



# High Temperature Aluminum Foil Tape

## 433L

Technical Data

March, 1995

**Product Description** A dead soft aluminum foil backing combined with a silicone adhesive and a clear easy-release film liner that can be used in many high temperature applications.

Construction	Backing	Adhesive	Color	Liner	Standard Roll Length
	Aluminum Foil (alloy 1100-0 or 1145-0)	Silicone (White)	Shiny Silver	Clear, Easy-Release Film	60 yds. (55 m)

### Typical Physical Properties and Performance Characteristics

**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:	34 oz./in width (37 N/100 mm)	D-3330
Tensile Strength:	23 lbs./in. width (403 N/100 mm)	D-3759
Elongation at Break:	4%	D-3759
Backing Thickness:	2.2 mils (.056 mm)	D-3652
Total Tape Thickness:	3.4 mils (.086 mm)	D-3652
Liner Thickness:	2.9 mils (.074 mm)	
Water Vapor Transmission Rate:	.1 gms (H <sub>2</sub> O/100 sq. in./24 hrs. (1.55 g/m <sup>2</sup> /24 hrs.)	D-3833
Temperature Use Range:		
Permanent Appl.	-65°F to 600°F (-54°C to 316°C)	
Removable Appl.	-65°F to 375°F (-54°C to 190°C)	
Weight:	.0096 lbs./yd./in. width (.0049 kg/m/24 mm)	

### General Information

- 433L tape can easily be die-cut into special sizes or shapes.
- Best results obtained when applied to a clean surface above 32°F (0°C).
- Store in a clean dry place at 60-80°F (15-27°C) and 40-50% relative humidity no longer than 18 months from date of manufacture.
- Good holding, splicing, sealing, patching or general protecting tape on many applications involving high temperatures.
- 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.
- Flame resistant – will not support combustion. Meets F.A.R. 25.853(a).
- Aluminum backing provides excellent reflection of both heat and light.

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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 help distribute the heat
- Splice jumbo rolls of aluminum foil or holding the last lap of narrow width rolls in preparation to annealing the rolls. (**NOTE:** The use of 3M Tape Primer can help improve the bond on many oily surfaces.)
- As a heat reflective wrap used in conjunction with insulation, tube, cables, or where otherwise required for high heat protection
- Maskant of metal during plastic coating

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## Features

- Aluminum foil backing
- Silicone adhesive

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## Advantages

- Excellent protection
- Heat reflective
- Flame resistant
- Wide temperature range

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## Benefits

- Helps protect parts from water, dust or chemical damage
- Helps protect from heat damage
- Will not aid combustion
- Will seal or help protect even under extreme temperature conditions

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## For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-227-5085. Address correspondence to: 3M Industrial Tape and Specialties Division, 3M Center, Building 220-8E-04, St. Paul, MN 55144-1000. Our fax number is 612-733-9175. In Canada, phone: 1-519-451-2500. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-0400.

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ISO 9002

This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

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