



# Technical Data Sheet

## 3M™ Double Coated Tape 9731RW



[Product Details](#)



[Regulatory Info/SDS](#)

### Product Description

3M™ Double Coated Tape 9731RW (reverse wound) has a silicone pressure sensitive adhesive coated on one side of a polyester film carrier and a high performance acrylic adhesive coated on the other side of the carrier. Normal wind direction is with the silicone adhesive on the outside of the roll. Reverse wound is with the acrylic adhesive on the outside of the roll.

### Product Features

- Silicone adhesive provides bond to Silicone Rubber and silicones.
- 3M™ Adhesive 350 provides adhesion to a wide variety of substrates.
- A thin polyester carrier provides dimensional stability and improved handling with ease of die cutting and lamination compared to adhesive transfer tapes.

### 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		Acrylic Side	350 Acrylic Adhesive
Adhesive Thickness		Acrylic Side	0.04 mm (1.6 mil)
Adhesive Carrier			Clear PET (Polyester)
Carrier Thickness			0.02 mm (1.0 mil)
Adhesive Type		Silicone Side	Silicone
Adhesive Thickness		Silicone Side	0.07 mm (2.9 mil)
Total Tape Thickness	ASTM D3652		0.14 mm (5.5 mil)
Density			1.06 g/cm <sup>3</sup>

Attribute Name	Test Condition	Value
Liner	Acrylic Side	Brown PCK
Liner Thickness	Acrylic Side	4.2 mil (58# )
Liner Print		None
Liner	Silicone Side	Clear PET
Liner Thickness	Silicone Side	0.07 mm (3.0 mil)

### Typical Performance Characteristics

#### 90° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Temperature	Test Condition	Substrate	Value
20 min	23 °C (73 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Stainless Steel	7.0 N/cm (64 oz/in) <sup>1</sup>

Dwell Time	Temperature	Test Condition	Substrate	Value
72 h	70 °C (158 °F)	Acrylic Side	Stainless Steel	10.8 N/cm (99 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	ABS	3.3 N/cm (30 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Polypropylene (PP)	5.8 N/cm (53 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Glass	7.9 N/cm (72 oz/in) <sup>1</sup>
20 min	23 °C (73 °F)	Silicone Side	Stainless Steel	4.9 N/cm (45 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Stainless Steel	5.4 N/cm (49 oz/in) <sup>1</sup>
72 h	70 °C (158 °F)	Silicone Side	Stainless Steel	4.3 N/cm (39 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	ABS	3.7 N/cm (34 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Polypropylene (PP)	5.3 N/cm (48 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Glass	5.3 N/cm (48 ) <sup>1</sup>

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

### 180° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Temperature	Test Condition	Substrate	Value
20 min	23 °C (73 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Stainless Steel	8.6 N/cm (78 oz/in) <sup>1</sup>
72 h	70 °C (158 °F)	Acrylic Side	Stainless Steel	13.2 N/cm (120 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	ABS	4.2 N/cm (38 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Polypropylene (PP)	7.3 N/cm (67 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Acrylic Side	Glass	9.7 N/cm (88 oz/in) <sup>1</sup>
20 min	23 °C (73 °F)	Silicone Side	Stainless Steel	4.6 N/cm (42 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Stainless Steel	4.8 N/cm (44 oz/in) <sup>1</sup>
72 h	70 °C (158 °F)	Silicone Side	Stainless Steel	5.9 N/cm (54 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	ABS	3.4 N/cm (31 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Polypropylene (PP)	5.4 N/cm (49 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Glass	5.1 N/cm (47 oz/in) <sup>1</sup>
72 h	23 °C (73 °F)	Silicone Side	Silicone Rubber	6.1 N/cm (55 oz/in) <sup>1</sup>

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

### Static Shear

Substrate: Stainless Steel

Dwell Time: 72 h

Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	1000 g, Acrylic Side	10,000 min <sup>1</sup>
70 °C (158 °F)	500 g Acrylic Side	10 min <sup>1</sup>
23 °C (73 °F)	1000 g, Silicone Side	10,000 min <sup>1</sup>
70 °C (158 °F)	500 g Silicone Side	946 min <sup>1</sup>

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

## Typical Environmental Performance

Substrate: Stainless Steel  
Temperature: 32 °C (90 °F)  
Dwell Time: 72 h  
Backing: 2 mil Aluminum Foil  
Test Method: ASTM D3330  
Environmental Condition: 90%RH

Attribute Name	Test Condition	Value
90° Peel Adhesion	Acrylic Side	8.2 N/cm (75 oz/in) <sup>1</sup>
180° Peel Adhesion	Acrylic Side	10.5 N/cm (96 oz/in) <sup>1</sup>
90° Peel Adhesion	Silicone Side	5.4 N/cm (49 oz/in) <sup>1</sup>
180° Peel Adhesion	Silicone Side	5.5 N/cm (50 oz/in) <sup>1</sup>

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

## 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.

## 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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