



Polyurethane Protective Tape

8544

Technical Data

August, 2005

Product Description

3M™ Polyurethane Protective Tape 8544 is a glossy black tape made from an abrasion resistant polyurethane elastomer that resists puncture, tearing, abrasion, ultraviolet light and erosion. 3M 8544 tape is commonly used for the prevention of chaffing from rivets on aircraft fuel cells and bladders. 3M 8544 tape provides a simple, easy, and fast method of protecting a surface from corrosion, abrasion, and minor impact damage. 3M 8544 tape is constructed with a solvent resistant, pressure sensitive, acrylic adhesive that is protected with an easy-release paper liner.

Typical Physical Properties and Performance Characteristics

- Notes: 1) The following technical information and data should be considered representative or typical only and should not be used for specification purposes.
2) ASTM = American Society for Testing and Materials.
3) Metric values are listed in parenthesis.

A. Dimensions

Approximate Applied Thickness:*	0.006 inch (0.15 mm) Film 0.003 inch (0.08 mm) Adhesive Total thickness 0.009 inch (0.23 mm)
Standard Roll Length:	36 yd (32.9 m)
Available Widths:	Minimum 1/2 inch Maximum 48 inches (1.25 cm to 122 cm)
Approximate Weight:*	0.51 lb/yd ² (277 g/m ²)

*Excludes the paper liner that is removed from the tape prior to application.

B. Typical Physical Properties and Performance Characteristics

PROPERTY	TEST METHOD	UNITS	TYPICAL VALUE
Tensile Strength @ Break	ASTM D882	lb/in (N/100 mm)	50 (875)
Elongation % @ Break	ASTM D882	%	400
Peel Adhesion @ 70°F (21°C) to:			
Plate Glass	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	65 (71)
Anodized Aluminum	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	58 (63)
Acrylic Enamel Paint	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	29 (32)
Mil-P-23377 Epoxy Primer	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	88 (96)

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Safety and Regulatory

- 3M™ Polyurethane Protective Tape is **100%** solids and contains no hazardous air pollutants (HAPs), volatile organic components (VOC's) or materials restricted by regulations or law. Respiratory protection is not required under normal use conditions.
- 3M polyurethane protective tape meets US Federal and California regulations for landfillable materials. The product is potentially recyclable.
- Packaging materials meet US Federal and California regulations for landfillable materials and are recyclable or reusable.
- This product is considered to be an article that does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

Shipping and Storage

No special/hazardous labeling or packaging required or regulations for air, ground or water shipment for this product.

Keep film in a clean area, away from excessive moisture and out of direct sunlight. Store rolls in the shipping carton. Return partially used rolls to the shipping carton.

Shelf life: Two (2) years from date of manufacture.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet (MSD) for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

For Additional Information

In the U.S., call toll free 1-800-235-2376 or fax 1-800-435-3082 or 651-737-2171. For U.S. Military, call 1-866-556-5714. If you are outside of the U.S., please contact your nearest 3M office or one of the following branches:

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Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Limitation of Remedies and Liability

If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.



This product was manufactured under a 3M quality standard registered under ISO9001 standards.



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