

June, 2019

3M™ Aluminum Foil Tape 425

Product Description

3M™ Aluminum Foil Tape 425 combines a 3 mil nominal dead soft aluminum foil backing with a transparent acrylic adhesive.

Product 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 L-T-80C.
- Meets requirements of FAR 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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Technical Information Note

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

Typical Physical Properties

Property	Values		Method
Backing Color	Shiny silver		
Total Tape Thickness	0.12 mm	4.6 mil	ASTM D3652
Backing Thickness	0.07 mm	2.8 mil	ASTM D3652
Backing	Dead soft aluminum		
Adhesive	Acrylic		
Approximate Weight	5.54 g/m/24 mm	0.012 lb/yd/in	
Water Vapor Transmission	0.77 g/m ² /24 hr	0.05 g/100 in ² /24 hr	ASTM D3833

Typical Performance Characteristics

Property	Values		Method	Dwell/Cure Time	Substrate	Notes
180° Peel Adhesion	5.1 N/cm	47 oz/in	ASTM D3330	Initial	Stainless Steel	12 in/min (300 mm/min)
Tensile Strength	49 N/cm	28 lb/in	ASTM D3759			
Elongation at Break	6 %		ASTM D3759			

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Typical Performance Characteristics (continued)

Property	Values		Method	Dwell/Cure Time	Substrate	Notes
Temperature Use Range	-54 to 149 °C	-65 to 300 °F				

Available Sizes

Property	Values	
Standard Roll Length	55 m	60 yd

Handling/Application Information

Application Ideas

- Aircraft paint stripping maskant.
- Moisture barrier in “white goods” appliances.
- General purpose heat reflector and heat dissipater.
- 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 and Shelf Life

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton. To obtain best performance, use this product within 24 months from date of manufacture.

Industry Specifications

UL 746C (File E 122798)
UL 723 Class “L” low flammability rating (File R 7311)
Can be certified to meet L-T-80C
FAR 25.853(a)

Trademarks

3M is a trademark of 3M Company.

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References

Property	Values	Method
3m.com Product Page	http://www.3m.com/3M/en_US/compa us/all-3m-products/~/3M-Aluminum-Foil-Tape-425?N=5002385+3293241744&rt=rudmil	ASTM D3652
Safety Data Sheet (SDS)	https://www.3m.com/3M/en_US/compa us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=425in	ASTM D3652

ISO Statement

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

Technical Information

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