



Technical Data Sheet

3M™ PET Durable Label Material 8417



[Product Details](#)



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Product Description

3M™ PET Durable Label Material 8417 is a self-wound (linerless) transparent polyester film coated with 3M™ Adhesive 100 High-temperature Acrylic. It is often used as an overlaminate in conjunction with 3M™ PET Durable Label Material 8418.

Product Features

- Adheres instantly to a variety of surfaces.
- Tough film backing resists edge tear when processing and dispensing.
- Non-corrosive and chemical resistant.
- High and low temperature stability.
- 3M™ Polyester Film Tape 8417 provides transparency when used as an overlaminate.

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	3M™ Adhesive 100 High-temperature Acrylic
Facestock	Polyester

Attribute Name	Test Method	Value
Total Tape Thickness	ASTM D3652	0.056 mm (2.2 mil)
Adhesive Thickness		0.03 mm (1.2 mil)
Facestock Thickness		0.025 mm (1 mil)

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 23 °C (73 °F)

Dwell Time: 10 min

Test Method: ASTM D3330

Substrate	Value
ABS	3.8 N/cm (35 oz/in) ¹
Glass	4.9 N/cm (45 oz/in) ¹
Polypropylene (PP)	1.2 N/cm (11 oz/in) ¹
Stainless Steel	4.1 N/cm (38 oz/in) ¹

¹ 304 mm/min (12 in/min)

Attribute Name	Value
Elongation at Break	100 %
Tensile Strength	43.5 N/cm (400 oz/in)

Attribute Name	Value
Note	Calipers are nominal values

Typical Environmental Characteristics

Chemical and Environmental Exposure

4 hour immersions at room conditions,
2" x 2" samples on stainless steel substrate.

Chemical Edge Penetration Appearance
Isopropyl Alcohol 0 No Change
10W30 Oil 0 No Change
Acid (pH 4) 0 No Change
Base (pH 10) 0 No Change
Water 0 No Change

Temperature Resistance

24 hour exposure, 2" x 2" samples on stainless steel.

Condition Appearance At 90% R.H.
-40°F (-40°C) No Change
90°F (32°C) No Change No Change
120°F (48°C) No Change
158°F (70°C) No Change
200°F (93°C) No Change No Change

Processing

- Printing –
Compatible with many flexographic processes and inks. Customer should determine conformance to specific requirements.
- Dispensing –
Suitable for dispensing by manual or automatic dispensing systems or by hand. Typical Unwind: 3 oz/in (3 N/100 mm); shocky.
- Roll Sizes –
Available in a number of standard widths and lengths. Contact your 3M sales representative, customer service representative, or 3M price book for specific size availability.

Handling/Application Information

Application Examples

- Fluid-line identification.
- General identification applications where chemical and temperature resistance is desired.

Application Techniques

Substrates should be thoroughly cleaned and dried for best adhesion performance. Typical cleaning solvents are heptane or isopropyl alcohol. Consult manufacturer's Material Safety Data Sheet (MSDS) for proper handling and storage instructions.

Maximum initial bonds are formed by using increased rub down pressure. Use a rubber roller or a squeegee with maximum hand pressure for best results.

When using these tapes below 50°F (10°C), the adhesive will not flow as easily. Increased rub down may be required to achieve the desired bond strength.

Special care should be taken when using any overlaminating film to prevent entrapped air and wrinkles.

Industry Specifications

UL Recognized (Files MH11410)

Storage and Shelf Life

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

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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