

## Ultimae Shield Gloss Black

- ✓ TPU materials
- ✓ Good in high glossy black
- ✓ Warranty 6 years

Properties		Value	Test Method
Physical Properties	Thickness (Substrate)	165 ± 15 μm	Thickness gauge
	Thickness (Overall)	295 ± 15 μm	Thickness gauge
	Elongation at Break	205%	ASTM D412
	Tensile Strength	9.0 kgf/inch	ASTM D412
Adhesion	Adhesion Force	421 gf/inch	JIS K 6854-2
	Type of PSA	Acrylic PSA	-
	Residual Adhesive	None	Put on painting plate then peel off with reverse direction after exposing to 80C for 24hr, -4C for 24hr, 20C for 12hr in sequence
Optical Properties	Gloss	91.2%	Glossmeter (@60°)
	Surface Uniformity	No deformation (crater, pin-hole, fish-eye)	Put on orange peel test plate / Sensory Tester
	Transmittance	-	Put on black acrylic plate /Sensory Test
		-	Put on transparent acrylic plate /Sensory Test
Surface Properties	Anti Scratch (5pt)	3.5pt	Copper brushing @RT (20°C)
	Self-Healing @RT (1hr, 5pt)	4.5pt	Copper brushing @RT (20°C) Stand-alone under RT (20°C)
	Thermal Recovery (70°C, 5pt)	4.5pt	Copper brushing @RT (20°C) Exposure to hot water (80°C)
	Chemical Resistance	No damaged for 150seconds	Spraying carburetor cleaner Mixture of methanol, acetone, toluene and white spirit (#200)