



Aluminum Foil Tape 49

Data Sheet

1. Product Description

3M™ Aluminum Foil Tape 49 is a 5 mil nominal dead soft aluminum foil backing combined with a transparent acrylic adhesive.

2. Product Construction

Backing	Adhesive	Color	Std. Roll Length
Dead Soft Aluminum	Acrylic	Shiny Silver	20 ft. (6.1 m)

3. Typical Physical Properties

Property	Typical Value*	ASTM Test Method
Adhesion to Steel	47 oz./in. width (51 N/100 mm)	D-3330
Tensile Strength	30 lbs./in. width (525 N/100 mm)	D-3759
Backing Thickness	2.8 mils (0.07 mm)	D-3652
Total Tape Thickness	4.6 mils (0.12 mm)	D-3652
Elongation at Break	8%	D-3759
Temperature Use Range	-65° to 300°F (-54° to 149°C)	
Water Vapor Transmission Rate	0.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² /24 hrs.)	D-3833
Approximate Weight	0.013 lbs./yd./in. width (4.77 gms/m/24 mm)	

* This data is not to be used for specification. Values listed are for typical properties and should not be considered minimum or maximum.

4. Features

- Flame resistant. Meets U.L. 746C (File E 122798) and 723, Class “L” low flammability rating (File R 7311).
- Can be certified to meet SAE-AMS-T-23397 and L-T-80B.
- Meets requirements of F.A.R. 25.853(a).
- The very low moisture vapor transmission rate makes these tapes a good sealant.
- The acrylic adhesive, combined with the durable aluminum backing, offers ideal properties for long serviceable life in and outdoors.
- Good candidate as a maskant in electroplating of aluminum because it will not contaminate the bath.
- Aluminum backing provides excellent reflection of both heat and light.
- Best results obtained when applied to a clean, dry surface above 32°F (0°C).

IMPORTANT: These tapes are not intended for medical usage. Neither 3M nor the Food and Drug Administration have evaluated or reviewed this tape for medical application. 3M does not recommend or endorse the usage of the aluminum tape for medical application. User assumes all risk and liability whatsoever in connection with usage of product in a medical application.

3M is a trademark of 3M Company.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture for a period of one (1) year from the date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, **3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**



Communications Markets Division
3M Telecommunications

6801 River Place Blvd.
Austin, TX 78726-9000
www.3MTelecommunications.com



Printed on 50% recycled paper
with 10% post-consumer

2 of 2

5. Application Ideas

- Provide EMI and moisture protection on communications cable splices.
- Aircraft paint stripping maskant.
- Moisture barrier in “white goods” appliances.
- General purpose heat reflector and heat dissipator.
- Mechanically hold wires and cooling coils in “white goods” appliances.
- Repair tears on truck trailers and aircraft.
- Splicing of thin gauge foils.
- General purpose holding, patching, sealing applications – indoors and out.

6. 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.

Litho in USA
© 3M 2004 78-8135-3417-5