



# 3M™ Vinyl Label Material 7051SA

## Product Data Sheet - Provisional

October 2013  
Supersedes : July 2013

**Product Description** 3M™ Vinyl Label Product 7051SA is a high performance material that offers good conformability and moisture resistance. The product can be printed using solvent screen and some solvent ink jet inks. This product utilizes 3M™ Adhesive 350E, structured, designed to provide excellent adhesion to high and low surface energy plastics, metals, painted metals and powder coatings.

**Product Descriptor / Dispatch Labelling** 7051SA

### Physical Properties

Not for specification purposes  
(Calipers are nominal values)

<b>Facestock</b>	95 micron Soft White Vinyl
<b>Adhesive</b>	28 micron 350E acrylic
<b>Liner</b>	195 micron, 140 g/m <sup>2</sup> Embossed Polycoated White Sheet

### Key Features

- Vinyl Material provides a printing surface for solvent Screen or Ink Jet Ink. The printed surface has good resistance to abrasion, water and heat.
- Designed for up to 5 years outdoor durability (based on 2000 hour Xenon arc test exposure).
- 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.
- Structured adhesive designed to allow air to flow from between adhesive and substrate such that hand applied labels can be applied free of bubbles and creases.
- Liner provides easy sheet processing and is designed to provide layflat product.

### 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
<b>Stainless Steel</b>	14.0	9.7	14.8	10.0
<b>ABS</b>	14.0	10.8	14.0	7.9
<b>Polycarbonate</b>	13.7	8.9	15.9	9.4
<b>Polypropylene</b>	12.1	8.2	15.2	9.5

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
<b>Stainless Steel</b>	10.3	5.9	15.8	11.1
<b>ABS</b>	6.4	6.1	14.6	8.3
<b>Polycarbonate</b>	6.0	6.5	15.9	9.7
<b>Polypropylene</b>	7.1	2.8	15.0	9.3

Adhesion	72 Hours at 40°C and 95% RH	
	180° Peel N/25mm	90° Peel N/25mm
<b>Stainless Steel</b>	15.8	10.2
<b>ABS</b>	14.6	8.1
<b>Polycarbonate</b>	15.9	8.7
<b>Polypropylene</b>	15.0	9.2

Liner Release tested using FINAT Test Procedures  
FTM 3 (180° removal of liner from face material at 300mm/min)

Liner Release	Rate of Removal	Release Force	Units
FTM 3	300 mm per min	10 to 100	cN/50mm

**Processing**

**Printing:**

A non topcoated print surface, gives good printing results with the following ink systems

**Solvent Screen Inks**

3M™ Screen Printing UV Ink Series 9800  
Nazdar's 7700 and System 2  
Sericol's Polyplast PY, GVYL, VYL, TMI and Techmark

**Ink Jet Print/Cut**

Facestock is suitable for Ink Jet printing with solvent based inks. The product prints well with EcoSolvent Max and EcoSolMax2 inks used on the Roland EcoSol VersaCam printers. The product cuts well with the cutting devices on this range of printer. Other Eco Solvent ink grades should be checked for optimum print settings.

**Die Cutting:**

Die cut is recommended with flatbed dies. The lay-flat liner also allows kiss cutting and back splitting.  
Sheet label materials are not recommended for rotary die cutting and stripping operations, therefore care should be taken to process this liner through rotary die cutting processes

**Packaging:**

Finished labels should be stored in plastic bags.

<b>Special Considerations</b>	<p>For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.</p> <p><b>NOTE:</b> 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>
<b>Storage</b>	Store at standard room temperature conditions of 21°C and 50% relative humidity.
<b>Shelf Life</b>	At least 24 months from date of dispatch by 3M when stored in the original packaging at 21°C & 50 % relative humidity
<b>For Additional Information</b>	To request additional product information or to arrange for sales assistance, call 0870 6080050 Address correspondence to: 3M United Kingdom PLC, 3M House, 28 Great Jackson Street, Manchester, M15 4PA
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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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