



Aluminum Foil Tape

425 • 427 (Linered)

Technical Data

Product Description

A 5-mil nominal dead Soft aluminum foil backing combined with a transparent acrylic adhesive. 427 tape offers an easy-release film liner. Can be used indoors or out for many long term applications.

Product Construction

Backing	Adhesive	Color	Liner	Standard Roll Length
Dead soft aluminum	Acrylic	Shiny silver	Easy-release paper	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: Tape	425 427	47 oz./in. width (51 N/100 mm) 50 oz./in. width (55 N/100 mm)	D-3330
Tensile Strength:	425/427	30 lbs./in. width (525 N/100 mm)	D-3759
Backing Thickness:	425/427	2.8 mils (0.07 mm)	D-3652
Total Tape Thickness:	425/427	4.6 mils (0.12 mm)	D-3652
Liner Thickness:	427	3.1 mils (0.08 mm)	D-3652
Elongation at Break:	425/427	8%	D-3759
Temperature Use Range:		-65° to 300°F (-54° to 149°C)	
Water Vapor Transmission Rate:	425/427	0.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² /24 hrs.)	D-3833
Approximate Weight:	425/427	0.115 lbs./yd./in. width (4.77 gms/m/24 mm)	

General Information

- Flame resistant. Meets U.L. 764C and 723, Class “L” low flammability rating (File R 7311).
- 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 425 and 427 tapes a good sealant.
- The acrylic adhesive combined with the durable aluminum backing offers ideal properties for long serviceable life both indoors and out.
- 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.
- Performance range from -65° to 300°F (-54° to 150°C). Higher temperatures for shorter periods.
- Best results obtained when applied to a clean, dry surface above 32°F (0°C).

IMPORTANT: The 3M™ Aluminum Foil Tape 425 and 427 (Linered) 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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Shelf Life To obtain best performance, use this product within 24 months from date of manufacture and store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

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.

Features	Features	Advantages	Benefits
	<ul style="list-style-type: none">• Aluminum foil backing	<ul style="list-style-type: none">• Long term protection• Heat reflective• Flame resistant	<ul style="list-style-type: none">• Helps protect parts from water, dust or chemical damage• Helps protect parts from heat• Will not support combustion
	<ul style="list-style-type: none">• Acrylic adhesive	<ul style="list-style-type: none">• Long aging	<ul style="list-style-type: none">• Helps reduce need for replacing

Technical Information and Data The technical information and data, recommendations, and other statements provided in this brochure are based on tests or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be used with the 3M 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 product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user’s knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user’s method of application.

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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.



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