



Technical Data Sheet

3M™ Double Coated Tape 9443NP



[Product Details](#)

Product Description

3M™ Double Coated Tapes with 3M™ 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 700 provides high tack adhesion to a variety of substrates, including metals, plastics and glass.
- 3M™ Adhesive 700 provides clean removal from many surfaces.

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 |
|----------------------|-------------|----------------|----------------------------------|
| Color | | | Clear |
| Adhesive Type | | | 700 Synthetic Rubber |
| Adhesive Carrier | | | HDPE (High Density Polyethylene) |
| Adhesive Thickness | | Faceside | 0.05 mm (2 mil) ¹ |
| Carrier Thickness | | | 0.05 mm (2 mil) |
| Adhesive Thickness | | Backside | 0.05 mm (2 mil) ² |
| Total Tape Thickness | ASTM D3652 | | 0.15 mm (6 mil) |
| Liner | | | 60# Densified Kraft |
| Liner Thickness | | | 0.1 mm (4 mil) |
| Primary Liner Color | | | Green Plaid, no print |

¹ Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

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

Typical Performance Characteristics

Substrate: Stainless Steel
 Temperature: 22 °C (72 °F)
 Dwell Time: 72 h
 Backing: 2 mil Aluminum Foil

| Attribute Name | Test Method | Value |
|--------------------|-------------|------------------------------------|
| 180° Peel Adhesion | ASTM D3330 | 22.4 N/cm (206 oz/in) ¹ |

¹ 12 in/min (300 mm/min)

90° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

| Dwell Time | Temperature | Substrate | Value |
|------------|----------------|--------------------|------------------------------------|
| 15 min | 22 °C (72 °F) | Stainless Steel | 10.1 N/cm (93 oz/in) ¹ |
| 72 h | 22 °C (72 °F) | Polycarbonate (PC) | 11 N/cm (101 oz/in) ¹ |
| 72 h | 22 °C (72 °F) | Polyester (PET) | 9.7 N/cm (89 oz/in) ¹ |
| 72 h | 22 °C (72 °F) | Polypropylene (PP) | 9.3 N/cm (85 oz/in) ¹ |
| 72 h | 22 °C (72 °F) | Stainless Steel | 10.6 N/cm (97 oz/in) ¹ |
| 72 h | 70 °C (158 °F) | Stainless Steel | 13.7 N/cm (126 oz/in) ¹ |

¹ 12 in/min (300 mm/min)

Static Shear

Test Method: ASTM D3654

| Temperature | Test Condition | Value |
|----------------|----------------|-------------------------|
| 22 °C (72 °F) | 1000g | 10,000 min ¹ |
| 70 °C (158 °F) | 500g | 17 min ¹ |

¹ 1/2 in x 1 in sample area, test terminated at 10,000 minutes

| Attribute Name | Value |
|-----------------------------------|-----------------------------|
| Short Term Temperature Resistance | 70 °C (158 °F) ¹ |
| Long Term Temperature Resistance | 49 °C (120 °F) ² |

¹ Short Term (minutes, hour)

² 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.

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.

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