

Technical data sheet



Product: 431

Manufacturer: 3M DEUTSCHLAND GMBH

Product group: KLEBEBAND

Article group: EINSEITIG

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3M 431 ALUMINIUM FOIL TAPE

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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

Adhesive Type	Acrylic	
Backing	Aluminium foil	
Thickness (ASTM D-3652)	90 µm	
Backing Thickness	50 µm	
Tape Colour	Shiny silver	
Shelf Life	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

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

Date :
431 Aluminium Foil Tape

Additional Product Information	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.
Application Techniques	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.	
Applications	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.
	FEATURES	ADVANTAGES	BENEFITS
	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.
Specifications	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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