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Technical Data Sheet

3M™ Double Coated Tape 9690+

English-US
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Product Description

3M™ Double Coated Tape 9690+ with Acrylic Adhesive 300MP+ formulated for low fog characteristics. The 300MP+ adhesive is suitable for bonding to most substrates including foams, fabrics and substrates with rough or textured 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
Adhesive Thickness		Faceside	0.071 mm (2.8 mil) [1]
Adhesive Carrier			Clear PET
Carrier Thickness			0.013 mm (0.5 mil)
Adhesive Thickness		Backside	0.06 mm (2.3 mil) [2]
Total Tape Thickness	ASTM D3652		0.14 mm (5.5 mil)
Density			0.91 g/cm³

[1] Faceside adhesive is on the interior of the roll, exposed when unwound.

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

Attribute Name	Value
Liner	83# PCK
Liner Thickness	6.2 mil
Primary Liner Color	Tan
Liner Print	3M logo

Typical Performance Characteristics

180° Peel Adhesion

Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

Dwell Time	Temperature	Substrate	Value
20 min	22 °C (72 °F)	Stainless Steel	6.1 N/cm (55 oz/in) [1]
72 h	22 °C (72 °F)	Stainless Steel	8.9 N/cm (81 oz/in) [1]
72 h	22 °C (72 °F)	ABS	4.7 N/cm (42 oz/in) [1]
72 h	22 °C (72 °F)	Polypropylene (PP)	4.6 N/cm (42 oz/in) [1]
72 h	70 °C (158 °F)	Stainless Steel	13.7 N/cm (124 oz/in) [1]
72 h	70 °C (158 °F)	ABS	8.1 N/cm (73 oz/in) [1]
72 h	70 °C (158 °F)	Polypropylene (PP)	54.5 N/cm (41 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
20 min	22 °C (72 °F)	Stainless Steel	4.5 N/cm (40 oz/in) [1]
72 h	22 °C (72 °F)	Stainless Steel	8.4 N/cm (76 oz/in) [1]
72 h	22 °C (72 °F)	ABS	4.2 N/cm (38 oz/in) [1]
72 h	22 °C (72 °F)	Polypropylene (PP)	4.0 N/cm (36 oz/in) [1]
72 h	70 °C (158 °F)	Stainless Steel	13.4 N/cm (122 oz/in) [1]
72 h	70 °C (158 °F)	ABS	6.2 N/cm (56 oz/in) [1]
72 h	70 °C (158 °F)	Polypropylene (PP)	3.8 N/cm (35 oz/in) [1]

[1] 12 in/min (300 mm/min)

Substrate: Stainless Steel
Temperature: 22 °C (72 °F)
Test Condition: 1000g
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil

Attribute Name	Test Method	Value
Static Shear	ASTM D3654	8,400 min [1]

[1] 1 in x 1 in sample area, test terminated after 10,000 minutes

Dwell Time: 1 h

Attribute Name	Test Method	Value
Fogging (Photometric method)	SAEJ1756	95 % [1]

[1] Fogging condensate on the glass plate determined by measuring the 60o specular gloss. The 60o specular gloss for the same glass plate is used as a reference value. The higher value indicates less fogging.

Typical Environmental Performance

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

Attribute Name	Substrate	Value
180° Peel Adhesion	Stainless Steel	11.4 N/cm (104 oz/in) [1]
180° Peel Adhesion	ABS	5.2 N/cm (47 oz/in) [1]
180° Peel Adhesion	Polypropylene (PP)	4.8 N/cm (43 oz/in) [1]
90° Peel Adhesion	Stainless Steel	9.8 N/cm (89 oz/in) [1]
90° Peel Adhesion	ABS	4.3 N/cm (39 oz/in) [1]
90° Peel Adhesion	Polypropylene (PP)	3.7 N/cm (33 oz/in) [1]

[1] 12 in/min (300 mm/min)

Electrical and Thermal Properties

Attribute Name	Test Method	Value
Glass Transition Temperature (Tg)	ASTM E1356	-60 °C [1]

[1] Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 4°C per minute. First heat values given.

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 24 months from date of manufacture.

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Select Automotive 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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