



3M™ Polyester Label Material 76610

Product Data Sheet

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Supersedes : April 2006

Product Description

3M Polyester Label Material 76610 is a 50 micron, white polyester labelstock with a matt print receptive topcoat and is designed for thermal transfer printing. This product utilizes 3M™ Adhesive 350E, designed to provide excellent adhesion to high and low surface energy plastics, metals, painted metals and powder coatings.

Product Descriptor / Dispatch Labelling

76610 3M TT3 MW PET50-350E/20-65WG

Physical Properties

Not for specification purposes
(Calipers are nominal values)

Facestock	56 micron matt white polyester
Adhesive	20 micron 350E acrylic
Liner	56 micron, 62 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 offers good thermal stability and provides durability in harsh environments.
- 350E is 3M's most universal labelstock adhesive and offers excellent adhesion, even on low surface energy substrates, combined with excellent temperature and chemical resistance.
- Densified glassine liner for consistent die cutting.
- UL and cUL recognized (File Number MH18072)

Application Ideas

- Barcode labels and rating plates
- Property identification and asset labeling in harsh environments
- 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	15.6	11.2	19.7	14.8
ABS	14.0	10.3	16.8	11.9
Polycarbonate	14.1	10.5	17.4	13.0
Polypropylene	14.5	9.9	16.7	11.2

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	22.7	17.0	19.1	14.7
ABS	18.1	13.9	15.9	12.2
Polycarbonate	18.1	14.3	16.8	13.1
Polypropylene	10.3	7.7	16.5	11.7

Adhesion	72 Hours at 40°C and 95% RH	
	180° Peel N/25mm	90° Peel N/25mm
Stainless Steel	20.4	16.0
ABS	14.9	10.7
Polycarbonate	14.9	9.7
Polypropylene	16.6	11.0

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	12.3	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.

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	At least 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
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