3M™ Paint Protection Film Series PUL2000

Technical Data Sheet

3M™ Paint Protection Film Series PUL2000 protects automotive surfaces from stone chips, scratches, bug damage, road tar and automotive fluid stains on paint and other vulnerable surfaces. These films features a tough, flexible polyurethane base with a protective polyurethane clearcoat that resists fading from punishing outdoor weathering - including UV radiation. A 2 mil acrylic adhesive applied to the films is pressure-sensitive for fast, efficient application. This transparent material has been rigorously tested for gravel chip resistance as well as staining, discoloration and yellowing. The film shows excellent tensile strength and resists elongation or shrinkage.

The tough, durable, virtually invisible urethane films will keep vehicles looking newer longer, without changing the design features or color. The film creates a barrier - protecting vulnerable areas such as front bumpers, side mirrors, door handle cavities, door edges, rocker panels and rear fender panels.

3M™ Paint Protection Film Series PUL2000 films feature:

- Durable, nearly invisible protection against scratches, chips, vehicle fluids, tar, and UV radiation on automotive paint and other vulnerable surfaces
- Polyurethane film and protective clearcoat resist chipping, scratching, staining and discoloration
- Pressure-sensitive adhesive makes for fast, efficient application without curing
- Flexible, die-cuttable film makes application to complex automotive surfaces easier
- Die-cut, premasked parts and simple dispensing tools helps reduce production costs
- Excellent alternative to molded protectors which can detract from finished vehicle appearance

Applications

Rocker Panel

Bed Leading Edge

Hood Leading Edge

Fender

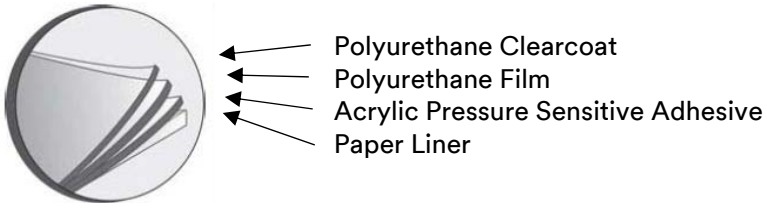
Wheel Edge

Door Handle

Rear Quarter Panel

Trunk Ledge

Product Construction



Physical Properties

	PUL2006	PUL2008	PUL2012
Color	Transparent	Transparent	Transparent
Thickness without Adhesive	0.152 mm (6 mils)	0.203 mm (8 mils)	0.305 mm (12 mils)
Overall Thickness	0.203 mm (8 mils)	0.245 mm (10 mils)	0.356 mm (14 mils)
Liner	6.2 mils – 7.1 mils	6.2 mils – 7.1 mils	6.2 mils – 7.1 mils

Product Characteristics

Characteristics	Results
Shrinkage	< 0.1%
Tensile	12 MPa (1740 psi)
Elongation	> 200 %

Performance Properties

Performance tests are run using standard test procedures in 3M laboratories. These values presented are typical and not to be used for specification purposes.

Test Description	Results
180° Peel Adhesion (Aluminum)	
20 minutes at room temperature	600 N/m (3.4 lb/in)
72 hours at room temperature	700 N/m (4.0 lb/in)
168 hours at 70°C/158°F	700 N/m (4.0 lb/in)
168 hours at 35°C/95°F & 100%RH	700 N/m (4.0 lb/in)
Thermal Cycle	700 N/m (4.0 lb/in)
Stain Resistance	
Unleaded gasoline; Diesel fuel; Motor oil	No discoloration or adhesion loss
Gravelometer	
SAE J400 - 2 cups of gravel at 25°C/77°F	Pass – no paint chipping
Natural Weathering	
24 months at 45° south-facing Arizona exposure	< 10% gloss loss / < 2.5 ΔE color change
24 months at 5° south-facing Florida exposure	< 10% gloss loss / < 2.5 ΔE color change

Availability

3M™ Paint Protection Films are available direct from 3M or 3M-approved converters. Contact your 3M Automotive Division account representative for roll sizes, minimum order quantities, prices, and terms and conditions of sale.

Application Conditions

Recommended temperature range of 24 ± 6°C for part, vehicle body, and ambient conditions. Heat or cool as needed to maintain required temperature range. Clean application area is required.

Shelf Life

One year from date of receipt by customer when stored in original packaging at 22 ± 4°C and at a maximum moisture of 60% RH.

Regulatory Information

Please refer to the product label and Article Information Sheet (AIS) for health and safety information before using.

Contact Information

The information provided in this technical document is intended as a guide for these products. For more information or help in selecting a 3M product for an application, please contact your 3M technical service representative or call 1-800-328-1684.

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