



Aluminum Foil Tape

431 • 439 Lined Version

Technical Data

August, 1995

Product Description

A 2 mil nominal dead soft aluminum foil with transparent acrylic adhesive for many permanent sealing, holding, splicing or masking applications requiring the protection offered by a foil backing. (439 tape is lined version)

Construction

	431 tape	439 tape
Backing:	Aluminum foil	Aluminum foil
Adhesive:	Acrylic	Acrylic
Color:	Shiny silver	Shiny silver
Standard Roll Length:	60 yds. (55 m)	60 yds. (55 m)
Liner:	None	Tan kraft paper with silicone release

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

			ASTM Test Method
Adhesion to Steel:	431	41 oz./in. width (45 N/100 mm)	D-3330
	439	41 oz./in. width (45 N/100 mm)	
Tensile Strength at Break:	431	19 lbs./in. width (338 N/100 mm)	D-3759
	439	18 lbs./in. width (315 N/100 mm)	
Elongation at Break:	431	5%	D-3759
	439	3%	
Backing Thickness:	431	1.9 mils (.047 mm)	D-3652
	439	1.9 mils (.047 mm)	
Total Tape Thickness:	431	3.1 mils (.078 mm)	D-3652
	439	3.1 mils (.078 mm)	
Liner Thickness:	439	5.6 mils (.14 mm)	D-3652
Water Vapor Transmission Rate:		.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² /.24 hrs.)	D-3833
Weight:		.0096 lbs./yd./in. width (.0048 kg/m/24 mm)	

General Information

- Flame resistant U.L. Approved Class “L” low flammability.
- Flame resistant – will not support combustion. Meets F.A.R. 25.853(a) requirements.
- Foil backing provides an excellent reflective surface for both heat and light.
- Good aging performance both indoors and outdoors.
- Low moisture vapor transmission rate offers excellent sealing and patching performance.

Aluminum Foil Tape

431 • 439 Lined Version

General Information (continued)

- Best results attained when applied to clean dry surfaces above 32°F (0°C).
- Store in a clean, dry place at 60-80°F (15-27°C) and 40-50% relative humidity no longer than 24 months from date of manufacture.

Application Ideas

- Seal and patch tears in truck trailers, as well as other outdoor equipment.
- Reflect heat away from sensitive areas.
- Thermal heat conduction.
- General purpose holding, patching, sealing applications – indoors or out.
- Splicing of thin gauge foils.
- Good maskant in electroplating of aluminum because it will not contaminate the bath.
- Decorative.

Features

- Aluminum foil backing
- Acrylic adhesive

Advantages

- Protection
- Heat reflective
- Flame resistant
- Long aging

Benefits

- Helps protect parts from water, dust or chemical damage
- Helps protect parts from heat
- Will not support combustion
- Helps reduce replacement need

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-227-5085. Address correspondence to: 3M Industrial Tape and Specialties Division, 3M Center, Building 220-8E-04, St. Paul, MN 55144-1000. Our fax number is 612-733-9175. In Canada, phone: 1-519-451-2500. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-0400.

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 ITSD 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 ITSD product. Given the variety of factors that can affect the use and performance of a 3M ITSD product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M ITSD 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 negligence, warranty, or strict liability.

ISO 9002

This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



Industrial Tape and Specialties Division

3M Center, Building 220-7E-01
St. Paul, MN 55144-1000



Recycled Paper
40% pre-consumer
10% post-consumer

Printed in U.S.A.
©3M 1995 70-0703-2479-6