



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 ³

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	22 °C (72 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Stainless Steel	7.0 N/cm (64 oz/in) ¹

Dwell Time	Temperature	Test Condition	Substrate	Value
72 h	70 °C (158 °F)	Acrylic Side	Stainless Steel	10.8 N/cm (99 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	ABS	3.3 N/cm (30 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Polypropylene (PP)	5.8 N/cm (53 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Glass	7.9 N/cm (72 oz/in) ¹
20 min	22 °C (72 °F)	Silicone Side	Stainless Steel	4.9 N/cm (45 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Stainless Steel	5.4 N/cm (49 oz/in) ¹
72 h	70 °C (158 °F)	Silicone Side	Stainless Steel	4.3 N/cm (39 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	ABS	3.7 N/cm (34 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Polypropylene (PP)	5.3 N/cm (48 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Glass	5.3 N/cm (48) ¹

¹ 12 in/min (300 mm/min)

180° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Temperature	Test Condition	Substrate	Value
20 min	22 °C (72 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Stainless Steel	8.6 N/cm (78 oz/in) ¹
72 h	70 °C (158 °F)	Acrylic Side	Stainless Steel	13.2 N/cm (120 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	ABS	4.2 N/cm (38 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Polypropylene (PP)	7.3 N/cm (67 oz/in) ¹
72 h	22 °C (72 °F)	Acrylic Side	Glass	9.7 N/cm (88 oz/in) ¹
20 min	22 °C (72 °F)	Silicone Side	Stainless Steel	4.6 N/cm (42 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Stainless Steel	4.8 N/cm (44 oz/in) ¹
72 h	70 °C (158 °F)	Silicone Side	Stainless Steel	5.9 N/cm (54 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	ABS	3.4 N/cm (31 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Polypropylene (PP)	5.4 N/cm (49 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Glass	5.1 N/cm (47 oz/in) ¹
72 h	22 °C (72 °F)	Silicone Side	Silicone Rubber	6.1 N/cm (55 oz/in) ¹

¹ 12 in/min (300 mm/min)

Static Shear

Substrate: Stainless Steel

Dwell Time: 72 h

Test Method: ASTM D3654

Temperature	Test Condition	Value
22 °C (72 °F)	1000g Acrylic Side	10,000 min ¹
70 °C (158 °F)	500g Acrylic Side	10 min ¹
22 °C (72 °F)	1000g Silicone Side	10,000 min ¹
70 °C (158 °F)	500g Silicone Side	946 min ¹

¹ 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) ¹
180° Peel Adhesion	Acrylic Side	10.5 N/cm (96 oz/in) ¹
90° Peel Adhesion	Silicone Side	5.4 N/cm (49 oz/in) ¹
180° Peel Adhesion	Silicone Side	5.5 N/cm (50 oz/in) ¹

¹ 12 in/min (300 mm/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.

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Select Automotive Applications:

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ISO Statement

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