



High Temperature Aluminum Foil Tape

433 • 433L (Linered)

Technical Data

Product Description 3M™ High Temperature Aluminum Foil Tape 433 has a silicone adhesive that can be used in many high temperature applications. Also comes in an easy-release film liner.

Product Construction	Backing	Adhesive	Color	Liner (3M tape 433L)	Standard Roll Length
	Aluminum foil (Alloy 1100-0)	Silicone (clear)	Shiny silver	Clear, easy-release film	60 yds. (55 m)

Typical Physical Properties

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

			ASTM Test Method
Adhesion to Steel:	3M tape 433	40 oz./in. width (43.8 N/100 mm)	D-3330
	3M tape 433L	38 oz./in. width (42.0 N/100 mm)	D-3330
Tensile Strength:		20 lbs./in. width (350 N/100 mm)	D-3759
Elongation at Break:		3.5%	D-3759
Backing Thickness:		2.0 mils (0.05 mm)	D-3652
Total Tape Thickness:	3M tape 433	3.6 mils (0.09 mm)	D-3652
	3M tape 433L	3.5 mils (0.09 mm)	D-3652
Liner Thickness:	3M tape 433L	2.9 mils (0.07 mm)	D-3652
Water Vapor Transmission Rate:		0.1 gms H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² /24 hrs.)	
Temperature Use Range:			D-3833
Permanent Appl.		-65° to 600°F (-54° to 316°C)	
Removable Appl.		-65° to 375°F (-54° to 190°C)	
Weight:		0.0096 lbs./yd./in. width (.0049 kg/m/24 mm)	

Features

- Flame resistant – meets requirements of F.A.R. 25.853(a).
- 3M™ High Temperature Aluminum Foil Tape 433L can easily be die-cut into special sizes or shapes.
- Best results obtained when applied to a clean surface above 32°F (0°C), but tape can be applied from 0°F to 200°F (-18°C to 93°C).
- Performance range from -65°F to over 600°F (-54°C to over 316°C). Adhesive will gradually thermoset at high temperatures. As it thermosets, the adhesive mass becomes firm and gradually loses its pressure sensitivity but will continue to hold the tape in place.

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Application Ideas

- Moisture barrier around doors and windows to help prevent fogging of glass.
- Seal for automotive air bag inflators.
- To hold insulation on hot air ducts in industry.
- Cover resistance wire heating elements to distribute the heat.
- Splice jumbo rolls of aluminum foil or holding the last lap of narrow width rolls in preparation to annealing the rolls.
- Ideal as a heat reflective wrap along or over insulations, applied to tubes, engine support structures, missile ground handling equipment, or as a protector from other heat source areas such as hot areas in steel mills.
- Good holding, splicing, patching or general protecting tape on many applications involving high temperatures.

Storage

Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

Shelf Life

To obtain best performance, use this product within 18 months from date of manufacture.

Product Use

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ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



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