



F-506

3M™ Standard Blackout Film

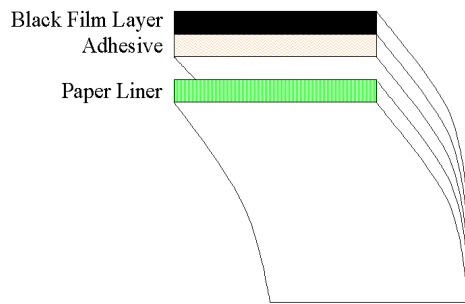
Technical Data Sheet

General Description

F-506 is a high performance blackout film intended for application to a wide range of exterior surfaces such as window extensions for the upper body areas and for wheel arches, rocker panels and door treads in lower body areas.

The film is characterised by high calliper thickness with a structured surface and matt black appearance. It is highly resistant to stone chipping, scratches and abrasion with excellent weathering performance. The adhesive layer provides reliable high adhesion under extreme conditions of environmental stress such as climatic change and humidity cycling.

General Construction



Special Features

The 3M™ Blackout System integrates advanced application techniques and converting processes to provide cost effective alternative solutions to painted surfaces, conforming to complex shapes and flange wraps which meet OEM specifications and requirements for performance and durability.

General Characteristics

Surface	Random heavy texture
Colour	Matt black
Film	PVC
Adhesive	Pressure sensitive modified acrylic with low initial tack but with high final bond strength to a wide variety of automotive surfaces providing reliability in all types of environmental conditions
Liner	Recyclable standard paper liner for easy film release with lay flat characteristics for perfect cut edges
Shelf Life	6 months from date of receipt by customer when stored in original packaging at 22 ± 4 °C and at maximum moisture of 60 %

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Physical Properties

(Typical Values)

Characteristics	Results	Test Method
Thickness (film + adhesive)	440 ± 50 µm	3M LS 034
Tensile Strength	1818 N/cm ²	3M LS 005
Elongation	269 %	3M LS 006
Dimensional Stability (Shrinkage) after 7d 80 °C		
- longitudinal / transversal	0,14 % / 0,14 %	3M LS 026
after 30 min. 120 °C		
- longitudinal / transversal	0,08 % / 0,14 %	3M LS 026

Performance Properties

(Typical Values)

180° Peel Adhesion (Aluminium)	Results	Test Method
30 min. at SLC	8,0 N/cm	3M LS 007
72 h at SLC	10,0 N/cm	3M LS 007
7 d at 80 °C	13,5 N/cm	3M LS 008
7 d at 38 °C, 98 % moisture	10,6 N/cm	3M LS 010
Thermal Cycling	10,5 N/cm	3M LS 009
Surface Appearance	Results	Test Method
7 d at 80 °C	no changes	3M LS 019
7 d at 38 °C, 98 % moisture	no changes	3M LS 019
Thermal Cycling	no changes	3M LS 019
Resistance to Wax and Dewax	no changes	3M LS 024
Resistance to Fluids (25 rub cycles)		
- Windshield Washer Solvent	no changes	3M LS 023
- Antifreeze	no changes	3M LS 023
- Car Wash Detergent	no changes	3M LS 023
- Oil	no changes	3M LS 023
Gasoline Resistance (dip test)		
- Unleaded Super Fuel	no changes	3M LS 015
- Diesel Fuel	no changes	3M LS 015
High Pressure Cleaning	no surface damage or adhesion loss	3M TMAE 002
2000 h Accelerated Weathering	no changes	SAE J 1960 / DIN 53387

Additional Information

This data sheet contains specific information about the product. General characteristics and application rules of high performance blackout films are available separately.

Important notice to purchaser

All statements, Technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of liability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.



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