



Technical Data Sheet

3M[™] Double Coated Tape 9731

English-US **Last Revision Date:** September, 2024

Supersedes: August, 2024





Product Details

Regulatory Info/SDS

Product Description

 $3M^{\text{TM}}$ Double Coated Tape 9731 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. Wind direction is silicone adhesive side on the outside of the roll.

Product Features

- Silicone adhesive bonds to Silicone Rubber and silicone products.
- 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 Thickness		Silicone Side	0.07 mm (2.9 mil)
Adhesive Type		Silicone Side	Silicone
Adhesive Carrier			Clear PET (Polyester)
Carrier Thickness			0.02 mm (1.0 mil)
Adhesive Type		Acrylic Side	350 Acrylic Adhesive
Adhesive Thickness		Acrylic Side	0.04 mm (1.6 mil)
Total Tape Thickness	ASTM D3652		0.14 mm (5.5 mil)
Density			1.06 g/cm ³

Attribute Name	Test Condition	Value
Liner	Silicone Side	Clear PET
Liner Thickness	Silicone Side	3 mil
Liner Print		None
Liner	Acrylic Side	Brown PCK
Liner Thickness	Acrylic Side	4.2 mil (58#)

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)	Silicone Side	Stainless Steel	4.9 N/cm (45 oz/in) ¹
72 h	23 °C (73 °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	23 °C (73 °F)	Silicone Side	ABS	3.7 N/cm (34 oz/in) ¹

Dwell Time	Temperature	Test Condition	Substrate	Value
72 h	23 °C (73 °F)	Silicone Side	Polypropylene (PP)	5.3 N/cm (48 oz/in) ¹
72 h	23 °C (73 °F)	Silicone Side	Glass	5.3 N/cm (48 oz/in) ¹
20 min	23 °C (73 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) ¹
72 h	23 °C (73 °F)	Acrylic Side	Stainless Steel	7.0 N/cm (64 oz/in) ¹
72 h	70 °C (158 °F)	Acrylic Side	Stainless Steel	10.8 N/cm (99 oz/in) ¹
72 h	23 °C (73 °F)	Acrylic Side	ABS	3.3 N/cm (30 oz/in) ¹
72 h	23 °C (73 °F)	Acrylic Side	Polypropylene (PP)	5.8 N/cm (53 oz/in) ¹
72 h	23 °C (73 °F)	Acrylic Side	Glass	7.9 N/cm (72 oz/in) ¹

¹ 304 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)	Silicone Side	Stainless Steel	4.6 N/cm (42 oz/in) ¹
72 h	23 °C (73 °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	23 °C (73 °F)	Silicone Side	ABS	3.4 N/cm (31 oz/in) ¹
72 h	23 °C (73 °F)	Silicone Side	Polypropylene (PP)	5.4 N/cm (49 oz/in) ¹
72 h	23 °C (73 °F)	Silicone Side	Glass	5.1 N/cm (47 oz/in) ¹
72 h	23 °C (73 °F)	Silicone Side	Silicone Rubber	6.1 N/cm (55 oz/in) ¹
20 min	23 °C (73 °F)	Acrylic Side	Stainless Steel	6.5 N/cm (59 oz/in) ¹
72 h	23 °C (73 °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)
72 h	23 °C (73 °F)	Acrylic Side	ABS	4.2 N/cm (38 oz/in) 1
72 h	23 °C (73 °F)	Acrylic Side	Polypropylene (PP)	7.3 N/cm (67 oz/in) ¹
72 h	23 °C (73 °F)	Acrylic Side	Glass	9.7 N/cm (88 oz/in) ¹

^{1 304} 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, Silicone Side	10,000 min ¹
70 °C (158 °F)	500 g Silicone Side	946 min ¹
23 °C (73 °F)	1000 g, Acrylic Side	10,000 min ¹
70 °C (158 °F)	500 g Acrylic Side	10,000 min ¹

¹ 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
180° Peel Adhesion	Silicone Side	5.5 N/cm (50 oz/in) ¹
90° Peel Adhesion	Silicone Side	5.4 N/cm (49 oz/in) ¹
180° Peel Adhesion	Acrylic Side	10.5 N/cm (96 oz/in) ¹
90° Peel Adhesion	Acrylic Side	8.2 N/cm (75 oz/in) ¹

^{1 304} 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.

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Select Automotive Applications:

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