



Technical Data Sheet

3M[™] General Purpose Double-Coated Tape 9817M





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English

Product Description

3M™ General Purpose Double-Coated Tape 9817M provides a balance of peel and shear properties with good heat resistance. Immediate bond utilizing only normal nip pressure when laminated to most open cell urethane and closed cell urethane foams.

It bonds well to polyester, polyester urethane, polyethylene, polystyrene, vinyl foams and most rubbers.

Exposed side is acrylic, liner side is rubber-based. Excellent quick stick and adhesion to high and low energy surfaces.

Product Features

- Extremely high-bond strength to most surfaces.
- Excellent versatility for lamination to foam material.
- Excellent dimensional stability with polyester carrier.
 Densified Kraft liner for rotary die-cutting.
- Good rotary die-cutting characteristics from the super calendared kraft liner.
 Use where high heat or UV resistance is not required.

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	Test Method	Test Condition	Value
Adhesive Type		Faceside	Acrylic ¹
Adhesive Carrier			Polyester Film
Adhesive Type		Backside	Rubber ²
Total Tape Thickness	ASTM D3652		0.08 mm (3.3 mil)
Liner			74# Kraft
Liner Thickness			0.103 mm (4.1 mil)

Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

Typical Performance Characteristics

180° Peel Adhesion

Dwell Time: 72 h Backing: 2 mil PET Test Method: ASTM D3330

Temperature	Test Condition	Substrate	Value
22 °C (72 °F)	Backside	Polypropylene (PP)	2.3 N/cm (21 oz/in) ¹
22 °C (72 °F)		Stainless Steel	6.6 N/cm (60 oz/in) ¹
22 °C (72 °F)		Neoprene Rubber	10.5 N/cm (96 oz/in) 1
70 °C (158 °F)		Neoprene Rubber	4.5 N/cm (41 oz/in) 1

^{1 12} in/min (300 mm/min)

² Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Static Shear

Dwell Time: 60 min Test Method: ASTM D3654

Temperature	Test Condition	Value
22 °C (72 °F)	1000g	10,000 min ¹
70 °C (158 °F)	250g	4,000 min ¹

¹ 1 in x 1 in sample area, test terminated after 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	80 °C (175 °F) ¹
Long Term Temperature Resistance	49 °C (120 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Attribute Name	Value
Relative Adhesion (HSE)	High
Relative Adhesion (LSE)	Medium

Typical Environmental Performance

Attribute Name	Value
Solvent Resistance	Medium

Typical Environmental Characteristics

Environmental Resistance

Properties defined are based on the adhesion of impervious faceplate materials to a stainless steel test surface.

Bond Build Up: The adhesive bond increases as a function of time and temperature.

Heat Resistance: 3M tape 9816L,M,H 150°F (65°C)

3M tape 9817L,M,H Acrylic-220°F (105°C) Rubber-175° (80°C)

Low Temp. Resistance: 40°F (4.4°C).

Processing

Die-cutting: Good die-cuttability. Lubricate dies with vanishing oil or similar low lubricants for improved processing.

Roll Laminating: Use rubber over steel roll set up with moderate application pressure. Make adhesive to substrate contact at nip area only.

Handling/Application Information

Application Examples

- General purpose foam or rubber laminating (60 in).
- General purpose lamination of fabricated parts.

Application Techniques

For maximum bond strength, surface should be thoroughly cleaned and dried. A typical cleaning solvent is heptane or isopropyl alcohol. When using cleaning solvents, vanishing oils, or lubricants, consult the manufacturer's Material Safety Data Sheet for proper handling and storage instructions.

Bond strength may be improved with firm application pressure and moderate heat causing adhesive to flow and develop intimate contact with bonding surface.

This adhesive is good for most indoor applications and can be used for outdoor applications if the adhesive is not directly exposed to the environment.

The temperature resistance is somewhat lower than our typical acrylics. Therefore, temperatures above 150°F (65°C) should be avoided.

Avoid contact withPlasticized Vinyl or plasticized rubber surfaces. Plasticizers will soften the rubber adhesive.

Storage and Shelf Life

Store at room temperature conditions of 72°F (22°C) and 50% relative humidity. If stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

Automotive Disclaimer

Select Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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