



Technical Data Sheet

3M™ Scrim Adhesive Tape 99786NP+



Last Revision Date: January, 2024



English

Regulatory Info/SDS

Product Description

Finite Element Analysis (FEA) data is available for this product at: 3m.com/FEA

3M™ Double Coated Tapes 99786NP+ with 3M™ Adhesive 300MP+ provides high adhesion to a wide variety of materials, including plastics and foams. 99786NP+ has a thin nonwoven carrier for dimensional stability and improved handling.

Product Features

- 3M™ Acrylic Adhesive 300MP+ is "Low Fog" per SAEJ1756
 Excellent adhesion to foam, fabrics, felt, nylon, leather, wood and other substrates
 Intended for a variety of markets, including general industrial, automotive, marine, medical equipment and specialty
- The polycoated kraft paper liner makes this adhesive tape ideal for die cutting and converting processes

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 | Value |
|----------------------|------------------------|
| Adhesive Type | 300MP+ Acrylic |
| Adhesive Carrier | Non-Woven Tissue |
| Total Tape Thickness | 0.14 mm (5.5 mil) |
| Density | 0.91 g/cm ³ |

| Attribute Name | Value |
|---------------------|--------------------|
| Liner | 58# PCK |
| Liner Thickness | 0.107 mm (4.2 mil) |
| Primary Liner Color | Tan |
| Liner Print | None |

Typical Performance Characteristics

180° Peel Adhesion

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

| Temperature | Substrate | Value |
|----------------|--------------------|----------------------------------|
| 22 °C (72 °F) | Stainless Steel | 9.2 N/cm (84 oz/in) ¹ |
| 22 °C (72 °F) | ABS | 5.4 N/cm (49 oz/in) ¹ |
| 22 °C (72 °F) | Polypropylene (PP) | 3.0 N/cm (27 oz/in) ¹ |
| 70 °C (158 °F) | Stainless Steel | 13 N/cm (120 oz/in) ¹ |
| 70 °C (158 °F) | ABS | 7.4 N/cm (68 oz/in) ¹ |
| 70 °C (158 °F) | Polypropylene (PP) | 2.6 N/cm (24 oz/in) ¹ |

^{1 12} in/min (300 mm/min)

90° Peel Adhesion

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

| Temperature | Substrate | Value |
|----------------|--------------------|----------------------------------|
| 22 °C (72 °F) | Stainless Steel | 10. N/cm (91 oz/in) ¹ |
| 22 °C (72 °F) | ABS | 4.5 N/cm (41 oz/in) ¹ |
| 22 °C (72 °F) | Polypropylene (PP) | 2.6 N/cm (24 oz/in) ¹ |
| 70 °C (158 °F) | Stainless Steel | 9.1 N/cm (83 oz/in) ¹ |
| 70 °C (158 °F) | ABS | 5.1 N/cm (47 oz/in) ¹ |
| 70 °C (158 °F) | Polypropylene (PP) | 2.5 N/cm (23 oz/in) ¹ |

^{1 12} in/min (300 mm/min)

Static Shear

Substrate: Stainless Steel

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil Test Method: ASTM D3654

| Temperature | Test Condition | Value |
|----------------|----------------|------------------------|
| 22 °C (72 °F) | 1000g | 7,900 min ¹ |
| 70 °C (158 °F) | 500g | 8,100 min ¹ |

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

Dwell Time: 16 h

| Attribute Name | Test Method | Value |
|------------------------------|-------------|--------|
| Fogging (Photometric method) | SAEJ1756 | 95 % 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 | 14 N/cm (130 oz/in) ¹ |
| 180° Peel Adhesion | ABS | 6.0 N/cm (55 oz/in) ¹ |
| 180° Peel Adhesion | Polypropylene (PP) | 3.0 N/cm (28 oz/in) ¹ |
| 90° Peel Adhesion | Stainless Steel | 11 N/cm (100 oz/in) ¹ |
| 90° Peel Adhesion | ABS | 5.4 N/cm (49 oz/in) ¹ |
| 90° Peel Adhesion | Polypropylene (PP) | 3.0 N/cm (27 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

Recommended storage in the original packaging at room temperature conditions of 60-80°F (16-22°C) and 50% relative humidity. Keep out of direct sunlight. Unconverted product has a shelf life of 24 months from date of manufacture.

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ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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