



# **Technical Data Sheet**

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3M<sup>™</sup> Vinyl Durable Label Material FV027805



Product Details

# Product Description

3M<sup>™</sup> Vinyl Durable Label Material FV027805 is a flexible and conformable longer life material that offers durability and moisture resistance. The polymerically plasticized nature of this soft flexible vinyl imparts long term dimensional stability for demanding applications. This label product utilizes 3M<sup>™</sup> P1480, which is a high performance tackified acrylic formulated for acid resistance and adhesion to polyolefins.

# Product Features

- Adhesive exhibits high initial tack and ultimate adhesion and adheres well to textured surfaces and powder coats.
- Liner for 3M label material FV027805 is designed for the ultimate in layflat. The backside is not printable.

# **Technical Information Note**

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

# **Typical Physical Properties**

Attribute Name	Value
Adhesive Type	P1480 Perm. 21
Facestock	Soft White Vinyl NTC
Adhesive Coat Weight	2 g/100 in <sup>2</sup> ± 10%

Attribute Name	Value
Facestock Thickness	0.081 mm (3.2 mil)
Liner	90# Polyctd. bleached kraft sheet polyethylene coated on
	two sides
Liner Thickness	0.17 mm (6.8 mil)

# **Construction Tested**

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 1.1 mil of adhesive on a polished stainless steel panel.

# **Typical Performance Characteristics**

Test Method: TLMI

Attribute Name	Temperature	Substrate	Value
180° Peel Adhesion	23 °C (73 °F)	Stainless Steel	8.8 N/cm (80 oz/in) <sup>1</sup>
Liner Release	23 °C (73 °F)		4 — 15.7 <sup>2</sup>
Shear Adhesion			1 h <sup>3</sup>
Loop Tack			6.16 N/cm (56 oz/in) <sup>1</sup>

<sup>1</sup> 300 mm/min (12 in/min)

<sup>2</sup> 180° removal, 300 in/min

<sup>3</sup> 1.0 in<sup>2</sup> x 1000g

Attribute Name	Value
Application Temperature	5 — 49 °C (40 — 120 °F)
Long Term Temperature Resistance	60 °C (140 °F) <sup>1</sup>
Minimum Long Term Temperature Resistance	-29 °C (-20 °F) 1

<sup>1</sup> Long Term (day, weeks)

Attribute Name	Value
Note	Calipers are nominal values

#### **Printing**

A non-topcoated print surface designed for use with solvent screen ink systems.

#### Solvent Screen Inks:

Nazdar's 7700 and System 2 Sericol's Polyplast PY, GVYL, VYL, TMI and Techmark

#### **Converting**

Die cut with steel rule or flatbed dies. The 90# lay-flat liner allows kiss cutting and back splitting. The converter can cut through the vinyl facestock without cutting through the liner. Sheet label materials are not recommended for rotary die cutting and stripping operations.

#### **Special Considerations**

For maximum bond strength, the surface should be clean and dry. Typical cleaning solvents are heptane and isopropyl alcohol. For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 40°F (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. When using solvents, read and follow the manufacturer's precautions and directions for use.

#### Handling/Application Information

#### **Application Examples**

- Nameplates and product ID labels
- Rating plates
- Property identification and asset labeling
- Warning, instruction, and service labels for durable goods, equipment/machinery and lawn and garden

## Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in a sealed plastic bag, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

## **Information**

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## **ISO Statement**

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