



3M™ Polyester Label Material 76712

Product Data Sheet

July 2011
Supersedes : April 2006

Product Description

3M Polyester Label Material 76712 is a 36 micron, silver polyester labelstock with a matt print receptive topcoat. The TT3 topcoat offers excellent image durability in harsh environments. This product utilizes 3M™ Adhesive 450E, a versatile adhesive suitable for application to a variety of surfaces used in indoor applications.

Product Descriptor / Dispatch Labelling

76712 3M TT3 MS PET36-450E-90WG

Physical Properties

Not for specification purposes
(Calipers are nominal values)

Facestock	42 micron matt silver topcoated polyester
Adhesive	18 micron 450E acrylic
Liner	77 micron, 90 g/m ² White Densified Glassine

Key Features

- TT3 topcoat offers high abrasion resistance combined with excellent resistance of the thermal transfer image when exposed to aggressive chemicals such as brake fluid.
- Polyester facestock provides durability in harsh environments.
- General purpose adhesive offering good all round performance on a range of surfaces.
- Densified glassine liner for consistent die cutting.
- UL Recognized for Indoor Dry Location use (File MH18072)

Application Ideas

- Barcode labels and rating plates
- Property identification and asset labeling
- Warning, instruction, and service labels for durable goods.

Performance Characteristics

Not for specification purposes

Standard Test Conditions are 23°C and 50% Relative Humidity

180° Peel Adhesion tested using FINAT Test Procedure FTM 1 (300mm/min)

90° Peel Adhesion tested using FINAT Test Procedure FTM 2 (300mm/min)

Adhesion	20 Minutes at Standard Conditions		72 Hours at Standard Conditions	
	180° Peel N/25mm	90° Peel N/25mm	180° Peel N/25mm	90° Peel N/25mm
Stainless Steel	11.8	7.4	16.3	8.9
ABS	11.9	8.4	15.8	8.4
Polycarbonate	11.9	9.3	16.9	9.5
Polypropylene	10.4	7.7	12.9	7.3

Adhesion	72 Hours at 70°C		72 Hours at - 40°C	
	180° Peel N/25mm	90° Peel N/25mm	180° Peel N/25mm	90° Peel N/25mm
Stainless Steel	20.4	14.1	16.5	8.8
ABS	16.8	11.4	14.6	9.3
Polycarbonate	17.0	11.6	15.7	9.3
Polypropylene	11.7	6.3	12.6	6.8

Liner Release tested using FINAT Test Procedures

FTM 3 (180° removal of liner from face material at 300mm/min)

FTM 4 (180° removal of liner from face material at 10m/min)

Liner Release	Rate of Removal	Release Force	Units
FTM 3	300 mm per min	6.1	cN/50mm
FTM 4	10 m per min	4.9	cN/25mm

Temperature resistance of label applied to stainless steel.

Other substrates should be tested as per application

Service Temperature	-40 to 150°C
Minimum Application Temperature	5°C

Processing**Printing:**

Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. Thermal transfer printing with resin ribbons is recommended for optimum durability. The material may also be printed using standard roll-processing methods including flexography and letterpress. The compatibility of ink systems and printing methods should be verified by testing in the actual process.

Die Cutting:

Rotary die cutting is recommended. Fanfolding of labels is not recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

Packaging:

Finished labels should be stored in plastic bags.

Special Considerations	<p>For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.</p> <p>NOTE: When using solvents, read and follow the manufacturer's precautions and directions for use.</p> <p>For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 5°C can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure.</p>
Storage	Store at standard room temperature conditions of 21°C and 50% relative humidity.
Shelf Life	24 months from date of dispatch by 3M when stored in the original packaging at 21°C & 50 % relative humidity
For Additional Information	To request additional product information or to arrange for sales assistance, call..... Address correspondence to: 3M
Important Notice	All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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