



Polyurethane Protective Tape

8542

Technical Data

November, 2004

Product Description

3M™ Polyurethane Protective Tape 8542 is a matte black tape made from an abrasion resistant polyurethane elastomer that resists puncture, tearing, abrasion, ultraviolet light and erosion. Polyurethane Protective Tape 8542 provides a simple, easy, and fast method of protecting a surface from corrosion, abrasion, and minor impact damage. Polyurethane Protective Tape 8542 is constructed with a solvent resistant, pressure sensitive, acrylic adhesive, protected with an easy-release poly 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:*	0.020 inch (0.51 mm) Film 0.002 inch (0.05 mm) Adhesive Total thickness 0.022 inch (0.56 mm)
Standard Roll Length:	36 yd (32.9 m)
Available Widths:	Minimum 1/2 inch Maximum 24 inches (1.25 cm to 61 cm)
Approximate Weight:*	1.2 lb/yd ² (625 g/m ²)

*Excludes the poly 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)	40 (700)
Elongation % @ Break	ASTM D882	%	500
Peel Adhesion @ 70°F (21°C) to: Stainless Steel	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	60 (66)
Mil C 85285 Polyurethane Paint	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	45 (49)
Mil C 85285 Polyurethane Paint with / 86A	ASTM D3330 Method A 24 hour dwell	oz/in (N/100 mm)	70 (77)

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Safety and Regulatory

- 3M™ Polyurethane Protective Tape is **100%** solids and contains no hazardous air pollutants (HAPs), volatile organic components (VOCs) or materials restricted by regulations or law. Respiratory protection is not required under normal use conditions.
- 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 and no 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 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

To request additional product information or to arrange for sales assistance, call toll free 1-800-235-2376. Address correspondence to: 3M Aerospace and Aircraft Maintenance Division, 3M Center, Building 223-1N-14, St. Paul, MN 55144-1000. Our fax number is 1-800-421-2483 or 708-338-5602. 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.



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Printed in U.S.A.
©3M 2004 60-9700-0072-9 (11/04)