



# 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 <sub>2</sub> O/100 sq. in./24 hrs.<br>(1.55 g/m <sup>2</sup> /24 hrs.) |                  |
| Weight:                        | .0217 lbs./yd./in./width<br>(.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.

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## 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.

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## Features

- 5 mil (.13 mm) aluminum foil backing

- Acrylic adhesive

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## Advantages

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

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## Benefits

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

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## 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.

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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

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Printed in U.S.A.  
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