Automotive
Technical Datasheet

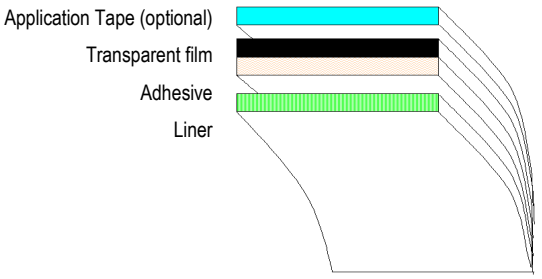
3M

VentureShield™ High Performance Protective Film 7510CC/ CS-LD

General Description:

3M™ High Performance Protective films are specially designed to protect painted automobile surfaces, improving functionality and allowing the conservation of visual appearance for long periods. 3M™ High Performance Protective films allow customized adjustment to application needs regarding improved chemical and mechanical resistance (like stone chip), long-term durability against environmental exposure and conformability to complex shapes and wrap-arounds.

Construction:



Special Characteristics:

7510CC/ CS-LD is a protective film, which can be used for a wide range of exterior automotive applications. A characteristic feature of this film is its high transparency and the high gloss provided by its high performance surface treatment. Its excellent functionality is needed for protection of many automobile specific applications e.g. glass sunroofs, surfaces between the car body and the bumper, painted surfaces at door edges and around door handles as well as for wheel arch areas. 7510CC/ CS-LD is well resistant against abrasion and scratching even under high temperature influences. Furthermore this film performs well under conditions of medium gravel impact, helps to reduce noise and provides resistance to splintering at low temperatures. The adhesive has been designed to provide reliable permanent adhesion under all common environmental loads.

General Properties:

Surface	High transparent and glossy
Film	especially developed PUR resin combined with an additional functional layer
Adhesive	Acrylate adhesive with very high bond strength developed for automotive paints surfaces
Liner	Plastic liner for easy removal
Shelf life	12 months from date of receipt by customer when stored in original cartons at 22 ± 4°C and at max. 60% relative humidity

Physical Properties:

(Typical Values)

Criteria	Results	Specification
Nominal thickness (film and adhesive)	210 µm	3M ADSD 0596
Nominal Weight (film + adhesive)	240g/m²	3M ADSD 0596
Tensile strength and elongation	5678 N/cm², 453 %	3M ADSD 0596
Dimensional stability (Shrinkage) 30min. 120℃	< 0,5 %	3M ADSD 0596

Performance Properties:

(Typical Values)

180° Peel adhesion (Aluminum)	Results	Test Method
30 Min. at SLC (N/cm)	8,37	3M LS 007
72h . at SLC (N/cm)	11,2	3M LS 007
7 days at 80 °C (N/cm)	15,2	3M LS 008
7 days 38 °C, 98 % moisture (N/cm)	15,91	3M LS 010
Thermal Cycling (N/cm)	14,46	3M LS 009
Surface Appearance	**Results**	**Test Method**
7 d at 80 ℃	No changes	3M LS 019
30 min. 120 ℃	No changes	3M LS 019
7 d at 80 ℃	No changes	3M LS 019
7 days 38 ℃, 98 % moisture (N/cm)	No changes	3M LS 019
Resistance to Wax and Dewax	No changes	3M LS 024
Resistance to Fluids (Crockmeter 10 cycles) Isopropanol/ Water 1:1 0,01% Dishwasher solution Commercial paint cleaner	 No changes No changes No changes	3M LS 023
Resistance to Diesel (rub test, Crockmeter, 6 Cycles)	Corresponds	3M LS 015
Resistance to Diesel (Immersion test)	Corresponds	3M LS 015
Abrasion Resistance (Crockmeter dry)	No changes	3M LS 029
High Pressure Cleaning	Corresponds	3M TMAE 002

Additional Information

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

Important notice to purchaser

All statements, technical information and recommendations herein are based on tests we believe to 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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