



Acrylic Foam Tape 5314

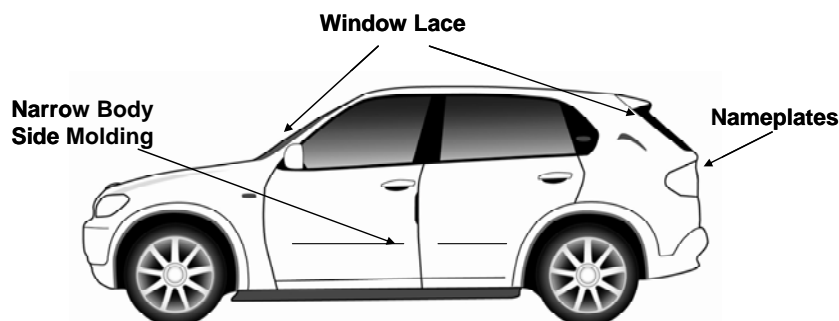
Technical Data Sheet

August 2009

Supersedes Technical Data Sheet dated November 2008

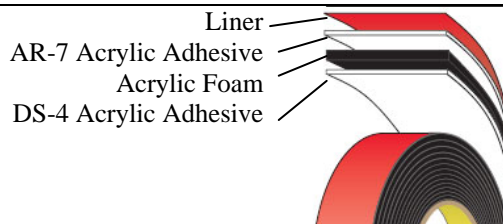
General Description 3M™ Acrylic Foam Tape (AFT) 5314 is a gray, double-coated acrylic foam tape commonly used for the attachment of automotive exterior trim parts such as body side moldings. AFT 5314 is a medium density foam tape providing a balance of conformability and strength. The acrylic foam core has unique viscoelastic properties that allow it to elongate and relax when put under load, thereby minimizing stress on the adhesive bond line. AFT 5314 has AR-7 adhesive on the liner side of the product for bonding to automotive paint surfaces, and DS-4 adhesive on the non-liner side of this product for bonding to the exterior trim part.

Applications



Shelf Life One year from date of receipt by customer when stored at 22°C (72°F) and 50% relative humidity.

Product Construction



Physical Properties Values shown are typical values not to be used for specification purposes.

Thickness	0.76 mm (± 0.08 mm) (0.030 in ± 0.003 in)
Density	688 kg/m ³ (± 80 kg/m ³) (43 lb/ft ³ ± 5 lb/ft ³)

Roll Width and Length (Planetary)

3M™ Acrylic Foam Tapes are available in the following standard widths. Millimeter widths rounded to the nearest whole numbers (7, 8, 9 mm . . .) and 1/8 inch increments starting with 1/4 inch (0.25, 0.375, 0.50, 0.625 inch . . .).

Minimum widths:
4 mm Levelwound
5 mm Planetary

Roll Width	Roll Width Tolerance	Roll Length (maximum)
Planetary Rolls		
< 7 mm (< 0.276 in)	+/- 0.38 mm (+/-0.015 in.)	66 meters (72 yards)
7 - 9 mm (0.276 - 0.354 in)	+/- 0.38 mm (+/-0.015 in.)	99 meters (108 yards)
10 - 18 mm (0.394 - 0.709 in)	+/- 0.38 mm (+/-0.015 in.)	160 meters (175 yards)
> 18 mm (> 0.709 in.)	+/- 0.76 mm (+/- 0.030 in.)	160 meters (175 yards)
Levelwound Rolls		
4 - 16 mm (0.157 - 0.630 in.)	+/- 0.38 mm (+/-0.015 in.)	900 meters (984 yards)

Technical Data Sheet

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Page 2

Performance Properties

Performance tests are run using standard test procedures. These values presented are typical values not to be used for specification purposes.

1. Breakaway and Continuing Peel

72 hrs at 22°C (72°F)	Breakaway Peel	89 N/12.7 mm	(20 lbs/.5 in)
	Continuing Peel	31 N/12.7 mm	(7 lbs/.5 in)
72 hrs at 70°C (158°F)	Breakaway Peel	111 N/12.7 mm	(25 lbs/.5 in)
	Continuing Peel	40 N/12.7 mm	(9 lbs/.5 in)
72 hrs at 38°C /100% RH (100°F/100%RH)	Breakaway Peel	80 N/12.7 mm	(18 lbs/.5 in)
	Continuing Peel	36 N/12.7 mm	(8 lbs/.5 in)



Breakaway and continuing peel tests are run with 12.7 mm (0.5 in) wide tape on PVC test bars. Tests were run on base coat/clear coat paint at a separation rate of 305 mm/min (12 in/min).

2. Static Shear

Exceeds 100 hours at 70°C (158°F). Static shear tests are run with 12.7 mm (0.5 in) wide by 50.8 mm (2 in) long tape on PVC test bars, 6.8 kg (15 lbs) roll-down against stainless steel. Static weight is 250 gm (0.55 lbs)



Contact Information

The information provided in this technical document is intended as a guide for this product. For more information, and help selecting a 3M product for an application, please contact a 3M technical service representative.

Regulatory

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