

# XPEL Protection Film - ULTIMATE

High Performance Ultra-Clear Clear-Coated Aliphatic Polyurethane Film

Technical Data Sheet – February 2011



## General Description:

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

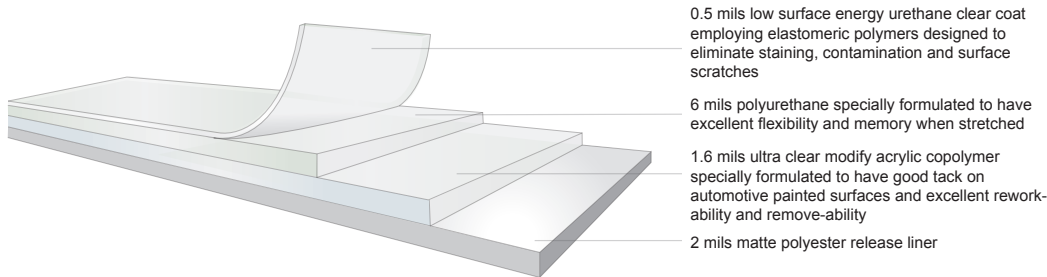
## Typical Applications:

Clear gloss 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:



## GENERAL CHARACTERISTICS

Properties	Typical Values	Unit of Measure	Test Method
<b>Physical</b> Topcoat Film Adhesive Liner	0.5 6 1.6 2.0	mil ± 5%	
<b>Peel Adhesion</b> Initial peel Normal State After Heat Age After Water Immersion After accelerated weathering	5.6 N/cm 7.53 N/cm 17.6 N/cm 10.2 N/cm 14.6 N/cm	1 hr @ RT 7 days @ RT 16 days @ 80°C 400 hr 40°C 1000 hr	TSM7505G
<b>Gloss</b>	>96 %	20 Degree	BS EN ISO 2813
<b>Aging Test (appearance)</b> Heat Age Water Immersion Post Xenon weathering Outdoor exposure Boiling water resistance	Pass-No Detrimental Effect Pass-No Detrimental Effect Pass-No Detrimental Effect Pass-No Detrimental Effect Pass-No Detrimental Effect	16 days @ 80°C 400 hr 40°C 1000 hr (41 days) FL exposure-1 yr 5 min in boiling water	TSM7505G
<b>Stone Chip Resistance - Gravelometer</b>	Pass-No Detrimental Effect	Chipping ratings per SAE	ASTMD3170
<b>Mechanical</b> Ultimate Strength @ Break Modulus Tensile Elongation @ Break	64.9 MPa 57.3 MPa 310.5%	Test rate: 1.0 mm/min	ASTMD638-95
<b>Solvent Testing</b> Water & Soap Spotting Acid Spotting Gasoline Lacquer Thinner Enamel Reducer Acetone	No Detrimental Effect No Detrimental Effect No Detrimental Effect No Detrimental Effect No Detrimental Effect No Detrimental Effect		Immerse for 30 min check in 24 hrs. for change

### **Shelf Life:**

XPEL recommends XPEL Protection Film - ULTIMATE be stored at 50°F-90°F, 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 Coverage:**

XPEL warrants XPEL ULTIMATE Paint Protection Film to be free from defects in materials and workmanship for ten (10) years from the date of purchase. Covered defects include: yellowing, staining, cracking, blistering and delaminating. This warranty does not extend coverage to damage caused by normal wear and tear, road debris impact, accidents, collisions or intentional damage of any kind.

#### **Limitations:**

The warranty and remedies described above are the exclusive warranties available. Authorized XPEL Dealers do not have authorization to modify or extend the warranty in any fashion. XPEL will be solely responsible for determining the validity of all claims and reserves the right to deny claims that do not meet the criteria as described above. The replacement of the defective film, including parts and labor, is the exclusive remedy; liability does not extend to any other damages, incidental, consequential or otherwise. Reimbursement for labor charges covered by this warranty will be made directly to the Authorized XPEL Dealer and will be calculated by using the coverage allowance published by XPEL.

### **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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