Polyester Label Material I00Y3

Product Data Sheet

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Product Description

3M™ Polyester Label Material I00Y3 is a 50 micron, silver polyester labelstock with matt print receptive topcoat, and is designed for laser toner printing. This product utilizes 3M™ Adhesive HP250, offering high adhesive strength on a variety of surfaces including high surface energy (HSE) plastics and metals.

Product Descriptor / Dispatch Labelling

I00Y3 Laserprint PT50 Matt Silver / HP250 / 90LK

Physical Properties

Not for specification purposes
(Calipers are nominal values)

Facestock	55 micron matt silver polyester
Adhesive	20 micron HP250 acrylic
Liner	85 micron, 90 g/m² white kraft liner

Key Features

- The facestock is topcoated with a matt print receptive coating, designed to accept images using laser toner. 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.
- Adhesive provides high ultimate adhesion on a variety of substrates.
- 90 g/m^2 clay coated kraft liner designed for sheet fed laser toner products. The liner can be back printed.

UL and cUL Recognized (File 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 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 Condition	
	180º Peel N/25mm	**90º Peel** N/25mm	**180º Peel** N/25mm	**90º Pe** N/25m
Stainless Steel	16.9	12.8	18.8	15.1
ABS	16.9	11.8	18.5	13.5
Polycarbonate	16.9	12.6	19.2	14.0
Polypropylene	12.7	8.6	15.3	8.7

Adhesion	72 Hours at 70ºC		72 Hours at - 40ºC	
	180º Peel N/25mm	**90º Peel** N/25mm	**180º Peel** N/25mm	**90º Pe** N/25m
Stainless Steel	21.4	16.5	18.1	14.6
ABS	21.2	10.6	17.6	13.3
Polycarbonate	21.2	17.8	19.0	14.2
Polypropylene	12.0	6.5	14.3	11.1

Adhesion	72 Hours at 40ºC and 95% RH	
	180º Peel N/25mm	**90º Peel** N/25mm
Stainless Steel	20.9	17.5
ABS	13.8	8.2
Polycarbonate	12.6	11.7
Polypropylene	12.5	8.3

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	32.7	cN/50mm
FTM 4	10 m per min	18.9	cN/25mm

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	**General:** Use label material in environment of 21°C and 50% relative humidity. 1.5mm periphery removal of the label matrix is recommended to minimise adhesive ooze. If foam is used to pack the die when rotary sheeting, the foam should be kept at least 19 mm away from knife edges. Poly-bag sheets after converting the label material. Keep the label material in polyethylene (LDPE) bags until printing. No more than 250 sheets per box. Fan all edges of sheets prior to laser printing. Use the straightest printing path when printing laser label materials. The extreme heat and pressure used in the toner fusing section of some laser printers may cause curl in the printed label material. When converting to A4 sheets it is recommended that the longest edge of the sheet is parallel to the machine direction. **Printing:** Facestock is topcoated for improved ink receptivity and is designed for laser toner printing. It is printable by all standard roll processing methods including flexography, hot stamp, 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℃ & 50 % relative humidity

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes.
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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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