3M™ Polyester Label Material 76953

Product Data Sheet

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Product Description

3M Polyester Label Material 76953 is a 55 micron, yellow polyester labelstock with a gloss 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

76953 GY PET55-350E/20-90LK

Physical Properties

Not for specification purposes
(Calipers are nominal values)

Facestock	55 micron yellow polyester laminate
Adhesive	20 micron 350E acrylic
Liner	93 micron, 90 g/m² white kraft liner

Key Features

- Facestock is topcoated for thermal transfer printing. Resin ribbons are recommended for optimum durability. The topcoat also provides improved ink anchorage for traditional forms of press printing
- Polyester facestock offers good thermal stability and provides durability in harsh environments.
- 350E adhesive offers excellent adhesion, even on low surface energy substrates, combined with excellent temperature and chemical resistance
- UL and cUL Recognized (File MH18072).

Application Ideas

- Warning, instruction and service labels.
- Equipment labelling.
- Rating plates.

Performance Characteristics

Not for specification purposes

Standard Test Conditions are 23ºC and 50% Relative Humidity

180º Peel Adhesion tested using FINAT Test Procedure FTM 1 (300mm/min)
90ºPeel 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	**90º Peel** N/25mm	**180º Peel** N/25mm	**90º 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	17.6	13.0
Polypropylene	14.5	9.9	16.7	11.2

Adhesion	**72 Hours at 70ºC**		**72 Hours at - 40ºC**	
	180º Peel N/25mm	**90º Peel** N/25mm	**180º Peel** N/25mm	**90º 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 40ºC and 95% RH**	
	180º Peel N/25mm	**90º 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 (180º removal of liner from face material at 300mm/min)
FTM 4 (180º removal of liner from face material at 10m/min)

Liner Release	**Rate of Removal**	**Release Force**	**Units**
FTM 3	300 mm per min	12.7	cN/50mm

Temperature resistance of label applied to stainless steel.
Other substrates should be tested as per application

Service Temperature	-40 to 150ºC
Minimum Application Temperature	5ºC

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 topcoat provides improved ink anchorage for standard roll-processing methods including flexography, letterpress, and screen-printing. The compatibility of ink systems and printing methods should be verified by testing in the actual process.

Die Cutting:

	Material may be die cut using flat-bed or rotary dies. 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. **NOTE:** 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 21ºC 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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