

3M

Wind Tape

8608

Technical Data Sheet

August, 2008

Product Description

3M™ Wind Tape 8608 can be used to help protect wind turbine blade surfaces from damage caused by sand and rain erosion and minor impact.

3M 8608 Tape is made from an exceptionally tough, transparent, abrasion-resistant polyurethane elastomer that resists puncture, tearing, and erosion. It is formulated for excellent resistance to ultraviolet light. 3M 8608 Tape provides surface protection using a technology that is solvent-free, requires no special application tools, and is fast and easy to apply. 3M 8608 Tape is transparent and is constructed with a long-aging, solvent-resistant pressure-sensitive acrylic adhesive. The technology used in the production of 3M 8608 Tape is related to 3M products that have demonstrated effective performance on large military helicopter rotor blades.

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 ¹	0.012 inch (0.30 mm) Film 0.002 inch (0.06 mm) Adhesive 0.014 inch (0.36 mm) = Total thickness
Standard Roll Length ²	18 yd (16.5 m)
Standard Roll Width ²	8 inch (203 mm)
Approximate Weight	0.81 lb/yd ² (439 g/m ²)

¹ Excludes the paper liner that is removed from the tape prior to application.

² Custom roll lengths and widths are available

B. Typical Physical Properties and Performance Characteristics

Property	Test Method	Units	Typical Value
Tensile Strength @ Break	ASTM D882 Method A	lb/in (N/100 mm)	80 (1400)
Elongation % @ Break	ASTM D882 Method A	%	500
Tear Strength	ASTM D1938	lbs. (kg)	3.5 (1.6)
Taber Abrasion	ASTM C501 H-18,1000 g wt. 1000 cycle	Loss in grams	< 0.10
Hardness	ASTM D2240	Shore A	80
Dielectric Strength	ASTM D1000	Volts	16,029
Sand Erosion	University of Dayton Research Institute 10 grams/cm ³ sand density		mass loss of .008 grams (approx .4%)
Peel Adhesion ³ @ 70°F (21°C) to: Polyester Gel Coat Epoxy Primer Polyurethane Paint	ASTM D1000, 24 hr dwell, 180° peel	oz/in (N/100 mm)	75 (82) 90 (98) 65 (71)
Max. Service Temperature		°F (°C)	275 (135)

³ The pressure-sensitive acrylic adhesive provides excellent adhesion to these common surfaces, which are used in the wind energy industry, when properly prepared and applied.

C. Solvent Resistance

There is little or no apparent effect after 24 hours immersion in the following solvents:

Motor Oil	—
Distilled Water	—
Hydraulic Fluid	—
Diesel Fuel	Slight Edge Penetration

When exposure to hydrocarbon fluids occurs, some discoloration of unpainted films may occur.

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Safety and Regulatory

- Polyurethane Protective Tape is **100%** solids and contains no hazardous air pollutants (HAPs), volatile organic component (VOC's). 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 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 for health and safety information before using this product. For additional health and safety information, visit www.3M.com/msds or 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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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.

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This product was manufactured under a 3M quality standard registered under AS9100 standards.



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