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## 3M™ Aluminum Foil Tape 431

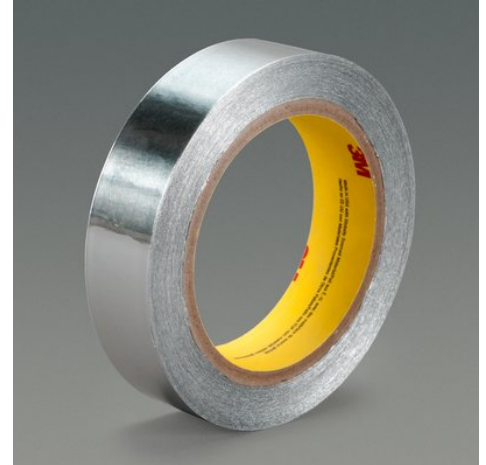
### Product Description

3M™ Aluminum Foil Tape 431 is a 2-mil nominal dead soft aluminum foil with transparent acrylic adhesive for many permanent sealing, holding, splicing or masking applications requiring the protection offered by a foil backing.

**IMPORTANT:** 3M™ Aluminum Foil Tape 431 is not intended for medical usage. Neither 3M nor the Food and Drug Administration have evaluated or reviewed this tape for medical application. User assumes all risk and liability whatsoever in connection with usage of product in a medical application.

### Product Features

- Flame resistant. Meets U.L. 723, Class “L” low flammability rating (File R 7311).
- Meets requirements of FAR 25.853(a).
- Foil backing provides an excellent reflective surface for both heat and light.
- Good aging performance both indoors and outdoors.
- Low moisture vapor transmission rate offers excellent sealing and patching performance.
- Best results attained when applied to clean dry surface above 32°F (0°C).



# 3M™ Aluminum Foil Tape 431

## 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
Total Tape Thickness	3.1 mil	0.08 mm	ASTM D3652
Backing Thickness	1.9 mil	0.05 mm	ASTM D3652
Approximate Weight	0.0049 g/m/24 mm	0.0096 lb/yd/in	
Water Vapor Transmission	0.77 g/m <sup>2</sup> /24 hr	0.05 g/100 in <sup>2</sup> /24 hr	ASTM D3833
Color	Shiny Silver		
Backing	Aluminum Foil		
Adhesive Type	Acrylic		

## Typical Performance Characteristics

Property	Values		Method	Notes	Test Condition
180° Peel Adhesion	4.5 N/cm	41 oz/in	ASTM D3330	12 in/min (300 mm/min)	
Tensile Strength	19 lb/in	33.3 N/cm	ASTM D3759		
Elongation at Break	5 %		ASTM D3759		
Long Term Temperature Resistance	300 °F	149 °C			Long Term (day, weeks)
Minimum Long Term Temperature Resistance	-65 °F	-54 °C			Long Term (day, weeks)

## Available Sizes

Property	Values	
Standard Roll Length	55 m	60 yd

**Handling/Application Information**

**Application Examples**

- Seal and patch tears in truck trailers, as well as other outdoor equipment.
- Reflect heat away from sensitive areas.
- Thermal heat conduction.
- General purpose holding, patching, sealing applications – indoors or out.
- Splicing of thin gauge foils.
- Good maskant in electroplating of aluminum because it will not contaminate the bath.
- Decorative.

**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 723, Class “L” low flammability rating (File R 7311)  
 FAR 25.853(a)

**References**

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Aluminum-Foil-Tape-431/?N=5002385+3293241743&amp;rt=rud">https://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Aluminum-Foil-Tape-431/?N=5002385+3293241743&amp;rt=rud</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=431">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=431</a>

**Family Group**

	431	439
Long Term Temperature Resistance (°F) Test Condition: Long Term (day, weeks)	300	300
Long Term Temperature Resistance (°C) Test Condition: Long Term (day, weeks)	148.8889	148.8889
Minimum Long Term Temperature Resistance (°C) Test Condition: Long Term (day, weeks)	-53.88889	-53.88889
Color	Shiny Silver	Shiny Silver
Total Tape Thickness (mm)	0.08	0.08
Backing Thickness (mm)	0.05	0.05
Backing	Aluminum Foil	Aluminum Foil

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**Family Group (continued)**

	431	439
Adhesive Type	Acrylic	Acrylic
Tensile Strength (N/cm)	33.3	31.5

**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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