



Lead Foil Tape

420 (Linered) • 421

Technical Data

Product Description

3M™ Lead Foil Tape 420 and 421 are backed with a rubber adhesive, offering excellent conformability in a variety of application conditions, indoors and out.

Product Construction

Backing	Adhesive	Color	Liner (3M tape 420)	Standard Roll Length
Lead foil	Rubber (green)	Dark silver	Clear, easy-release film	36 yds. (33 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
3M tape 420		
Adhesion to Steel:	45 oz./in. width (49 N/100 mm)	D-3330
Tensile Strength:	20 lbs./in. width (350 N/100 mm)	D-3759
Elongation at Break:	12%	D-3759
Backing Thickness:	4.7 mils (0.12 mm)	D-3652
Tape Thickness:	6.8 mils (0.17 mm)	D-3652
Liner Thickness:	3.5 mils (0.09 mm)	D-3652
Temperature Use Range:	-60° to 225°F (-54° to 106°C)	
Water Vapor Transmission Rate:	0.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² 24 h)	D-3833
Weight:	0.075 lbs./yd./in. width (0.0375 kg/m/24mm)	
3M tape 421		
Adhesion to Steel:	31 oz./in. width (34 N/100 mm)	D-3330
Tensile Strength:	15 lbs./in. width (263 N/100 mm)	D-3759
Elongation at Break:	14%	D-3759
Backing Thickness:	4.0 mils (0.10 mm)	D-3652
Tape Thickness:	6.3 mils (0.16 mm)	D-3652
Temperature Use Range:	-60° to 225°F (-54° to 106°C)	
Water Vapor Transmission Rate:	0.1g H ₂ O/100 sq. in./24 hrs. (1.55 g/m ² 24 h)	D-3833
Weight:	0.06 lbs./yd./in. width (0.034 kg/m/24mm)	

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Features

- Very good conformability.
- Good thermal properties and will perform over a wide variety of temperature conditions (-60° to 225°F or -54° to 106°C). It has been used at higher temperatures for shorter duration.
- 3M™ Lead Foil Tape 420 can be certified to Fed. Spec. H-T-29A.
- Electrically and thermally conductive.
- Can be die-cut into specific shapes.
- This material when disposed of separately is classified as RCRA hazardous waste. Please consult applicable Federal, State and local regulations for proper disposal.
- Elevated lead levels in water may result from long term submersion of this product.
- Best results are obtained when applied to a clean dry surface above 32°F (0°C). Also, by “feathering” the edges – rubbing the tape down with a smooth-edged plastic piece (or similar object) – the tape can be made to better conform to the substrate. This is especially important if the tape is to be used as a “thief” in electroplating where the edges must fully contact the metal base.

Application Ideas

- Electroplating
- Radiation barrier
- Moisture barrier
- Chemical milling
- X-ray plate masking
- Maskant during paint stripping
- Add weight (balance) to equipment parts (golf clubs, tennis rackets, etc.)

Disposal and Safety Considerations

- Wear protective gloves and/or wash hands after working with tape.
- Lead will slowly leach into water when submerged. Leaching will accelerate as acidity increases.
- This material when disposed of separately is classified as RCRA hazardous waste. Please consult applicable Federal, State and local regulations for proper disposal.

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.

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Product Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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



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