

3M

Lead Foil Tape

420 (Linered) • 421

Technical Data

May, 2008

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	Standard Roll Length
	Lead foil	Rubber (green)	Dark silver	Clear, easy-release film (3M tape 420)	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
Adhesion to Steel:	3M tape 420 3M tape 421	45 oz./in. width (49 N/100 mm) 31 oz./in. width (34 N/100 mm)	D-3330
Tensile Strength :	3M tape 420 3M tape 421	20 lbs./in. width (350 N/100 mm) 15 lbs./in. width (263 N/100 mm)	D-3759 D-3759
Elongation at Break:	3M tape 420 3M tape 421	12% 14%	D-3759
Backing Thickness:	3M tape 420 3M tape 421	4.7 mils (0.12 mm) 4.0 mils (0.10 mm)	D-3652
Tape Thickness:	3M tape 420 3M tape 421	6.8 mils (0.17 mm) 6.3 mils (0.16 mm)	D-3652
Liner Thickness:	3M tape 420	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 hrs.)	D-3833
Weight:	3M tape 420 3M tape 421	0.075 lbs./yd./in. width (0.0375 kg/m/24 mm) 0.06 lbs./yd./in. width (0.034 kg/m/24 mm)	

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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.
- 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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Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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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.



Industrial Adhesives and Tapes Division

3M Center, Building 21-1W-10, 900 Bush Avenue
St. Paul, MN 55144-1000
800-362-3550 • 877-369-2923 (fax)
www.3M.com/industrial



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