ThorShield Paint Protection Film - GLOSSMAX

High Performance Ultra-Clear Hydrophobic-Coated Polyurethane Film



Technical Data Sheet February 2023



General Description

ThorShield Paint Protection Film - GLOSSMAX is a 8.0 mil (200 micron) hydrophobic clear-coated urethane film, coated with a clear acrylic pressure sensitive adhesive (PSA). The film is specifically designed for surface protection of automotive painted surface and other surfaces from any harmful effects of stone chips, scratches, and other debris. The special hydrophobic-coated urethane polymers maintains the surface clarity, durability and fine condition without any damages through resisting and overcoming a wide range of environmental conditions.

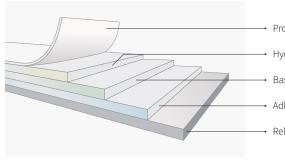


Features

- · Flexible clear-coated urethane polymer enables ease of installation
- · Excellent Optical Clarity with low unwanted texture as orange peel, etc.
- · Hydrophobic coat helps easily wipe off contaminants like bug damage, fluid stains, etc.
- ·Self-healing thermal restoration technology that makes most minor scratches disappear
- · Superior durability in high heat and humidity environmental conditions



Product Construction



Protection Cap sheet – Polyester / 2 mils, 50 microns

Hydrophobic clear-coat - Polyurethane / 0.5 mils, 13 microns

Base Film – Polyurethane / 6 mils, 150 microns

Adhesive – Acrylic pressure sensitive adhesive (PSA) / 1.5 mils, 35 microns

Release liner – Polyester / 3 mils, 75 microns



Roll Configuration

60 inch x 50 ft (1,524 mm x 15 M)



Physical Properties

Properties	Typical Values	Unit of Measure	Test Method
Nominal thickness (clear coat + film + adhesive)	8.0 mils (200 µm)	mil ± 5%	
Tensile Strength	< 1	%	ASTM D 1003
Elongation	> 250	%	ASTM D 412
Peel Adhesion	1.0 @20min	kg/25mm	UTM Instrument Method (LLOYD LS1)
	1.5 @24hrs		



Performance

Properties	Typical Values	Unit of Measure	Test Method
Outdoor Weathering	No Detrimental Effect	1,000 hrs (40 days)	6500W Xenon Arc, Irradiance: 0.51W/m2(340 nm), 65°C. Humidity 50% R.H
	No Detrimental Effect	3,000 hrs (120 days)	QUV using UVA bulb, 4 hour 50°C UV exposure, 4 hours 60°C condensation
Heating Resistance	No Detrimental Effect	Appearance	20 cycles @ -20°C ↔ 80°C
Moisture Resistance	No Detrimental Effect	Appearance	168 hrs @ 50°C/ 95% RH
Chemical Resistance	No Detrimental Effect	Appearance	DIN 42 115 100% Alcohol / Gasoline / 5% Acid / 5% NAOH



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Self Life

ThorShield Paint Protection Film - GLOSSMAX be stored at $+10^{\circ}$ C $^{+}20^{\circ}$ C (50°F-70°F), 40% $^{-}60\%$ RH. Film should be used within five (5) years from the date of purchase.

Warranty

ThorSHIELD Corp. warrants ThorShield Paint Protection Film – GLOSSMAX to be free of any manufacturing or workmanship defects for five (5) years from the date of purchase. This is only applicable in the case of proper handling and use. Terms and conditions apply.

Notice

The technical information, recommendations and other statements contained in this Technical Data Sheet are based upon tests or experience that ThorShield believes are reliable, but the accuracy or completeness of such information is not guaranteed. Since only the user is aware of the specific conditions in which the product is to be used, it is the user's responsibility to determine whether the product it suitable for that intended use.



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