

# Technical data sheet



Product: 431

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: KLEBEBAND

Article group: EINSEITIG

Download: 10.07.2025

## 3M 431 ALUMINIUM FOIL TAPE

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Tewipack Uhl GmbH  
Industriestraße 15  
D-75382 Althengstett

Telephone:  
+49(0)7051/9297-0  
Fax:  
+49(0)7051/9297-99

E-Mail:  
info@tewipack.de  
Website:  
www.tewipack.de

Managing director:  
Alexander Uhl,  
Michael Uhl  
HRB 330424  
Amtsgericht  
Stuttgart

Bank details:  
Sparkasse  
Sindelfingen  
Pforzheim  
Calw  
BLZ 666 500  
85  
Konto 17 787

Commerzbank  
Sindelfingen  
BLZ 603 400 71  
Konto 8 001 166

Vereinigte  
Volksbank AG  
Böblingen  
BLZ 603 900 00  
Konto 80 089  
003

Postbank  
Stuttgart  
BLZ 600 100  
70  
Konto 146  
294 708



# 431 Aluminium Foil Tape

(No. 439 Lined Version)

## Product Data Sheet

Updated : September 2022  
Supersedes : **March 1996**

### Product Description

An aluminium foil with transparent acrylic adhesive designed for permanent sealing, holding, splicing or masking requiring the protection offered by a foil backing.

### Physical Properties

Not for specification purposes

<b>Adhesive Type</b>	Acrylic	
<b>Backing</b>	Aluminium foil	
<b>Thickness</b> (ASTM D-3652)	90 µm	
<b>Backing Thickness</b>	50 µm	
<b>Tape Colour</b>	Shiny silver	
<b>Shelf Life</b>	12 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity	

### Performance Characteristics

Not for specification purposes

<b>Adhesion to Stainless Steel</b> <small>ASTM D-3330</small>	4.4 N/10mm	
<b>Tensile Strength</b> <small>ASTM D-3759</small>	3.0 N/10mm	
<b>Elongation at Break</b> <small>ASTM D-3759</small>	5.0 %	
<b>Temperature Range</b> Maximum	150 °C	
<b>Water Vapour Transmission Rate</b>	.1.55g water/m <sup>2</sup> / 24h	

Date :  
431 Aluminium Foil Tape

<b>Additional Product Information</b>	Foil backing provides an excellent reflective surface for both heat and light.	Good, long ageing performance both indoors and out.	Low moisture vapour transmission rate offers excellent sealing and patching performance.
<b>Application Techniques</b>	Best results are attained when applied to a clean, dry and non dusty surface above 0°C.	To improve adhesion ensure firm an even application pressure is applied.	
<b>Applications</b>	Seal and patch tears in truck trailers, as well as other equipment tested outdoors.	Heat reflection and cold conduction in appliances.  Mechanical holding and splicing in general industry.	Good maskant in electroplating of aluminium, as well as other critical operations.
	<b>FEATURES</b>	<b>ADVANTAGES</b>	<b>BENEFITS</b>
	Aluminium foil backing.	Ultimate protection.	Protects parts from water, dust or chemical damage.
		Heat reflective.	Protects parts from heat.
		Non-flammable.	Will not aid combustion.
	Acrylic adhesive.	Long ageing.	Reduces cost of replacing damaged parts.
<b>Specifications</b>	Flame resistant U.L. Approved Class "L" low flammability.	No. 431 passed all requirements in accordance with F.A.A. Regulation No. 25, Paragraph 28.853. These tests, which include	flame retardant properties, are required on all materials used in cabin exteriors of commercial aircraft.

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Date :  
431 Aluminium Foil Tape

## Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

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Industrial Adhesives & Tapes Division  
3M Belgium  
Hermeslaan 7  
1831 Diegem  
Belgium

Industrial Adhesives & Tapes Division  
3M Nederland  
Molengraafsingel 29  
2629 JD Delft  
Nederland