Aluminum Foil Tape

425 • 427

Technical Data **April, 2008**

Product Description

3M™ Aluminum Foil Tapes 425 and 427 are 5 mil nominal dead soft aluminum foil backing combined with a transparent acrylic adhesive. 3M aluminum foil tape 427 offers an easy-release liner.

Product Construction

Backing	Adhesive	Color	Liner	Standard Roll Length
Dead soft aluminum	Acrylic	Shiny silver	Easy-release paper (3M aluminum foil tape 427)	60 yds. (55 m)

Typical Physical Properties

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: 3M aluminum foil tape 425 3M aluminum foil tape 427	 47 oz./in. width (51 N/100 mm) 50 oz./in. width (55 N/100 mm)	D-3330
Tensile Strength:	30 lbs./in. width (525 N/100 mm)	D-3759
Backing Thickness:	2.8 mils (0.07 mm)	D-3652
Total Tape Thickness:	4.6 mils (0.12 mm)	D-3652
Liner Thickness: 3M aluminum foil tape 427	 3.1 mils (0.08 mm)	D-3652
Elongation at Break:	8%	D-3759
Temperature Use Range:	-65° to 300°F (-54° to 149°C)	
Water Vapor Transmission Rate:	0.1g H_2O/100 sq. in./24 hrs. (1.55 g/m^2/24 hrs.)	D-3833
Approximate Weight:	0.013 lbs./yd./in. width (4.77 gms/m/24 mm)	

Features

- Flame resistant. Meets U.L. 746C (File E 122798) and 723, Class “L” low flammability rating (File R 7311).
- 3M aluminum foil tape 425 can be certified to meet SAE-AMS-T-23397 and L-T-80B.
- Meets requirements of F.A.R. 25.853(a).
- The very low moisture vapor transmission rate makes these tapes a good sealant.
- The acrylic adhesive, combined with the durable aluminum backing, offers ideal properties for long serviceable life in and outdoors.
- Good candidate as a maskant in electroplating of aluminum because it will not contaminate the bath.
- Aluminum backing provides excellent reflection of both heat and light.
- Best results obtained when applied to a clean, dry surface above 32°F (0°C).

IMPORTANT: These tapes are not intended for medical usage. Neither 3M nor the Food and Drug Administration have evaluated or reviewed this tape for medical application. 3M does not recommend or endorse the usage of the aluminum tape for medical application. User assumes all risk and liability whatsoever in connection with usage of product in a medical application.

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Application Ideas

- Aircraft paint stripping maskant.
- Moisture barrier in "white goods" appliances.
- General purpose heat reflector and heat dissipator.
- Mechanically hold wires and cooling coils in "white goods" appliances.
- Repair tears on truck trailers and aircraft.
- Splicing of thin gauge foils.
- General purpose holding, patching, sealing applications – indoors and out.

Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

Shelf Life

To obtain best performance, use this product within 24 months from date of manufacture.

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.

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ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.

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