

3M™ Acrylic *Plus* Tape Series PT1000

Technical Data Sheet



3M™ Acrylic *Plus* Tape Series PT1000 is a black, double-coated acrylic foam tape designed for the attachment of automotive exterior trim parts such as body side moldings and claddings.

3M Tape Series PT1000 offers the following key features:

- High conformability
- Black, high-strength core with low elongation properties
- Cold temperature impact resistance
- Easy liner release

The highly conformable core, which improves adhesive wet out, combines with high performance adhesive systems to provide robust part adhesion to many challenging surfaces. The black color and low elongation properties improve the bond-line appearance of the attached part.

Some typical applications for 3M Tape Series PT1000 include body side moldings, claddings, roof ditch moldings and wheel flares.

Product Construction



Liner Options

See the technical update "<u>3MTM Acrylic Foam and Acrylic Plus Tapes: Product Constructions</u>" for liner and tabbing information.

Physical Properties

	PT1100	PT1500	PT1100T	PT1500T
Thickness	1.14 mm (0.045 in)	1.52 mm (0.060 in)	1.14 mm (0.045 in)	1.52 mm (0.060 in)
Range	+/- 0.13 mm (0.005 in)			
Density	545 kg/m³ (34 lb/ft³)	521 kg/m³ (32.5 lb/ft³)	545 kg/m³ (34 lb/ft³)	521 kg/m³ (32.5 lb/ft³)
Range	+/- 80 kg/m³ (5 lb/ft³)			

Roll Width and Length

3M™ Acrylic *Plus* Tapes are available in the following standard widths. Millimeter widths -- rounded to the nearest whole number-- and 1/8-inch increments starting with 1/4 inch.

Minimum widths: 4 mm Levelwound, 5 mm Planetary (Standard versions)

Planetary

PT1100 and PT1100T

Roll Width	Roll Width Tolerance	Roll Length (max)
< 8 mm (< 0.276 in)	+/- 0.40 mm (+/-0.015 in)	66 M (72 yds)
8 - 9 mm (0.276 - 0.375 in)	+/- 0.40 mm (+/-0.015 in)	99 M (108 yds)
10 - 18 mm (0.394 - 0.709 in)	+/- 0.40 mm (+/-0.015 in)	132 M (144 yds)
> 18 mm (> 0.709 in)	+/- 0.80 mm (+/- 0.031 in)	132 M (144 yds)

PT1500 and PT1500T

Roll Width	Roll Width Tolerance	Roll Length (max)
< 10 mm (< 0.315 in)	+/- 0.40 mm (+/-0.015 in)	66 M (72 yds)
> 10 mm (0.394)	+/- 0.40 mm (+/-0.015 in)	99 M (108 yds)

Levelwound

PT1100 and PT1100T

Roll Width	Roll Width Tolerance	Roll Length (max)
4 - 14 mm (0.157 – 0.551 in)	+/- 0.40 mm (+/-0.015 in)	900 M (984 yds)
15 - 16 mm (0.591 – 0.630 in)	+/- 0.40 mm (+/-0.015 in)	700 M (765 yds)

PT1500 and PT1500T

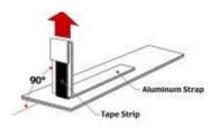
Roll Width	Roll Width Tolerance	Roll Length (max)
4 – 16 mm (0.157 – 0.630 in)	+/- 0.40 mm (+/-0.015 in)	500 M (545 yds)

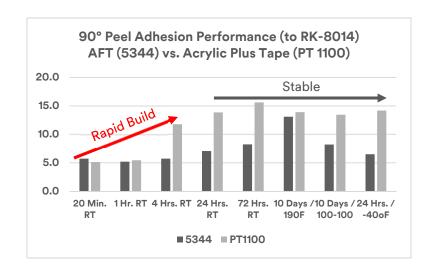
Performance Properties

Typical performance of 3M[™] Acrylic *Plus* Tape Series PT1000 is shown below. Peel and shear values depend on plastic substrate characteristics and/or paint composition. These values are for reference only.

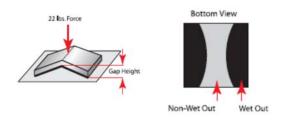
Note: Care should be taken to make sure the surface is clean and dry prior to application of the tape. After adhesion build, the adhesive is durable to typical automotive environmental conditions and chemicals and provides a robust attachment solution. For more details and application guidance, please contact your 3M Technical Representative.

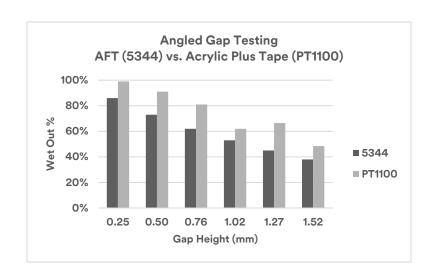
90° Peel Adhesion Testing





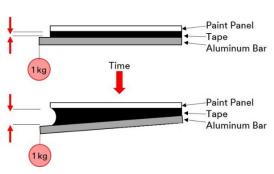
High Conformability (Angled Gap)

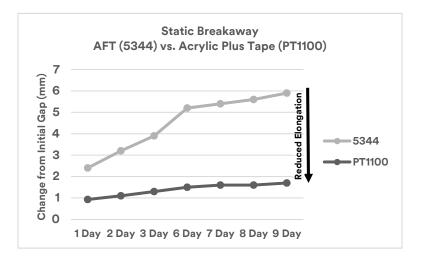




Static Break Away (Typical Results)

Deflection (Bondline Elongation) Low Static Load (1 kg)





4

Shelf Life

One year from date of manufacture when stored at 4°C - 38°C (40°F - 100°F) and 0 - 95% relative humidity. Optimum storage conditions are 22°C (72°F) and 50% relative humidity.

Regulatory Information

Please refer to the product label and Safety Data Sheet (SDS) for health and safety information before using. Observe proper handling precautions as outlined in the SDS, which is available on request or at www.3M.com/msds.

The product is published as a material entry and is available for access on www.mdsystem.com. For product IMDS I.D. number, email requests to 3M-IMDSrequest@mmm.com.

Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your 3M technical service representative or call 1-800-328-1684.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Automotive Division
3M Center
St. Paul, MN 55144-1000
Phone 1-800-328-1684
Web www.3M.com/autosolutions

3M is a trademark of 3M Company Please recycle. Printed in USA. © 3M 2016. All rights reserved.