

3M™ Aluminum Foil Tape 425

Last Revision Date: June, 2019



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.

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	Additional Information
Backing	Dead soft aluminum	
Adhesive Type	Acrylic	
Color	Shiny silver	
Backing Thickness	0.07 mm	View 
Test Method: ASTM D3652		
Total Tape Thickness	4.6 mil (0.12 mm)	View 
Test Method: ASTM D3652		

Total Tape Thickness	0.12 mm	View 
Test Method: ASTM D3652		
Backing Thickness	2.8 mil	View 
Test Method: ASTM D3652		
Approximate Weight	5.54 g/m/24 mm (0.012 lb/yd/in)	
Approximate Weight	0.012 lb/yd/in	
Water Vapor Transmission	0.77 g/m ² /24 hr (0.05 g/100 in ² /24 hr)	View 
Test Method: ASTM D3833		
Water Vapor Transmission	0.05 g/100 in ² /24 hr	View 
Test Method: ASTM D3833		

Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	49 N/cm	View 
Test Method: ASTM D3759		
180° Peel Adhesion	5.1 N/cm (47 oz/in)	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	47 oz/in	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength	28 lb/in	View 
Test Method: ASTM D3759		
Elongation at Break	6 %	View 
Test Method: ASTM D3759		

Long Term Temperature Resistance	149 °C	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-54 °C	View 
Test Condition: Long Term (day, weeks)		
Long Term Temperature Resistance	300 °F	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	-65 °F	View 
Test Condition: Long Term (day, weeks)		

Available Sizes

Property	Values	Additional Information
Standard Roll Length	55 m (60 yd)	
Standard Roll Length	60 yd	

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.

Handling/Application Information

Application Examples

- 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.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/company-us/all-3m-products/~ /3M-Aluminum-Foil-Tape-425/?N=5002385+3293241744&rt=rud
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=425

ISO Statement

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

Information

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