# 3M 3M<sup>™</sup> Polyester Label Material 76751S

# **Product Data Sheet**

# August 2011 Supersedes : May 2006

Product Description	3M Polyester Label Material 76751S is a 50 micron, silver polyester labelstock with a matt print receptive topcoat, and is designed for thermal transfer printing. The TT3 topcoat offers excellent image durability in harsh environments. This product utilizes 3M <sup>™</sup> Adhesiv 350E, designed to provide excellent adhesion to high and low surface energy plastics, metals, painted metals and powder coatings.			
Product Descriptor / Dispatch Labelling	h 76751S 3M TT3 MS PET50-350E/47-90DWG			
Physical Properties Not for specification purposes	Facestock	56 micron matt silver topcoated polyester		
(Calipers are nominal values)	Adhesive	46 micron 350E acrylic		
	Liner	77 micron, 90 g/m <sup>2</sup> white densified double-sided glassine		
Key Features	<ul> <li>TT3 topcoat offers high abrasion resistance combined with excellent resistance of the thermal transfer image when exposed to aggressive chemicals such as brake fluid.</li> <li>Polyester facestock offers good thermal stability and provides durability in harsh environments.</li> <li>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.</li> <li>46 micron adhesive coat weight gives excellent adhesion to textured surfaces</li> <li>Densified double-sided glassine liner for consistent die cutting. The double-side liner improves ease of dispensing.</li> <li>UL and cUL recognized (File Number MH18072)</li> </ul>			
Application Ideas	<ul> <li>Barcode labels and rating plates</li> </ul>			
	<ul> <li>Property identification and asset labelling in harsh environments</li> </ul>			
	<ul> <li>Warning, instruction, and service labels for durable goods.</li> </ul>			

# **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	
	180º Peel N/25mm	<b>90º Peel</b> N/25mm	180º Peel N/25mm	90º Peel N/25mm
Stainless Steel	23.1	20.4	29.4	24.6
ABS	20.3	15.3	24.6	20.1
Polycarbonate	22.4	16.3	26.4	20.5
Polypropylene	21.2	16.0	22.6	19.9

Adhesion	72 Hours at 70⁰C		72 Hours at - 40⁰C	
	180º Peel N/25mm	90º Peel N/25mm	180º Peel N/25mm	90º Peel N/25mm
Stainless Steel	28.0	25.5	27.1	25.6
ABS	25.1	18.0	23.2	24.8
Polycarbonate	23.7	21.4	26.6	23.8
Polypropylene	17.0	10.8	23.4	21.7

Adhesion	72 Hours at 40⁰C and 95% RH		
	180º Peel	90º Peel	
	N/25mm	N/25mm	
Stainless Steel	26.8	24.5	
ABS	21.1	23.8	
Polycarbonate	18.9	23.8	
Polypropylene	23.9	19.5	

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	18.9	cN/50mm
FTM 4	10 m per min	9.0	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	For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.
	<b>NOTE:</b> When using solvents, read and follow the manufacturer's precautions and directions for use.
	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.
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 $^{\circ}$ & 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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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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