2019	gf/inch	>1500	2570	Pass
	Coating Elongation at Break		ISO 527-1:2019	%	≥90	105	Pass
	Elongation at Break		ISO 527-1:2019	%	≥150	346	Pass
	Transverse Tensile Strength		ISO 527-1:2019	MPa	≥15	29.4MPa	Pass
Puncture Resistance	Displacement	Puncture Tester	ISO 527-3:2018	mm	≥10		Pass
	Maximum Force		ISO 527-3:2018	gf	≥1000		Pass
	Puncture Strength		ISO 527-3:2018	MPa	≥50	86.5KN/m	Pass
Water Contact Angle	Contact Angle	Water Contact Angle Tester	ISO 527-1:2019	°	≤90	86	Pass
Glossiness	Glossiness	60° Gloss Meter	ISO 527-1:2019	°	35±5	22.3°	Pass
Special Properties	Self-Healing Property	Brass Brush Rub + Hot Water (>70℃) Healing Test	QC/T 1171-2022	S	/	/	/
	Stain Resistance	Chenguang GM-2110 Oil-Based Marker	QC/T 1171-2022	/	No residue	S	Pass
Appearance	Color	Standard Sample	/	/	Matte Finish	Matte Finish	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