

3M™ Polyurethane Protective Tape 8544

Technical Data Sheet

Description

3M™ Polyurethane Protective Tape 8544 is a 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 polyethylene liner.

Typical Physical Properties and Performance Characteristics

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

Dimensions:

Approximate applied Thickness*	0006 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 ½ inch Maximum 28 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.

Typical Physical Properties and Performance Characteristics:

Property	Test Method	Units U.S. (SI)	Typical Value
Tensile Strength @ Break	ASTM D882	psi (Mpa)	2900 (20)
Elongation % @ Break	ASTM D882	%	580
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)
Max. Service Temperature		°F (°C)	180°F (82°C)

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

Shelf Life

Two (2) years from data of manufacture or as expressly certified by 3M.

Precautionary Information

Refer to Product Label and 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, and visit www.3m.com/3M/en_US/company-us/SDS-search/

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:

Authorization to Use

Ensure products meet all applicable specifications, standards, and maintenance manual requirements for the platform being worked on and validate all aircraft approvals against current technical documentation.

**These products were manufacture under a 3M Quality Management System registered to the AS9100 standard*

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and 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. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 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, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 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 for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.



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

8544
Issue date: 9/2021

3M is a trademark of 3M Company
© 3M 2021. All rights reserved.