



Heavy Duty Aluminum Foil Tape

438

Technical Data

November, 1994

Product Description A 5 mil aluminum foil tape with a transparent acrylic adhesive to use when a heavier weight foil (than 425 tape) is required.

Construction	Backing	Adhesive	Color	Standard Roll Length
	Aluminum foil	Acrylic	Shiny silver	60 yds. (55 m)

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:	43 oz./in. width (47 N/100 mm)	D-3330
Tensile Strength:	59 lbs./in. width (1033 N/100 mm)	D-3759
Backing Thickness:	5 mils (.13 mm)	D-3652
Tape Thickness:	7.2 mils (.18 mm)	D-3652
Elongation at Break:	10%	D-3759
Water Vapor Transmission Rate:	.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² /24 hrs.)	
Weight:	.0217 lbs./yd./in./width (.0109 kg/m/24 mm)	

General Information

- For applications requiring greater thickness than 425 tape.
- Meets UL 723 specification for class L low flammability.
- Foil backing provides an excellent reflective surface for both heat and light.
- Aluminum foil backing and acrylic adhesive system combine to offer long aging both indoors and out.
- The high coefficient of expansion offered by the aluminum allows expansion and contraction with changes in temperatures, along with thermal conductivity.
- Performs in a range from -65°F to over 300°F (-54°C to 149°C). Higher temperatures for shorter periods of time.
- 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.

Heavy Duty Aluminum Foil Tape

438

Application Ideas

- Barrier, protector and thermal conductor in appliance (electronics) industry.
- Use when customer specification calls for a 5 mil (.13 mm) foil as a barrier for vinyl coated wires in many applications in appliance industry.
- Patch tears in skins of aircraft and truck trailers.

Features

- 5 mil (.13 mm) aluminum foil backing

- Acrylic adhesive

Advantages

- Heavy Protection
Heavier than many foil backings
- Heat reflective
- Non-flammable
Meets U.L. 723 class L
- Long aging

Benefits

- Helps protect parts from water, dust and chemical damage
- Helps protect parts from heat
- Will not aid combustion
- Helps reduce replacement cost

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.

3M

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 1994 70-0703-2530-6