

# Technical Data Sheet

## 3M™ Lead Foil Tape 420 (Lined)

### Product Description

3M™ Lead Foil Tape 420 is backed with a rubber adhesive, offering excellent conformability in a variety of application conditions.

### Product 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.

### Technical Information Note

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

### Typical Physical Properties

Property	Values	Additional Information
Backing	Lead Foil	
Adhesive Type	Rubber (green)	
Color	Dark Silver	
Liner	White, easy-release film	
Liner Thickness	0.09 mm	
Backing Thickness (mm)	0.13 mm	View 
Test Method: ASTM D3652		

Total Tape Thickness (mil)	7.6 mil	<a href="#">View</a> 
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.19 mm	<a href="#">View</a> 
Test Method: ASTM D3652		
Backing Thickness	5 mil	<a href="#">View</a> 
Test Method: ASTM D3652		
Liner Thickness	3.7 mil	
Approximate Weight	35.2 g/m/24 mm	
Approximate Weight	0.075 lb/yd/in	
Water Vapor Transmission	1.55 g/m <sup>2</sup> /24 hr	<a href="#">View</a> 
Test Method: ASTM D3833		
Water Vapor Transmission	0.1 g/100 in <sup>2</sup> /24 hr	<a href="#">View</a> 
Test Method: ASTM D3833		

### Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	35 N/cm	<a href="#">View</a> 
Test Method: ASTM D3759		
180° Peel Adhesion	4.9 N/cm	<a href="#">View</a> 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	45 oz/in	<a href="#">View</a> 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength (lb/in)	20 lb/in	

View 

Test Method: ASTM D3759

Elongation at Break (%)

12 %

View 

Test Method: ASTM D3759

Long Term Temp C

107 °C

View 

Test Condition: Long Term (day, weeks)

Minimum Long Term Temperature Resistance

-51 °C

View 

Test Condition: Long Term (day, weeks)

Long Term Temp F

225 °F

View 

Test Condition: Long Term (day, weeks)

Minimum Long Term Temperature Resistance

-60 °F

View 

Test Condition: Long Term (day, weeks)

## Available Sizes

Property	Values	Additional Information
Standard Roll Length	33 m	
Standard Roll Length	36 yd	

## Disposal and Safety Considerations

- Wear protective gloves when handling the tape as transfer of lead to the hands is possible. To ensure removal of any lead residue after use, wash hands with a soap specifically formulated to remove lead from the surface of the skin. This will minimize additional transfer of lead to other surfaces.
- 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 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 18 months from date of manufacture.

## Automotive Disclaimer

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## Bottom Matter

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## Trademarks

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3M is a trademark of 3M Company.

## Handling/Application Information

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### Application Examples

- Electroplating
- Radiation barrier
- Moisture barrier
- Chemical milling
- X-ray plate masking

## References

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Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/p/d/b40067913/">https://www.3m.com/3M/en_US/p/d/b40067913/</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=420 Linered">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=420 Linered</a>

## ISO Statement

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

## Information

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