



# **Technical Data Sheet**

3M<sup>™</sup> Double Coated Tape 9589

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Supersedes: June, 2024



Product Details

# **Product Description**

3M<sup>™</sup> Double Coated Tapes with 3M<sup>™</sup> Synthetic Rubber Adhesive 700 Series feature a high tack synthetic rubber adhesive which provides excellent quick stick or initial adhesion and bonds together a wide variety of materials such as metals, papers, paints and most plastics. These tapes have a film carrier, which can add dimensional stability for aid in removal and also provides easier handling during slitting and die-cutting.

# **Product Features**

• The high density polyethylene carrier in these products is hand-tearable, and provides dimensional stability and improved handling with ease of die-cutting and lamination compared to adhesive transfer tapes.

3M™ Adhesive 760 provides high tack adhesion to a variety of substrates, including metals, plastics and glass.
3M adhesive 760 provides clean removal from many surfaces.
Tape components are in compliance with Title 21 of the code of Federal Regulations (21 CFR) as indirect food

additives.

# **Technical Information Note**

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

Attribute Name	Test Method	Test Condition	Value
Color			White
Adhesive Type			760 Synthetic Rubber
Adhesive Carrier			HDPE (High Density
			Polyethylene)
Adhesive Thickness		Faceside	0.076 (3.0 mil) <sup>1</sup>
Carrier Thickness			0.076 mm (3 mil)
Adhesive Thickness		Backside	0.076 mm (3.0 mil) <sup>2</sup>
Total Tape Thickness	ASTM D3652		0.23 mm (9 mil)
Liner			60# Densified Kraft
Liner Print			Green Plaid
Liner Thickness			0.1 mm (4 mil)
Primary Liner Color			Green Plaid, no print

# **Typical Physical Properties**

<sup>1</sup> Faceside adhesive is on the interior of the roll, exposed when unwound.

<sup>2</sup> Backside adhesive is on the exterior of the roll, exposed when liner is removed.

# **Typical Performance Characteristics**

Substrate: Stainless Steel Temperature: 23 °C (73 °F) Dwell Time: 72 h Backing: 2 mil Aluminum Foil

Attribute Name	Test Method	Value
180° Peel Adhesion	ASTM D3330	12.7 N/cm (117 oz/in) <sup>1</sup>

1 304 mm/min (12 in/min)

## 90° Peel Adhesion

Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

Dwell Time	Temperature	Substrate	Value
15 min	23 °C (73 °F)	Stainless Steel	8.8 N/cm (81 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Polycarbonate (PC)	11 N/cm (101 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Polyester (PET)	8.9 N/cm (82 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Polypropylene (PP)	6.7 N/cm (62 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Stainless Steel	9.2 N/cm (84 oz/in) <sup>1</sup>
72 h	70 °C (158 °F)	Stainless Steel	9.4 N/cm (87 oz/in) <sup>1</sup>

<sup>1</sup> 304 mm/min (12 in/min)

### **Static Shear**

Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	1000 g	10,000 min <sup>1</sup>
70 °C (158 °F)		1,773 min <sup>1</sup>

<sup>1</sup> 13 x 25 mm (0.5 x 1 in) sample area, test terminated at 10,000 minutes

Attribute Name	Value	
Short Term Temperature Resistance	70 °C (158 °F) <sup>1</sup>	
Long Term Temperature Resistance	49 °C (120 °F) <sup>2</sup>	

1 Short Term (minutes, hour)

<sup>2</sup> Long Term (day, weeks)

# **Handling/Application Information**

#### **Application Examples**

- Miscellaneous joining and holding uses where high initial tack is required.
- Quick and easy tacking of carpet edges.
  General industrial mounting, joining and splicing.

#### **Application Techniques**

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improves bond strength. To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.\*

\*Note: Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

#### **Application Equipment**

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

#### **Industry Specifications**

Title 21 of the code of Federal Regulations (21 CFR)

#### **FDA Statement**

This product might be suitable for use in indirect food contact applications. Please see the applicable Regulatory Data Sheet for more information relating to FDA compliance.

#### 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 18 months from date of manufacture.

## Available Sizes

Attribute Name	Width	Value
Core Size (ID)		76.2 mm (3 in)
Maximum Available Width		660 mm (26 in)
Maximum Length	1/2 in(12.7mm) and wider	329 m (360 yd)
Maximum Length	1/4 to 7/16 in	165 mm (180 yd)
Minimum Available Width		6.35 mm (1/4 in)
Normal Slitting Tolerance		±0.8 mm (±1/32 in)
Standard Roll Length		33 m (36 yd)

### 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.

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## **ISO Statement**

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

 $3M^{\,\rm TM}$  Industrial Adhesives and Tapes Division 3M Center, St. Paul, MN 55144-1000 3M.com/iatd

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