

# XPEL Protection Film - ULTIMATE STEALTH

High Performance Matte Clear-Coated Aliphatic Polyurethane Film

Technical Data Sheet – April 2014



## General Description:

XPEL Protection Film - ULTIMATE STEALTH is a patent pending high performance self adhesive clear coated aliphatic polyurethane film designed to protect automotive paint, and other surfaces, from the harmful effects of stone chips and abrasion. It has exceptional elongation properties for ease of application and this feature allows for single piece installations over highly contoured surfaces. XPEL Protection Film - ULTIMATE STEALTH is a very low surface energy film designed to resist staining and offers superior resistance to environmental contaminants. The clear coat employs special elastomeric polymers that allow light scratches and swirls to “heal” over time. XPEL Protection Film - ULTIMATE STEALTH is coated with ultra clear high performance acrylic adhesive which has excellent adhesion on a broad range of surfaces, while resisting disturbances during installation.

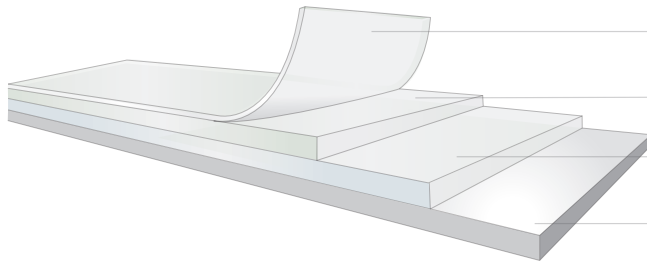
## Typical Applications:

Matte polyurethane for stone chip protection, high wear and abrasion

## Typical Industry Sectors:

Automotive, motorcycle, RV, powersports, bicycle, aircraft and most modes of transportation

## Film Construction:



- 0.5 mils low surface energy matte polyurethane clear coat employing elastomeric polymers designed to eliminate staining, contamination and surface scratches
- 6 mils polyurethane specially formulated to have excellent flexibility and memory when stretched
- 1.6 mils ultra clear modified acrylic copolymer specially formulated to have good tack on automotive painted surfaces and excellent reworkability and remove-ability
- 2 mils matte polyester release liner

## GENERAL CHARACTERISTICS

Properties	Typical Values	Unit of Measure	Test Method
<b>Physical</b>			
Topcoat	0.5	mil ± 5%	
Film	6		
Adhesive	1.6		
Liner	2.0		
<b>Peel Adhesion</b>			
Initial peel	6.2 N/cm	1 hr @ RT	TSM7505G
Normal State	8.35 N/cm	7 days @ RT	
After Heat Age	21.3 N/cm	16 days @ 80°C	
After Water Immersion	11.6 N/cm	400 hr 40°C	
After accelerated weathering	18.5 N/cm	1000 hr	
<b>Gloss</b>	58 %	20 Degree	BS EN ISO 2813
<b>Aging Test (appearance)</b>			
Heat Age	Pass-No Detrimental Effect	16 days @ 80°C	TSM7505G
Water Immersion	Pass-No Detrimental Effect	400 hr 40°C	
Post Xenon weathering	Pass-No Detrimental Effect	1000 hr (41 days)	
Outdoor exposure	Pass-No Detrimental Effect	FL exposure-1 yr	
Boiling water resistance	Pass-No Detrimental Effect	5 min in boiling water	
<b>Stone Chip Resistance - Gravelometer</b>	Pass-No Detrimental Effect	Chipping ratings per SAE	ASTMD3170
<b>Mechanical</b>			
Ultimate Strength @ Break	64.9 MPa	Test rate: 1.0 mm/min	ASTMD638-95
Modulus	57.3 MPa		
Tensile Elongation @ Break	310.5%		
<b>Solvent Testing</b>			
Water & Soap Spotting	No Detrimental Effect		Immerse for 30 min check in 24 hrs. for change
Acid Spotting	No Detrimental Effect		
Gasoline	No Detrimental Effect		
Lacquer Thinner	No Detrimental Effect		
Enamel Reducer	No Detrimental Effect		
Acetone	No Detrimental Effect		

**Shelf Life:**

XPEL recommends XPEL Protection Film - ULTIMATE STEALTH be stored at 50F-90F, and 40%-60% RH. Film should be used within one year of purchase

**Installation:**

XPEL Protection Film - ULTIMATE is designed to be used on any fully cured OEM paint surface. Surfaces that have been repainted are only suitable for installation of the film if the surface was repainted according to recommendations as set by the OEM. XPEL maintains a complete set of detailed installation instructions, which may viewed at [www.xpel.com](http://www.xpel.com). Generally, a wet application of the product is recommended.

**Warranty:**

XPEL Technologies Corp. warrants XPEL Protection Film - ULTIMATE to be free of any manufacturing or workmanship defects for ten (10) years from the date of purchase. The warranty does not cover damage to XPEL Protection Film - ULTIMATE caused by erroneous application, accidents or collisions, intentional misuse or ordinary wear, nor damage, dents or chips to the protected surface or film caused by impact of rocks or any other debris. XPEL will replace any film that does not meet this warranty. The replacement of damaged film is the exclusive remedy; liability does not extend to any other damages, incidental, consequential or otherwise.

**Notice:**

The representations of performance and suitability for use contained in this Technical Data Sheet are meant only as a guide. 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 is suitable for that intended use.



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